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AMERICAN
MEDICAL BIOGRAPHY

LIVES OF EMINENT PHYSICIANS OF THE UNITED STATES
AND CANADA, FROM THE EARLIEST TIMES

BY

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AND

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TO THE SONS OF ÆSCULAPIUS AND HIPPOCRATES

WHO IN LOVE AND REVERENCE

HONOR THEIR FOREFATHERS BY MUSING UPON THEIR LIVES

AND EMULATING THEIR ACCOMPLISHMENTS

EPITAPHOLOGIA

"Let us now praise famous men and our fathers who begat us . . . All these were honoured in their generations and were the glory of their lives. There be of them, that have left a name behind them, that their praises might be reported . . . These were merciful men, whose righteousness hath not been forgotten . . . Their bodies are buried in peace, but their name liveth forever." (Ecclesiasticus 44.)

In this volume the labor of twenty years assumes its final form—years of delightful occupation: browsing in old volumes, writing to and hearing from interested colleagues; years devoted to the gathering and reconstructing of concise biographies of our confreres of the United States and Canada, who have done the noteworthy, dating from the earliest discoverable down to the latest necrology, January 1, 1927.

Our subjects have all passed out into the greater life; no living are included, as we believe with Sir Sidney Lee that, "Death is a part of life and no man is a fit subject for biography till he is dead."

The standard for inclusion of a name has been: What did he do for others; did he advance the science or the art of medicine; did he teach, write, devise apparatus, or enter public service? We have been somewhat more lax in our estimate of the claims of the pioneers. Those who abandoned medicine for other fields are noticed if eminent. Most of our early botanists and many pure scientists were physicians, the stimulus of botanical research naturally lying in the hope of finding new remedies in the *terra nova;* these medical naturalists have received special consideration.

Antecedent to this work is Howard A. Kelly's "Cyclopedia of American Medical Biography," in two volumes, 1912, the result of five years' work with the aid of numerous collaborators. The plan was that of James Thacher's "Medical Biography," 1828, with an introductory memoir on medicine in America.

In 1920, the immediate progenitor, "American Medical Biographies" appeared; this volume of thirteen hundred and twenty pages, founded on the "Cyclopedia," was rewritten, enlarged, and corrected by Howard A. Kelly and Walter L. Burrage, and contained nineteen hundred and forty-eight biographies, carried up to the year 1919. It included a *List of Works Chiefly Consulted* for students of biography but omitted the brief history of medicine, which had been covered by Colonel Fielding H. Garrison in his incomparable "Introduction to the History of Medicine," now in its third edition.

The present dictionary is, therefore, the "American Medical Biographies" reedited, comprising two thousand and forty-nine sketches of which some three hundred are new. Biographies deleted to make room for the recent claimants are indicated in their appropriate places alphabetically in the text.

The index of names of American physicians, dead and living mentioned in the text but not written up *in extenso,* should be consulted for names not found in the main body of the work; we hope this addendum will reveal many who may have been forgotten.

The *List of Works Chiefly Consulted* has been greatly enlarged, partly by including references previously incorporated with the individual biographies.

Unsolicited aid proferred by many colleagues is gratefully acknowledged. So many medical and reference libraries have been responsive to our needs that any adequate and detailed statement of our obligation is impossible. Miss Audrey W. Davis, a valued coadjutor, has done most efficient work in gathering material, in helping to write some two hundred and sixty biographies, and in verifying the *List of Works Chiefly Consulted.*

Howard A. Kelly,
Walter L. Burrage.

July 1, 1928.

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ABBOTT, Samuel Warren (1837-1904), who had the distinction of being the first secretary of Massachusetts' reorganized state board of health, was born in Woburn, Massachusetts, June 12, 1837. His father was a descendant of George Abbott, who emigrated from England about 1640, and his mother from Edward Winn, who came from North Wales about 1642. Samuel's great grandfather was Joseph Winn, who fought at Lexington and Bunker Hill. Samuel was educated at Phillips Andover Academy, Massachusetts, and graduated A. M. from Brown University (Rhode Island) in 1858.

He began to study medicine with Dr. Benjamin Cutter of Woburn, and afterwards at the Harvard Medical School, where he graduated in 1862. He was assistant surgeon in the United States Navy from 1861 to 1864, then surgeon to the First Massachusetts Cavalry from 1864 until it was mustered out at the close of the war.

Dr. Abbott's chief interest was in hygiene. He was coroner of Middlesex County from 1872 to 1877 and medical examiner of the same county, under the new law, from 1877 to 1884. After the war he practiced medicine in Woburn for four years and in Wakefield for the rest of his life. He was health officer of Massachusetts from 1882 to 1886 and secretary of the State Board of Health from its reorganization in 1886 up to a short time before his death, which occurred in Newton, Massachusetts, October 22, 1904. Thus he took part in two important medical advances in his native state, the inauguration of a medical examiner system, replacing the antiquated coroners, and in the formation and perpetuation of a progressive state board of health, one that acquired an enviable reputation throughout the country.

Dr. Abbott married Martha W. Sullivan, of Woburn, in 1864.

He was a member of the Massachusetts Medical Society, vice president of the Massachusetts Medico-Legal Society in 1897-98, and president of the Middlesex East District Medical Society in 1874-75, also a member of the Société Francaise d'Hygiène.

His contributions to medical literature were many. Among them are: "Uses and Abuses of Animal Vaccination," American Public Health Transactions, 1882; "The Influenza Epidemic of 1889-1890;" State Board of Health Report, 1890; "The Distribution of Diphtheria in Massachusetts," International Congress of Hygiene, London, 1891. From 1886 to 1896, inclusive, he edited "Massachusetts Registration Reports of Births, Marriages and Deaths." WALTER L. BURRAGE.

ABRAMS, Edward Thomas (1860-1918), of Dollar Bay, Michigan, was born in a miner's cabin in Eagle River, Michigan, November 20, 1860. His parents, Michael Abrams and Lydia Chegwyn Abrams, came from Cornwall, England. His early life was a period of hard struggle to gain an education. Between the ages of thirteen and eighteen, he was apprenticed to a blacksmith; he then began to teach at a country school in order to earn the money which would enable him to go to college. After obtaining in 1883 a Bachelor of Science degree at Valparaiso, he attended Dartmouth Medical School, from which he was graduated in 1889. Later he did postgraduate work at Long Island College Hospital, and in 1902 Olivet conferred on him the honorary degree of Master of Arts. The doctor began his practice in Centennial, Michigan, and later removed to Dollar Bay, where he spent the remainder of his life.

In 1907 he was elected to the State legislature. His legislative experience and knowledge of parliamentary procedure made him the backbone of all medical legislation in the state. Appreciation of the fairness of his nature was shown, when in 1913, during the copper miners' strike, the State appointed him as intermediary between agitators and employers. He was a politician of high type, straightforward and relentless in his pursuit of right. Nothing could stop him when on the trail of error, if he believed his action would be beneficial. It was said of him that he had stopped more detrimental and furthered more useful measures than any other medical man in Michigan. These same characteristics were not only evidenced in state affairs, but had an influence national in scope. In much demand as a public speaker, he rarely spoke at length, but always with a wonderfully earnest manner and a masterful delivery. His knowledge of history, combined with his enthusiasm, made him a most interesting speaker. Without doubt he was the best authority in the state on Cornish history, beliefs and customs. In short, he was ever loyal to the spirit of his ancestry. Dr. Abrams was the owner of a fine medical library with full files of about twenty periodicals. He was president of the local chapter of the Red Cross, member of the state committee, Council of National Defense, and, as acting president of the State Board of Health,

was much interested in Camp Custer, and made frequent visits there.

Besides being a member of the American Association of Obstetricians and Gynecologists, Dr. Abrams belonged to the American Medical Association, was a member of the state and local medical organizations, charter member of the A. K. K., one of the oldest medical fraternities; also member of the American Society of Social and Political Economics, and the American Geographical Society. He was surgeon to various railroads and mining companies in the Upper Peninsula; consulting surgeon and lecturer on gynecology and obstetrics at the Lake Superior General Hospital, Lake Linden; surgeon-in-chief to St. Joseph's Hospital at Hancock.

Physically, Dr. Abrams was rather small, but wiry and active. At one time he was fond of wrestling, and very proficient in the art. His fingers were remarkably slender and quick in the most delicate operations.

In 1890 he was married to Ida L. Howe, of Howell, Mich. One child, a daughter, was born to them, but died in early infancy. He was survived by his wife, several sisters and two brothers, one of whom, James Abrams, was a physician at Calumet, Mich.

His last appearance in public was in addressing a gathering for the Red Cross the evening before his death. His death occurred suddenly, shortly before midnight, May 20, 1918, after an evening spent in study in his library.

G. Van Amber Brown.

ACKLEY, Horace A. (1813-1859), surgeon of Cleveland, Ohio, was born in Genesee County, New York, in 1813, and received his early education in the district schools. At an early age he displayed a special bent towards medicine, acquiring some preliminary instruction in the towns of Elba and Batavia in his native county and subsequently attending medical lectures in the College of Physicians and Surgeons of the Western District of the State of New York, situated at Fairfield, Herkimer County, receiving there his M. D. in 1833, at the early age of eighteen. The following year he settled in Rochester, New York, and at the request of Dr. John Delamater, who had been one of his teachers in Fairfield, delivered at Palmyra a course of lectures on human anatomy. In 1835, Dr. Ackley removed to Akron, Ohio, and in the following year was appointed demonstrator of anatomy in the Willoughby Medical College, Ohio. Soon after he removed to Toledo, where he practiced for several years and married in 1837 Miss Sophia S. Howell of Willoughby. On the organization of the Cleveland Medical College in 1843 he was called to its chair of surgery, and continued to occupy this position until his resignation in 1858. During the epidemic of cholera which decimated Sandusky in 1849, on the call for medical aid by the afflicted city, Dr. Ackley abandoned his practice, organized a relief corps of physicians and proceeded at once to the seat of the epidemic. He was president of the Ohio State Medical Society in 1852. Though for fifteen years the most active and eminent operative surgeon of Northern Ohio, no written records of his work have been preserved. But the almost unanimous testimony is conclusive in establishing the fact that Dr. Ackley was a bold and skilful operator, who divided with Dr. R. D. Mussey of Cincinnati the vast majority of the major surgical practice of his day in the region west of the Alleghanies and north of the Ohio River. He was gifted with a most remarkable self-possession in the presence of danger, which stood him in good service, whether holding a mob at bay, in the performance of a dangerous surgical operation, or finding a mistake of diagnosis after the conclusion of the operation. He was considered a splendid medical witness, and his assistance was sought in all cases where medical testimony would affect the verdict. Particularly was this so in cases of malpractice and medical jurisprudence. It was of little use for an attorney, no matter how astute, to cross-examine him in expectation of changing or controverting his proposition.

Dr. Ackley was neither an extensive reader nor a profound pathologist, and his lectures, while clear and accurate, lacked system and connection. As a clinical lecturer he was at his best. He was an enthusiastic sportsman, and whatever time he could snatch from the demands of an engrossing surgical practice was devoted to amusement with his rod and gun. It was upon his farm and largely at his expense that the first experiments in the artificial propagation of fish were made by his partner, Dr. Garlick, in 1853.

As an operator Ackley was bold, skilful and determined. Two ovariotomies performed by him in 1855 and 1857 are recorded by Dr. J. W. Hamilton of Columbus in the Transactions of the Ohio State Medical Society for 1859, where we find, also, two letters from the eminent physician and surgeon, Dr. John Delamater, of Cleveland, discussing the merits and demerits of the operation. In one of these letters he says: "Usually Professor

Ackley was accustomed to dissuade patients from submitting to any operative procedures in these cases, beyond that of mere tapping as a palliative in the later stages of the affection." The position of both Delamater and Ackley on the question of ovariotomy seems to have been practically the same.

"De mortuis nil nisi bonum"—yet the truth of history demands further the brief and sad statement that Dr. Ackley in his later years fell into the habits of intemperance, which not only obscured the honorable records of a strenuous life, but contributed in no slight degree to his premature death, April 24, 1859.

HENRY E. HENDERSON.

ADAMI, John George (1862-1926), Canadian pathologist of ultimate Italian descent, was born in Manchester, England, January 12, 1862 and received his early education at the grammar school of that city. Later he attended Owens College and in 1880 became a scholar at Christ College, Cambridge, where he eventually received highest honors in physiology. After finishing at Cambridge, he went abroad and while in Heidenhain's Laboratory, worked on the circulation of a frog's kidney. Adami finished his clinical work at Manchester but in 1888 returned to Cambridge to become a demonstrator in pathology under Roy. During the years from 1888 to 1892 he developed a keen interest in pathology, a pursuit which was rewarded by his appointment, at the age of 30, first professor of pathology at McGill University, Montreal, Canada, a chair created through the influence of Osler. There Adami passed the greater part of his scientific career.

At McGill Adami's time was largely taken up with administrative work connected with the organization of his new department at the University and the Royal Victoria Hospital. However, his students and colleagues were active and he obviously stimulated many of their scientific papers. A noteworthy contribution from his own pen was his article on inflammation in Allbutt's System of Medicine (1896, vol. 1, p. 54) in which he argued that the inflammatory process is of much wider significance than its daily illustrations in medicine and surgery would suggest. Adami taught rather that inflammation was a topic of general biology and should be approached as such by students. It was this paper which crystallized his views along broad general lines and was undoubtedly responsible for inspiring him later to write his well-known Principles of Pathology, the first volume of which appeared in 1909. In this work, a laudable attempt was made to bring pathology into line with other well recognized branches of biological endeavor. The work passed through a second edition in 1910 and was at first received with acclaim but its popularity faded and it is now little used. Pathology was as yet too much concerned with special instances to be coordinated into a unified system. However this may be, Adami's work has always been regarded as one of great originality.

Adami was a man of wide interest and wrote attractively on a large variety of subjects. Of his literary work, his paper on Sir John Harington and the introduction of the water closet is perhaps best known. This is an amusing and scholarly account of the celebrated Elizabethan worthy. In 1905 Adami was elected Fellow of the Royal Society of London and served on the council of that body from 1915 to 1917. During the war he served in Europe with the Canadian Medical Corps and in 1919 gave up his chair of pathology at McGill and became the vice-chancellor of the University of Liverpool where he died August 29, 1926. Apart from useful service on the Foot and Mouth Disease Commission, he made no contribution to pathology after his return to England in 1919.

Adami was a genial and very friendly man and was an attractive and easy conversationalist. It is clear, however, from his letters that he was dissatisfied with the scant recognition accorded to his generalizations in pathology. In the later years of his life he writes of "Fighting a Losing Cause" and of "finding no sympathy for pathology that was not essentially applied to medicine and surgery." There is little question but that he died a disappointed man.

Adami married twice and had two children by his first wife.

JOHN F. FULTON.

ADAMS, Frederick Whiting (1786-1858), physician, writer on theology and violin-maker, was born at Pawlet, Vermont, in 1786. His literary remains show him to have been well educated. He studied medicine with Dr. Oliver Harmon of Pawlet; attended medical lectures at Dartmouth Medical School and began practice in Fairfield, Vt., before graduation. After some time he removed to Cambridge, Vt., and thence to Barton in the same state in 1814, and in 1822 returned to Dartmouth and received his medical diploma. He continued to practice in Barton and vicinity until 1836, acquiring a great reputation as a physician and surgeon and being called at

times to a distance of fifty miles to perform capital operations. He was one of the first to call attention to the advantage of hellebore (veratrum viride) in practice. In the winter of 1835-36 he attended medical lectures in Philadelphia and in the latter year settled in Montpelier. Here at first he was shunned by many on account of his reputed skepticism but through his skill and kindly manners soon became a leading practitioner in the town and surrounding country.

Dr. Adams was a man of literary taste, and long having been assumed to be an infidel or atheist, at the request of friends, he published a book entitled "Theological Criticism or Hints of the Philosophy of Man and Nature" (1843), with an appendix on "Dogmas of Infidelity", a book which entitles him to rank with Paine in his estimate of the Bible, the church and the clergy. He was, however, noted for his practical philanthropy, frequently treating the poor free of charge and even adding gifts of money or clothing where need appeared. It was well said that he "lived more practical Christianity than any other man in town." He was also a poet of no mean ability and frequently wrote verses which revealed strong Christian sentiments. When asked on his deathbed if he would die as he had lived, he replied, "If there is a Christian's God, I am not afraid to trust myself in His hands." As a boy he learned to play on the violin and other instruments. His love for music never forsook him and during a long period of time, partly to amuse himself and partly as an occupation, he experimented in making violins, violas and violoncellos. He carefully studied all models of old Italian and German makers and endeavored to rival their quality of tone by using well-seasoned woods taken from our native forests. He is said to have made one hundred and forty instruments, some of his making still being in use among the people of New England. His skill in this direction attracted the attention of Ole Bull, with whom he enjoyed a close friendship.

Dr. Adams was twice married and his family consisted of at least one daughter. He died in Montpelier, Vt., December 17, 1858.

ADAMS, Horatio (1801-1861), of Waltham, Massachusetts, son of Rev. Solomon Adams, of Middleton, Mass., proved the identity of variola and vaccinia. He was born in Waltham, Massachusetts, February 20, 1801 and graduated from the Harvard Medical School in 1826. He practiced in Waltham until the time of his death, April 22, 1861. In 1858 he delivered the annual discourse on "Investigations Upon the Subject of Vaccination" before the Massachusetts Medical Society (Communications Massachusetts Medical Society, vol. ix). Smallpox had been prevalent in Waltham between 1835 and 1845, the public had become skeptical as to the protective power of vaccination. Adams conducted original experiments on conveying smallpox to cows and with the vaccine so produced rendering immunity to human beings. "The Boston Medical and Surgical Journal" says of him: "It is believed that he was the first in this country who succeeded in proving the identity of the variolous and vaccine diseases. After reading an account of Mr. Ceeley's experiment of inoculating the cow, he was induced to repeat it and succeeded in obtaining the same results. From a crust obtained by inoculating a cow with variolous matter, a child was vaccinated and a vesicle appeared having all the characteristic marks of the true cow pox."

In the year 1852 he published (Transactions American Medical Association, vol. v) a paper, "On the Action of Water on Lead Pipes, and the Diseases Proceeding From It." This was a valuable contribution to the subject, at this time, calling attention as it did by case reports from his practice and that of others to the frequent incidence of lead paralysis from the use of contaminated drinking water.

WALTER L. BURRAGE.

ADAMS, Zabdiel Boylston (1829-1902), physician of Framingham, Mass., was the son of Zabdiel Boylston (Harvard College, 1813) and Sarah May Holland Adams. He was born in Boston, October 25, 1829, and graduated from Bowdoin College in 1849 and from the Harvard Medical School in 1853. He practiced in Roxbury, a part of Boston, until the Civil War, when he volunteered his services to Governor Andrew. In May, 1861, he was commissioned assistant surgeon in the Seventh Massachusetts Volunteers, his first service being at Washington, where he arrived the following July. He was at the siege of Yorktown with the Seventh Regiment in the spring of 1862, and was also at Williamsburg and Fair Oaks. On May 26, 1862, he was commissioned surgeon of the Thirty-second Massachusetts Volunteers, joining the Army of the Potomac. He was at Harrison's Landing for two months and subsequently on the Rap-

pahannock. He was at Antietam, Fredericksburg and the second engagement at Bull Run, and served under General Burnside in his "mud march." He was with his regiment at Chancellorsville, Brandy Station, and Gettysburg. Because of an affection of the eyes he resigned his commission as surgeon of the Thirty-second Regiment, August 4, 1863. On January 12, 1864, he re-entered the service and was commissioned captain of Company F, Fifty-sixth Regiment, and with that command participated in the Wilderness engagements, where he was twice wounded, one shot breaking his leg. He was taken prisoner and confined at Lynchburg for three months, when he was transferred to Libby Prison, being released on parole a month later. While in confinement, he was commissioned major by Governor Andrew, and in December, 1864, he was discharged for disability contracted in the service. At his own request he rejoined his regiment in February, 1865, and took a prominent part in the assault on Petersburg in April, 1865. Then he returned to Boston and resumed practice, shortly after removing to Framingham.

Dr. Adams was a member and had held office in the Middlesex South and Framingham medical societies and other medical organizations. He was identified with the Framingham Hospital and numerous other institutions and had been for twelve years before his death medical examiner of the Eighth Middlesex District.

He married Frances Kidder, of Boston. His widow, a daughter, Frances, and a son, Z. Boylston Adams, M. D. 1903, survived him.

His death, on May 1, 1902, at the age of seventy-two, was due to a fall over the Metropolitan Water Works dam at Southboro, Mass.

Dr. Adams was an ardent advocate of vaccination and still believed in the use of the lancet in the treatment of some forms of sthenic pneumonia. He was an old-fashioned doctor and a characteristic representative of a passing generation. WALTER L. BURRAGE.

AGASSIZ, Jean Louis Rudolph (1807-1837), born in Motier, Switzerland, May 28, 1807, Louis Agassiz, naturalist, was the son of a clergyman; his mother was Rose Mayer, a physician's daughter, and Louis was the fifth of eight children, the first four of whom died in infancy. Agassiz developed a love of natural history when still a small boy, and at an early age made a collection of fishes and all sorts of pets, birds, field mice, hares, guinea-pigs, etc., which he reared with great care. He also showed considerable skill with tools, and is said to have owed much of his dexterity in manipulation to the training of the eye and hand, gained in making shoes and toys for his sister's dolls. He was a bright, active child and a general favorite. The love of teaching he showed in later life may in part at least be traced back to his father from whom he had his earliest lessons. At the age of ten he went to the College for Boys at Binne and later he spent two years at that of Lausanne. A brilliant student, he showed much greater capacity for languages and natural history than for mathematics, physics, and chemistry. He became proficient in Latin and Greek as well as in German and Italian. He was a splendid swimmer but did not care for riding horses. He took no interest in shooting. Later, during his university life, he was a proficient fencer. While at Lausanne, Agassiz came much under the influence of Dr. Mathias Mayer, a physician with a large practice and under him studied anatomy. He likewise met several scientists, who aroused an ambition in him to become a naturalist. Accordingly he persuaded his parents to let him give up going into business after finishing school, as planned, and to send him to Zurich University to study medicine. To become a country doctor seemed Louis' desire in order that he might have opportunity to study natural history. Two years followed at Zurich University, a year at Heidelberg, and finally three at Munich University. While at Zurich, Agassiz gave a good deal of attention to the study of natural history and his subsequent university career was guided a good deal more by his devotion to zoology than by his medical studies. He took the degree of doctor of philosophy when he was twenty-two, a year before he became a doctor of medicine. It was chiefly owing to the pleadings of his parents that he spent enough time on medical studies to take his degree. As a university student, he was a leader both in intellectual pursuits and in convivial recreation.

When twenty-two, he had already done important scientific work, and was mastered by an ambition to become a foremost student of natural science. During his student days, while engaged in scientific work, he kept one and sometimes two artists in his employ,—not easy, he says with an allowance of $250 per year; but they were poorer than he, and so managed to get along together. His first

important work, undertaken at the request of Martius, was a description of Brazilian fishes collected by Spix, and a little later he began his great independent work on fossil fishes. In 1832, when twenty-five, after a period of study under the influence of Cuvier in Paris, Agassiz entered upon a professorship of natural history at Neuchatel. He retained this professorship until his removal to America. While occupying this position, he extended his studies on fossil fishes, did valuable work on echinoderems, and made important contributions on the action of glaciers. To him is due primarily the knowledge of a general glacial epoch.

Agassiz had a wonderful power of attracting people and making them devoted to his interests. In his student days he not only got other students to join in with him in forming clubs for scientific study, but induced artists to work for him for almost nothing. He went about things as if he were very rich instead of poor and then managed to get relatives and friends to help him out of his financial troubles. At Neuchatel, where his salary at first was but $400, he had a large staff of scientific assistants and artists and got into very serious financial difficulties. His reckless daring in expenditures, however, enabled him to do a prodigious amount of scientific work, which otherwise would have been impossible. At the age of thirty he had achieved a world-wide reputation as a naturalist and had done the most important work on which his reputation as a scientist rests. After this period his scientific contributions, though considerable in amount and valuable, were hampered on the one hand by a too complex, unorganized, and not always harmonious staff of assistants, and on the other hand by the need to raise money to pay debts in which his undertakings involved him. In 1846 his financial difficulties had reached such an acute stage that his home was broken up, while his wife, the sister of Alexander Braun, the botanist, a student and life-long friend of Agassiz, went with her three children to live with her brother. Agassiz departed for America on a grant obtained in his behalf from the King of Prussia by Alexander von Humboldt. On Agassiz's first visit to Paris in 1831-2 he had met and much attracted Von Humboldt, who was then at the zenith of his power. After this period, Von Humboldt showed his friendship for Agassiz in many ways, not the least of which was the obtaining of this grant. Agassiz came to America at the age of thirty-nine. His primary object was to study the natural history of the country. He prepared himself, however, to make his visit as profitable as possible and diligently studied English on his long ocean trip. After arriving in America, he visited some of the chief cities of the country and met most of those who at that time were prominent students of natural history in America. He was especially attracted by the work of Dana of Yale and Samuel G. Morton of Philadelphia.

Before Agassiz came to America, his friend Charles Lyell had arranged that he might give a course of lectures before the Lowell Institute in Boston, thus giving him opportunity to supplement his income and at the same time to gain a public introduction. He was enthusiastically greeted. Agassiz delivered courses of lectures similar to those given at the Lowell Institute in Boston, in Albany, New York, and in Charleston, South Carolina, and with similar success. At the request of the faculty of the College of Physicians in New York, Agassiz gave a series of twelve lectures during the fall of 1847, and from this time on he was constantly in demand by the lecture-loving American public. In 1847 he was appointed to the chair of Zoology and Geology at the scientific school just established by Abbott Lawrence in connection with Harvard College. The salary attached to the chair, $1,500, was guaranteed by Mr. Lawrence "until such time as the fees of the students should be worth $3,000 to their professor," a time which never came. Agassiz's lectures, with the exception of the more technical lectures addressed to small classes, were always fully attended, but special students were naturally very few in a department of pure science. This was, however, counter-balanced in some degree by the clause in his contract which allowed him entire freedom for lectures elsewhere. After his appointment, Agassiz removed to Cambridge, where he opened his first course in 1848. Much of his time was devoted to obtaining funds for the Museum of Comparative Zoology and its organization. So great were his persuasive powers that he obtained generous grants from the state Legislature during war times. In all he raised by public and private subscription about $700,000 for the museum, an amount since greatly increased by gifts from his son, Alexander. Agassiz took part in several scientific expeditions, among them one to Florida, one to Brazil, and one by sea

from the Atlantic to the Pacific Coast, fully utilizing opportunities thus afforded for obtaining material for his pet museum.

Not long after coming to America his first wife died and in 1850 he married Elizabeth C. Cary, sister-in-law of President Felton of Harvard University. Mrs. E. C. Agassiz was of the greatest help to her husband. To increase his resources she established a private school for girls in which Agassiz himself was one of the teachers. This proved a success and Agassiz was a great favorite with the pupils.

Agassiz was great as an investigator, as a director of research, and as the founder of a magnificent museum. He was preeminent as a teacher. Of his scientific contributions while in this country, the most important are: "Lake Superior; its Physical Character, Vegetation and Animals, compared with Those of Other and Similar Regions," March, 1850; "Contributions to the Natural History of the United States;" first two volumes issued in 1857, the third in 1860 and the fourth in 1862. There were to be ten volumes, but only four were issued. Agassiz intended the work to be written in a non-technical style and yet to be a scientific contribution. With the exception of the introductory essay on Classification, the articles contained in the four volumes are, however, highly technical in nature. The essay on Classification is valuable in that the subject is taken up from a view opposed to that of Darwin and the evolutionists. The technical papers are on the North American Testudinata, the Embryology of the Turtle, the Acalephs in general, Ctenophoræ, the Discophoræ, and the Hydroidæ. The four volumes owe much to the drawing and engraving of Sonrel, who wore out his eyes in the work, and of Burkhardt and Clark. In addition to these works, he published a large number of articles of greater length, a list of which may be found in his Life by Marcou. The topics treated are scattered broadly in the fields of zoology and geology. Some papers are mere sketchy reviews, others are of great importance to science. Among the latter may be mentioned papers on corals and coral reefs, on the embryology of some of the invertebrates, and on the homologies of the radiates.

In the summer of 1851 he became professor of anatomy at the Medical College at Charleston, South Carolina. He had been giving popular lectures on biology for the income which it brought him, and was glad to substitute for these popular lectures in various parts of the country a regular course of instructions for students. While lecturing at the Medical College he established a laboratory on Sullivan's Island and there devoted the greater part of his time to a study of the coast fauna. Three times a week he went to town to deliver lectures on human anatomy. In the following year his professorship at the college continued, but owing to illness he could give little attention to the work. He did not teach again in a medical college. His death took place at Cambridge, Massachusetts, on December 14, 1873. CHARLES R. BARDEEN.

AGNEW, Cornelius Rea (1830-1888), surgeon-ophthalmologist and oto-laryngologist, was born in New York City, August 8, 1830, and died there April 18, 1888. In that city, too, he performed the greater portion of his work. His ancestors, Huguenot, Irish and Scotch, came to America from time to time during the 18th century. His father was William, his mother, Elizabeth Thompson Agnew. When fifteen years of age, he entered Columbia College—an institution which, in after years, was to owe much to his labors—and, at the age of nineteen, received therefrom the degree of bachelor of arts. In the same year he began to study medicine—after the fashion of the time—with a preceptor, Dr. J. Kearney Rogers, who for many years was surgeon to the New York Hospital and to the New York Eye and Ear Infirmary, as well as professor of anatomy in the College of Physicians and Surgeons. In the last-named institution, the subject of this sketch attended the regular course, and, in 1852, received his professional degree. Serving for a year or more as house surgeon in the New York Hospital, he proceeded in 1854 to what were then the western wilds south of Lake Superior. There for about a year he practiced in a village which is now Houghton, Michigan. Receiving without solicitation the appointment of surgeon to the Eye and Ear Infirmary of New York City, he returned to his native town early in 1855. Soon, however, he sailed for Europe to prepare himself still further for the arduous duties of his new position. He did not, however, while abroad, confine his attention exclusively to the study of ophthalmology and otology. In Dublin, for example, though he studied under William (afterwards Sir William) Wilde, deviser of Wilde's incision for mastoid abscess, he became, at the same time, a resident pupil of the lying-in

asylum. In London, a little later, though he studied under William Bowman and George Critchett, he devoted much attention to general medicine and general surgery. Finally, in Paris, where his masters in ophthalmology were no less personages than Sichel and Desmarres, he found time to attend the clinics of Velpeau and Ricord.

Returning to New York late in 1855, he entered upon a career as general practitioner, and soon was appointed surgeon-general of the state. Three years later, he was appointed medical director of the New York Volunteer Hospital. In his later years Agnew devoted himself exclusively to diseases of the eye and ear. He was a man of strongly marked and wholly natural executive ability. Hence it was that, first and foremost, he was a founder of institutions. He was one of four to start the Union League Club of New York City. He assisted, in 1864, in organizing the School of Mines of Columbia. In 1866, at the request of the entire faculty, he established an ophthalmic clinic in the College of Physicians and Surgeons of New York. Two years later he brought into existence the Brooklyn Eye and Ear Hospital, and, the following year, the Manhattan Eye and Ear Hospital of New York. He was also one of the founders of the New York Ophthalmological Society. A part of the success of the United States Sanitary Commission must be attributed to Dr. Agnew's labors. In 1869 he was elected to the clinical professorship of diseases of the eye and ear in the College of Physicians and Surgeons—a position which he held till his death.

Agnew's contributions to ophthalmic literature and his inventions are numerous and valuable. He devised, for example, an excellent operation for divergent strabismus, which he described in detail in the "Transactions of the American Ophthalmological Society," for 1886, under the title, "A Method of Operating for Divergent Squint." His "operation for thickened capsule" is also an important procedure, often described today by European ophthalmologists even in their smaller manuals.

As a lecturer, Agnew was always simple, clear and interesting. According to one of his assistants, Dr. Charles H. May, of New York, "In his first lecture; I remember, he always laid stress upon the necessity for the ophthalmologist being observant, and he regularly illustrated the difference between 'seeing' and 'observing' by the following anecdote: A man was preparing to end his day's work one summer afternoon and found that he had allowed comparatively little time for catching the boat which connected with his train. He hastily closed up his office, and rushed to the pier. He saw the ferry boat in the slip, with a space of one or two feet between the boat and the slip. He made up his mind that he could just catch the boat by running. He ran, and, giving a final jump, landed on the boat, knocking down one or two passengers at the same time. Picking himself up, he was accosted by one of the passengers whom he had inconvenienced, with the remark: 'You big goose, the ferry boat is coming in, not going out.' Agnew used to lay stress upon the anecdote, saying that the man saw the ferry boat and the fact that it was not in the slip, but he failed to observe that it was coming in and not going out.

Dr. Agnew was a man of slender build and middle height, dark-eyed, dark-complexioned, and when the present writer knew him, with the remains of a raven blackness still lingering in his rapidly whitening hair. He was gently dignified in manner and even in serious conversation had a way of smiling softly from time to time, as if a pleasant undercurrent of thought were playing beneath the more immediate matter. The writer recalls with a kind of poignant gratitude the fact that his own fast-failing, but afterwards excellent, eyes were tested for the first time by this careful and courteous physician. He recalls especially the manner in which, when he had received from Dr. Agnew's hand the folded bit of paper containing the results of the test, he was taken gently by the shoulders, while a pleasant voice observed: "Young man, be there in you much or little, the glasses which you will get in accordance with this prescription will certainly prove to be a kind of turning-point in your life." Then—that characteristic smile.

In 1856 he married Mary Nash, daughter of Lora Nash, a New York merchant. They had no children and adopted two nieces.

Agnew was a very religious man, and took an abiding interest in things pertaining to the welfare of the church. He was never intolerant, however, but, as in his scientific labors, was thoughtful, earnest, careful never to offend and more attentive by far to the duties which he himself had to perform than to looking up defects in the services of others.

THOMAS HALL SHASTID.

AGNEW, David Hayes (1818-1892), Philadelphia surgeon, famed as teacher of anatomy and surgery, for his deft and exact operating and skill as a consultant, was born in Lancaster County, Pennsylvania, November 24, 1818, of a family which it was said, could be traced through many generations of North of Ireland and Scotch ancestry to Norman progenitors. In America the Agnews had been prominent in the history of Pennsylvania for nearly two centuries. Agnew's father was a physician and the son was educated at Moscow College, in Chester County, at Jefferson College, at Canonsburg and for a year at Delaware College, Newark, Delaware. He was graduated from the medical department of the University of Pennsylvania in 1838 before he was twenty-one years of age, and went into general practice at Nobleville, in Chester County. He was married, November 21, 1841, to Margaret Creighton, daughter of Samuel Irwin, iron-founder, in the same county. When he had been seven years in practice, in a country community, his father-in-law died and young Agnew entered with his brothers-in-law (1843) in the iron-founding firm of "Irwin & Agnew". Through lack of transit facilities and a business depression this firm failed in 1846, leaving Agnew with personal debts. He returned to the practice of medicine in Chester and Lancaster counties and moved to Philadelphia in 1848, where he resuscitated the Philadelphia School of anatomy, in Chant street, succeeding Jonathan M. Allen (q.v.) in 1852. At this school Dr. Agnew worked early and late, sometimes being in the school for eighteen hours a day, lecturing and demonstrating; the quarters were enlarged and at one time, as many as 267 students were in attendance, coming from the University of Pennsylvania and Jefferson medical colleges, near at hand, and from the Southern States. He had difficulty in obtaining sufficient material for dissection but was active and diligent in pursuit of it. For ten years he pursued his labors here; he said later in life that he never knew what it was to feel tired; he had a splendid physique, was six feet tall and of a compelling personality. The students adored him; he was said to be the most clear and practical lecturer of the time; he had a kindly nature and a love of science being ready ever to answer questions and demonstrate the facts of nature on the human body. Dr. Agnew also started a school of operative surgery lecturing on two or three evenings a week. In 1854 he had been made a surgeon to the Philadelphia Hospital and there he could teach clinical surgery; he was an assistant as well, to Henry H. Smith, professor of surgery at the University so that on the opening of the Civil War he was known as an able operator and a sound consultant, being then at the age of forty-two. During the war he served chiefly as assistant surgeon at the Hestonville Hospital, though he was employed by the government at several of the large hospitals and became an expert in the treatment of gunshot wounds. In 1863 Dr. Agnew was elected a surgeon to the Wills Eye Hospital; in 1865, surgeon to the Pennsylvania Hospital; in 1867, surgeon to the Orthopaedic Hospital; in 1870, professor of clinical surgery, and in 1871 professor of surgery in the University of Pennsylvania, retaining the last position until 1889 when he was created emeritus professor.

From the first Dr. Agnew's reputation and practice increased; his clinics were crowded as well as his waiting room; he was the chief consultant in charge of President James A. Garfield when he was shot by Guiteau in 1881; in 1889 he was elected president of the Philadelphia College of Physicians and the previous year he had been given a complimentary banquet attended by over 200 physicians in the foyer of the Academy of Music, at which J. M. DaCosta and Lewis A. Sayre spoke and Weir Mitchell read a poem.

Dr. Agnew's writings comprised some sixty-six titles, including addresses on sundry occasions, "Practical Anatomy; a New Arrangement of the London Dissector", 1856; Sixty articles: "Anatomy in its Relation to Medicine and Surgery", 1859-1864; Clinical Reports, 1859-1871; "Lacerations of the Female Perineum", 1865; "Vesico-Vaginal Fistula", 1867; and his chief work: "Treatise on the Principles and Practice of Surgery" in three volumes appearing respectively in 1878, 1881, 1883. This was an exposition of his enormous experience, embraced every department of surgery and was written by him in moments snatched from a busy practice, in English so clear that even today his well-balanced consideration of points in diagnosis, his lucid explanation of the surgical anatomy of diseases and injuries is of value to the student of medicine.

As a teacher Agnew was remarkable for his simple, plain straight-forward methods, his faculty for making clear and easily comprehensible even the abstruse and complicated

portions of his subject; in operating he was calm, often when all around were flurried; he inspired both the assistants and his patients with courage. As a consultant his soundness of judgment was always in evidence and his kindliness and tact prevented him from injuring the feelings of his consultant. He was ambidextrous, owing to an injury to his right index finger in youth, and could handle the knife with either hand at will and with precision. Spectators marvelled at the exactness of his operating and at his judgment in emergencies, though he was never what is called "brilliant". He was patient, never irritable while operating. He had a calm, well balanced disposition through life and when in his seventies he suffered with angina pectoris he bore the pain with equanimity. Active up to the last he died of coronary arteriosclerosis complicated by nephritis and diabetes on March 22, 1892, beloved and mourned by all.

AHERN, Michael Joseph (1844-1914), protagonist in the field of Listerian surgery in Quebec, was born in Quebec in 1844 of parents who came over from Cork, Ireland. He studied in the local schools and resolved to teach as a profession. Curé Saxe, however, persuaded him to seek a wider field and he took up medicine in the Laval University in 1864 and graduated Doctor of Medicine in 1867, then serving as interne in the Marine and Immigrants' Hospital, Quebec.

He stepped into the shoes of Dr. McCraw and gradually built up a substantial practice and married Georgine Marcotte of Quebec in 1876. In 1878 he was made professor of anatomy and in 1885 of clinical surgery in Laval. Born in the days when anesthesia had but recently arrived to mitigate the horrors of surgery and extend its domain, he had yet to see its promised benefits, largely dissipated by the continued reign of pyemia, erysipelas, hospital gangrene and purulent infections of all sorts. These he combated by the introduction of the new Listerism into the Hotel-Dieu of Quebec. He was, like so many of his confrères, in all ages and clinics, interested in science, especially in botany and mineralogy; he made collections of the fossils found in the rocks of the Quebec mountains, and at his death over four hundred named specimens of the Niagara formation were presented to the Geological Museum of the University.

His last work was an uncompleted "History of Medicine in Canada" under French Rule. He died April 18, 1914.

HOWARD A. KELLY.

AKERLY, Samuel (1785-1845), of New York, was born in 1785. After graduating in medicine from Columbia in 1807, he studied with his brother-in-law, Samuel Latham Mitchill, (q.v.) and became an enthusiastic zoologist and botanist. In 1820, he published an "Essay on the Geology of the Hudson River." He was active in establishing institutions for deaf mutes and the blind, and among his contributions are his observations on deafness (1824). In 1829, he brought out the fourth American edition of the "Lexicon Medicum" by Robert Hooper, with additions from American authors on botany, chemistry, materia medica, and mineralogy. He died on Staten Island, July 6, 1845.

ALCOTT, William Alexander (1798-1859), physician and author, was born in Wolcott, Connecticut, August 6, 1798. By hard work on the farm he supported himself, and paid for tuition in the medical school of Yale University, and before many years became a man of great influence in the community and acquired considerable practice. He was a man of excellent common sense, and quickly detected the folly of the fantastic therapy dominating the medical world in his day and long after it, and many illuminating experiences led him to abandon the use of one drug after another; all this is detailed in an autobiography with the quaint title, "Forty Years in the Wildernesses of Pills and Powders." He early realized the advantages and made use of hydrotherapy as an adjunct in the treatment of disease. He had great confidence in calomel and gave enormous doses without apparent ill effects. He describes his treatment of croup in a child to whom he administered a teaspoonful at a dose and the little patient soon recovered.

About 1832 Alcott removed to Boston and associated himself with William Woodbridge in the preparation of school geographies and atlases and in editing the "Annals of Education." The people among whom he had lived had only the most rudimentary education; the schools taught reading, but "figuring" had to be learned after hours; a few could do small sums in subtraction but almost none could multiply or divide. He edited "Juvenile Rambles," the first weekly period-

ical published in America for children. He wrote "On the Construction of School-Houses." It is said he visited 20,000 school-houses. In all, Alcott published upward of one hundred books and pamphlets, many dealing with education, morals and physical training, and he was identified with noted reforms.

He died in Auburndale, Massachusetts, March 29, 1859. ROBERT M. LEWIS.

ALDEN, Ebenezer (1788-1881), medical biographer, was born in Randolph, Mass., March 17, 1788. He was descended through both father and mother from John Alden of the "Mayflower". Graduated from Harvard College in 1808 he received an M. B. from Dartmouth Medical School in 1811 and an M. D. from the University of Pennsylvania Medical Department in 1812. At Philadelphia he came under the instruction of Rush, Barton and Wistar. Returning he settled in his native town and there passed the rest of his life. From 1837 to near the close of his life Dr. Alden was a trustee of the Phillips Academy and of the Andover Theological Seminary. He was also a trustee of Amherst College and was one of the original trustees of Thayer Academy of Braintree. In 1847 he was elected president of the Massachusetts Medical Society but declined to serve. Dr. Alden was a bibliophile and collected a private library of rare books and pamphlets, especially those concerning the Civil War and the ecclesiastical history of New England. He joined the New England Historic Genealogical Society in 1846, the year after its organization. He was well known as a lecturer on temperance and as a singer, making one of a chorus at the National Peace Jubilee in Boston, in 1869 when he was eighty-one years of age. Some of his writings are: "The Early History of the Medical Profession in the County of Norfolk," May 10, 1853, "Memoir of Bartholomew Brown, Esquire," Randolph, 1862; "Memorial of the Descendants of the Hon. John Alden," 1867, page 184; "Notice of the Founders of the Massachusetts Medical Society" and "Historical Sketch of the Origin and Progress of the Massachusetts Medical Society," 1839. He was married to Anne, daughter of Capt. Edmund Kimball, of Newburyport, in 1818 and they had six children. He was totally blind for the last five or six years of his life and died at the age of ninety-three at his home in Randolph, January 26, 1881. There is a portrait in the New England Historic Genealogical Register for 1881, page 213.

WALTER L. BURRAGE.

ALEXANDER, Ashton (1772-1855), founder and first secretary of the Medical and Chirurgical Faculty of Maryland, provost of the University of Maryland, was born in 1772, near Arlington, Alexandria County, Virginia. The town of Alexandria was named after his ancestors, who owned large tracts of land in its vicinity. His father commanded a company of horse in the Continental Army at the commencement of the Revolution. His youth was spent in Jefferson County, Virginia, where he was educated at a private institution and studied medicine under Dr. Philip Thomas, of Frederick, Md., finishing at the University of Pennsylvania, where he obtained his medical degree May 22, 1795. He settled first in North Carolina and in 1796 went to Baltimore. He was a founder of the Medical and Chirurgical Faculty of Maryland and its first secretary (1799-1801); then he was treasurer (1801-1803) and the last surviving charter member.

Other positions Dr. Alexander held were the following: Commissioner of Health, Baltimore, 1804-05 and again 1812; attending physician, Baltimore General Dispensary, 1801-03; consulting physician, Baltimore Hospital, 1812; president, District Medical and Chirurgical Society, 1819-20; provost, University of Maryland, 1837-50.

He married in December, 1799, a daughter of his preceptor, Dr. Thomas, and had eight children, only three of whom arrived at maturity and all of whom died before he himself did. His first wife dying, he married very late in life Miss Merryman, but had no children.

Dr. Alexander is described as being a self-possessed and courteous man, neat in his dress which included knee and shoe buckles and gold-headed cane. He died of pneumonia in Baltimore in February, 1855, in his eighty-third year. EUGENE F. CORDELL.

ALEXANDER, James Franklin (1826-1903), was born on a farm in Greenville district, South Carolina, in 1826, a descendant of good old Scotch-Irish stock and closely related to the Alexanders of Mecklenburg, North Carolina, who in May, 1775, signed the first "Declaration of Independence" known to be in existence in the United States. His grandfather, John R. Alexander, was a soldier in the Revo-

lutionary War. His father, Thomas W., removing from South Carolina settled in Gwinnett County, Georgia, when James F. was only five years of age. James graduated at the Georgia Medical College in March, 1849, afterwards settling in the city of Atlanta, at once forming a partnership with a former schoolmate, Dr. John C. Calhoun, but the exorbitant price of six dollars per month rent for an office so deterred young Calhoun that he went back to his old home, Lawrenceville.

Among Dr. Alexander's first patients were a number of small-pox cases whom the other doctors refused to treat. Dr. Alexander gladly availed himself of this opportunity and this incident doubtless affected the whole of his future. The reputation he gained here for his successful management of the cases and obliterating the disease gave him such notoriety that he was ever known, not only throughout Georgia, but the entire South as a successful small-pox expert. During his practice before and after the war he was known to have passed through fifteen or sixteen small-pox epidemics. In his early years he became an ardent advocate of general vaccination and re-vaccination. He was the youngest member of the body of men who formed the Georgia Medical Association in May, 1849. Up to his death he was an active and prominent member of this organization. In 1853, '54 and '55, he did much good work in helping to establish the Atlanta Medical College. Being of a diffident nature, he preferred private practice to appearing in the lecture hall. Dr. Alexander was surgeon to the Eighth Georgia Infantry during the Civil War for the first year. After this he resigned, returning home, serving the Confederacy as a surgeon in the hospital, principally looking after small-pox patients during the last two or three years of the war.

In politics he was an ardent Democrat and active Secessionist. From his popularity and general congeniality he was a favorite among the people and could have held any office that he wished, refusing all, however, except to be elected delegate to the convention which declared Georgia out of the Union.

His first wife was Miss Georgia Orme of Milledgeville, and his second wife, Ada, daughter of Judge Permeda Reynolds. From the first union there was an only daughter; from the second, two children, James F. and Ada. He died Nov. 14, 1903, of senile decay.

JAMES B. BAIRD.

ALEXANDER, Nathaniel (1756-1808), physician and ardent patriot, was born in Mecklenburg County, North Carolina, March 5, 1756. His father was Lieutenant-Colonel Moses Alexander, who took part in the Cherokee Boundary Expedition of 1767 and rendered other important military services. Nathaniel Alexander graduated at Princeton University in 1776, then studied medicine; he served as surgeon in the North Carolina Continental Line or Regulars from 1778 until the close of hostilities in 1782. At the end of the War he began to practice at the High Hills of the Santee, South Carolina, then went to Charlotte, North Carolina. In 1797 he became a member of the North Carolina House of Commons; 1801-1802 he was in the State Senate; 1803-1805 he was member of the United States Congress. Here his course met with such approval that he was elected governor of North Carolina and served from 1805 until 1807.

Dr. Alexander was "distinguished in his generation as a friend of public education;" from 1805-1807 he was president of the board of trustees of the University of North Carolina—before a governor of the State became ex-officio president of the board; in his gubernatorial position he labored to impress the legislature with the importance of providing a system of public education.

Although so noted as a statesman, he was also not undistinguished in his profession. Dr. J. M. Toner (q.v.) speaks of him as a "physician of eminence in Mecklenburg."

His wife was a daughter of Colonel Thomas Polk; they had no children. He died at Salisbury, North Carolina, March 8, 1808.

ALEXANDER, Samuel (1858-1910), genito-urinary surgeon, was born in New York City April 2, 1858, the son of Henry M. and Susan Brown Alexander and the grandson of Matthew Brown, D. D., for many years president of Washington and Jefferson College. He graduated from Princeton in 1879 and from Bellevue Medical College in 1882. In 1883 he went abroad, studying in London, Leipsic and Vienna. Upon his return to America he was appointed attending surgeon to Bellevue Hospital and in 1887 became professor of genito-urinary surgery in Bellevue Hospital Medical College. In 1898 he was made professor of clinical surgery in the department of genito-urinary diseases in Cornell University Medical College. He died in New

York City November 29, 1910, of acute gangrenous appendicitis. He was unmarried.

Dr. Alexander was an indefatigable worker and an enthusiastic and successful teacher. He began his professional life as a partner of Dr. E. L. Keyes and devoted himself to genito-urinary diseases in which he became one of the foremost authorities in America. He gave particular attention to the relief of enlarged prostate and developed an admirable operation based on exhaustive and scientific work in anatomy and pathology.

Among his writings are: "Syllabus of Introductory Lectures to the Clinical Courses on the Surgical Diseases of the Genito-urinary System;" a booklet in two parts, 1905-1908; "The Technique of Median Prostatectomy". Tr. Phila. Acad. of Surgery, 1911.

C. L. Gibson.

ALLEN, Charles Linnaeus (1820-1890), scholar, sanitarian, lecturer at Middlebury College and the University of Vermont, practiced medicine and surgery in Middlebury and Rutland, Vt., for more than forty years. He was born in Brattleboro, June 21, 1820, the son of Dr. Jonathan Adams and Betsy Cheney Allen. His boyhood was spent on a farm in Jamaica, Vt., his mother's home. At the age of fifteen he was apprenticed to a printer in Burlington. Not satisfied with his treatment, he ran away, enlisting at Boston in the United States Navy as a "powder monkey." On account of his penmanship, he was employed by the captain as clerk. After several months, he deserted at New York, tramped to Middlebury, where his father was then practicing, and in 1837 began a college course, working his way by doing farm work and teaching. During his college course he was suspended for a year for leaving town to attend a Tippecanoe meeting at Brandon, so that he graduated in 1842. His health failed him after graduation and he was considered hopelessly sick with consumption. He went south to North Carolina, where he spent two years regaining his health; meantime tutoring. Returning to Vermont he entered the Castleton Medical College, where he received his degree in 1846 and at once took up the practice of his profession in Middlebury.

Dr. Allen lectured on chemistry at Middlebury College, although he never received a formal appointment. He divided his practice between Middlebury and Rutland for several years, at the same time lecturing at the Castleton Medical College. In 1855 he was appointed professor of chemistry and later, in 1860, of the practice of medicine, at this institution. In the spring of 1862 he delivered lectures in the Medical Department of the University of Vermont on civil and military hygiene, the first lectures on that subject ever delivered in this country. In 1861 he was a member of the State Board for examining candidates for regimental surgeons. Later he was appointed a surgeon of the United States Volunteers, Ninth Vermont Infantry, but learning from Senator Foote that there was a vacancy in the Brigade Corps of Surgeons, U.S.V., he resigned, hastened to Washington, and in June, 1862, took the examination for the Brigade Corps of Surgeons and passed the best examination, with one exception, during the war. He was at once appointed on the examining board with Doctors Clymer and Brinton with the rank of major. Later he was transferred to the department of the south and in 1864 he was made medical purveyor. He resigned in August of that year "because he went into the army to serve as a surgeon, not as a druggist". After the war he was appointed a pension examining surgeon and held the position until his death with the exception of four years during Cleveland's first administration. He was secretary of the Vermont State Board of Health from the first organization of the board in 1886 until his death. This position was one for which he was admirably qualified. Boards of health were comparatively unknown at this time. The science of preventive medicine was in its beginning and it had not then made for itself a place in the popular mind. Dr. Allen did much valuable educational work for the newly appointed board in Vermont. He prepared circulars in popular language, dealing with infectious diseases, school houses, water supplies, and other details of state sanitation and edited a periodical, called "The Sanitary Visitor," in the name of the board. Thus he laid the foundation for the successful work of the board in later years.

Dr. Allen was for many years a member of the Vermont State Medical Society and was twice its president, first in 1850 and again in 1858. He had been a prominent member of the Addison County Medical Society and its treasurer and librarian from 1847 until 1859. In 1888 he became a member of the American Public Health Association. He was a member of the American Medical Association and a fellow of the American Academy of Medicine. He was always a student; did not

specialize, but was a good all-round surgeon and physician. He had a wide reputation in Western Vermont and beyond, and his consultation practice was extensive.

Dr. Allen married June 14, 1854, Harriet W. W. Garfield, widow of Dr. F. A. Garfield, by whom he had two daughters. Mrs. Harriet Allen died April 25, 1858, and he married, May 31, 1865, Margaret Gertrude Lyon. By her he had three sons, Edwin Lyon, Charles William and Harris Campbell.

He died suddenly at his home in Rutland on the morning of July 2, 1890, of cerebral hemorrhage.

Dr. Allen was of striking personal appearance, short in stature, and in his early days muscular and well knitted. He had a large well formed head, patriarchal gray hair and beard, prominent features and brown eyes, a face not readily forgotten. His knowledge and reading were not confined to his profession. He was a well-read man and from the first was a prominent member of the Shakespeare Club of Rutland, which had a long and honorable career in that city.

CHARLES S. CAVERLY.

ALLEN, Charles Warrenne (1854-1906), dermatologist of New York, was born at Flemington, New Jersey, December 4, 1854. He was the son of a lawyer and went as a boy to the public schools of his native place; later he was sent to the Lycée Imperiale, Nantes, and in 1875 graduated from Phillips Exeter Academy, Exeter, New Hampshire. He began to study medicine at Harvard, but received his degree from the College of Physicians and Surgeons, New York, in 1878. In 1879-80 he studied in Vienna, Heidelberg and Paris, then in 1881 settled in New York City to practice, later devoting himself exclusively to diseases of the skin. Shortly after his return from Europe he was appointed genito-urinary surgeon to the Charity Hospital, New York; when he resigned that position he was appointed consultant. For many years he was physician to the department of diseases of the skin in the Essex Street Dispensary. In 1900 he was appointed to the chair in the New York Post-Graduate Medical School, a position he held until death. He was dermatological consultant to the Randall's Island Hospital, New York, the Hackensack and Bayonne Hospital, New Jersey, a member of the medical societies of the state and county of New York, the New York Dermatological society and the American Dermatological Association.

He wrote "The Practitioner's Handy Book of Medical Progress" and the "Practitioner's Manual," and in collaboration with Drs. Franklin and Stern published, in 1904, "Radiotherapy, Phototherapy, and High Frequency Currents" and was on the editorial staff of the "New York Medical Record," also contributing frequently to various medical journals on dermatology.

Dr. Allen's vast experience and keen observation made him one of the most expert dermatologists in the United States; he was a ready debator.

His death occurred at Genoa, May 17, 1906, while returning from the International Medical Congress. J. McF. WINFIELD.

ALLEN, Dudley Peter (1852-1915), of Cleveland, Ohio, surgeon, teacher, writer, and a patron of art, was born in Kinsman, Ohio, March 25, 1852. His father and his grandfather were physicians. He graduated from Oberlin College, Ohio, in the class of 1875 and soon thereafter entered the Harvard Medical School, and in 1879 received from it his degree of M. D. He then spent a year as surgical house officer in the Massachusetts General Hospital, and on leaving that institution went to Europe where he passed two years or more attending medical and surgical lectures and clinics in Berlin, Vienna, London, Paris and other medical centres.

In 1883 he settled in Cleveland where he began a surgical career, which ultimately brought him to the front of his profession. He was early appointed to the department of surgery in the Western Reserve University, where in time he became professor of surgery and clinical surgery. He also joined the surgical staffs of a number of hospitals, but he served for the longest period at the Lakeside Hospital where ultimately he became surgeon-in-chief. His professional practice rapidly grew to large proportions. Dr. Allen was a pioneer particularly in applying surgery to deviations of the nasal septum and hypertrophies of the turbinates. He was a frequent contributor to medical literature, and an active supporter and a patron of the Cleveland Medical Library,—an institution which owes much to his able and generous support.

He was president of the Ohio State Medical Society, and for a number of years was secretary, and finally president of the American Surgical Association, 1906-1907. He was

awarded the degree of LL. D. from his own College (Oberlin). In 1910 he resigned all his medical positions, and with his wife (who before marriage was Miss Elizabeth S. Severance, of Cleveland) made a tour around the world.

During his busy professional life he interested himself in the fine arts, and when he was free to travel indulged his desire to see more of the world and made valuable collections of paintings and engravings, especially of old Chinese porcelains, in which he was a recognized expert. His interest also included architecture, horticulture and music, and his knowledge and judgment in these specialties were astonishing. He died suddenly in New York City on Wednesday, Jan. 6, 1915.

GEORGE H. MONKS.

ALLEN, Harrison (1841-1897), anatomist of Philadelphia, born in that city April 17, 1841, was the son of Samuel Allen and of Elizabeth Justice Thomas. On his father's side he was descended from Samuel Allen, who came over here from England with William Penn. He had his early education in the public grammar schools and at the Central High School of Philadelphia, and as a boy was greatly interested in natural history, and though afterwards he would have preferred pure science, financial considerations led him to study medicine, including dentistry. It became necessary for Allen to leave school during his high school course and seek work. He tried two or three things and finally studied dentistry under Dr. J. Foster Flagg (q.v), devoting his spare moments to reading medical books, and taking the regular courses in medicine at the University of Pennsylvania, where he graduated in 1861. Upon graduation he became a resident physician in the Blockley Hospital, Philadelphia.

He was for the greater part of the war stationed in hospitals in and near Washington where a large part of his limited leisure was spent at the Smithsonian Institution, and there he came under the influence of Professors Joseph Henry and Spencer F. Baird. Upon his resignation from the army Allen entered upon the practice of medicine in Philadelphia. Partly owing to his dental education he was led to develop the special surgery of the air passages, and among his fifty-odd papers on medical and surgical subjects, many relate more or less closely to this field of work.

At the time Harrison Allen began the practice of medicine there was little opportunity for a man to earn his living by entire devotion to science and teaching. While he was forced into practice for a livelihood, his deeper interests were in natural science, and these led him to welcome the ill-paid teaching positions offered. Meanwhile, in the midst of practice and teaching he was actively engaged in scientific investigation, much influenced at first by his teacher, Joseph Leidy (q.v). He joined the group of investigators which worked in the building occupied by the well known Philadelphia School of Anatomy and became an active member of the Philadelphia Academy of Natural Sciences. The subject of his thesis at graduation was "Entozoa Hominis." This title suggests the guiding hand of Joseph Leidy, who did so much in this field. Allen's first published scientific paper, entitled "A Description of New Pteropine Bats from Africa," appeared in the "Proceedings of the Academy of Natural Sciences" in July, 1861. This was the beginning of a series of some thirty-odd papers relating to bats. Of these the most important was his "Monograph on the Bats of North America" published by the Smithsonian Institution in 1864 and brought out in a second revised edition in 1893. In the course of his studies on bats Allen gathered a considerable private collection of specimens which he bequeathed to the Academy of Natural Sciences at Philadelphia. While his work on bats constituted Allen's most important scientific contributions he published numerous valuable papers on other subjects including the joints, the muscles, locomotion, distribution of color markings and craniology. He dissected and described the Siamese twins. In craniology his most important papers were on "Crania from Florida Mounds" (Proceedings of the Philadelphia Academy, 1896) and on "Hawaiian Skulls" (Proceedings of the Wagner Free Institute of Science, 1898). In both papers he paid special attention to individual adaptation of skull form to function and deprecated craniology as a certain criterion of race. Harrison Allen published two textbooks, one in 1869 called "Outlines of Comparative Anatomy and Medical Zoology," the other in 1884, entitled "A System of Human Anatomy." The latter book is clearly written. The subject is taken up from the medical and surgical aspect. It was not commercially very successful, although the fruit of much painstaking labor. In 1891 Allen published under

the title "Addresses in Anatomy" a number of addresses previously delivered on the teaching and application of anatomy. He did not believe that anatomy for medical students should be a mere handmaid of clinical surgery. So to teach anatomy he believed to be against the best interests not only of anatomy as a science, but also ultimately in its practical applications to medicine. He believed in taking it up from the morphological standpoint and that "morphology embraces all animated structures in a scheme of philosophy." Allen was the first to suggest the term pedomorphism in describing infantile characters in the bodies of adults. In a work on "An Analysis of Life Form in Art" (1875) he collected much interesting material relating to design. In all undertakings he devoted the most patient attention to detail and was an exquisitely skilful dissector, although paying comparatively little attention to the technic of microscopic anatomy. As an example of Allen's methods of work, Brinton gives an account of his preparation of a paper on the "Jaw of Moulin-Quignon." This jaw was found in the Abbeville gravels in 1863, and was claimed by some to be that of a prehistoric man, while by others this was disputed. Allen became interested and took up the study of the human mandible with these questions in view:

1. What is the pattern of an ordinary jaw?
2. What is the value of the lower jaw in man as a test characteristic of race?

Allen visited every important anatomical collection in Philadelphia and studied over four hundred inferior maxillæ. His results he based on the three hundred and twenty more perfect specimens. He came to the conclusion that the lower jaw is of little value as a test character of race owing to its wide variations everywhere.

Wilder gives the following summary of Allen's character: "Pre-eminent among Dr. Allen's many admirable traits was his readiness to recognize the good qualities of others. Even respecting bores or those who wronged him I do not recall an unkind remark. So decided, indeed, was his predisposition to find some extenuating quality in even the most flagitious transgressor that had the devil been objurgated in his presence we may imagine him to add: 'His satanic majesty has doubtless many sins to answer for, but let us not forget his extraordinary ability, activity, and enterprise.' I could occupy much time with details of my dear friend's life and nature, but content myself with enumerating what seems to me rare combinations of characteristics. An ardent naturalist and daily handling specimens variously preserved, he was fastidiously neat in person and apparel."

Among his other appointments he was: acting assistant surgeon, 1862; assistant surgeon in the United States Army, 1862. He served throughout the war and resigned in December, 1865, with the title of Brevet-major. He was professor of anatomy and surgery at the Pennsylvania Dental College, 1866-78; president of the American Laryngological Association 1886; visiting surgeon to the Philadelphia Hospital, 1874-78; assistant surgeon to Wills Eye Hospital, 1868-70, and to St. Joseph's Hospital, 1870-78. In 1865 he was appointed to the chair of comparative anatomy and zoology in the auxiliary department of medicine at the University of Pennsylvania; in 1878 to the chair of the institutes of medicine in the medical department of the University; 1885 saw him emeritus professor of the institutes of medicine, and in 1891 he once more assumed the chair of comparative anatomy and zoology which he held until 1896. He was thus connected with the University of Pennsylvania as a teacher for over thirty years. Among other scientific societies to which he belonged may be mentioned the Natural History Society of Boston, the Philadelphia Pathological Society, the Washington Biological Society, the Association of American Anatomists, of which he was president from 1891-1893, and the Anthropomorphic Society, of which he became president in 1891.

In December, 1869, Harrison Allen married Julia A., daughter of S. W. Colton, of Longmeadow, Massachusetts, who survived him with a son and daughter.

He died suddenly November 14, 1897.

A list of his work is in the Proceedings of the Tenth Annual Session of the Association of American Anatomists held in Ithaca, December, 1897. His portrait is in the Transactions of the College of Physicians, Phila. 1918.

CHARLES R. BARDEEN.

ALLEN, Jonathan Adams (1787-1848), was a physician and surgeon of wide reputation in Middlebury, Vermont, from 1820 to the time of his death. He was more than a physician and surgeon; he was a well known botanist, geologist and chemist, besides being a man of high personal character and a devout Christian. Dr. Allen was born at Holliston, Massachusetts, Nov. 17, 1787. His father, Amos

Allen, was of Welsh descent, his mother was a daughter of Abel Smith and grand-daughter of Jonathan Adams of Medway. After the family removed to Newfane, Vt., young Jonathan, during intervals of work on the farm, attended the common schools. He seems to have been a natural student and satisfied his taste for books by purchasing these from the proceeds of the furs he was enabled to secure by trapping and hunting. On his twenty-first birthday he started out with a bundle to seek his fortune. He taught school in West Townshend and studied Latin with the minister. Deciding to study medicine, he placed himself under the tuition of Dr. Paul Wheeler of Wardsboro. He attended lectures at Dartmouth under Dr. Nathan Smith and graduated from that institution August 24, 1814, and then returned to Wardsboro, practiced with Dr. Wheeler, his instructor, for two years, and moved to Brattleboro in August, 1816.

Dr. Allen was surgeon of a regiment raised near the end of the war of 1812, which, on account of the close of the war, was disbanded without seeing service. In the spring of 1822 he moved from Brattleboro to Middlebury, where he was appointed a member of the corporation of the Vermont Academy of Medicine, a medical college situated at Castleton, Vt., and having a "conventional connection" with Middlebury College, the latter institution conferring the degrees. He also at this time was appointed professor of materia medica and pharmacy in the Castleton institution and moved to Herkimer, New York. Here his second wife died, five days after the birth of her son, Amos Dygert. Thereupon, because his property, with the exception of a horse, was in Vermont, Dr. Allen determined to return there. In an old crate, which had been used for packing crockery, placed upon two saplings for runners, he placed his four older children (presumably leaving the baby with relatives in Herkimer) and started for Middlebury on foot, leading the horse hitched to the improvised sleigh.

Dr. Allen was appointed professor of materia medica and pharmacy in the Vermont Academy of Medicine in 1822, a position which he held for seven years. He also delivered lectures on chemistry at Middlebury College in 1820 and 1826. He was a member of the corporation of the Castleton institution from 1822 to 1832. This school was first known as the Castleton Medical Academy, then as the Vermont Academy of Medicine, and finally after 1841 as the Castleton Medical College. Dr. Allen was a prominent member of the Vermont Medical Society and was made a curator of that Society, when it was reorganized in October, 1841. The Addison County Medical Society, which, like the state society, had had a lapse of several years, was reorganized in December, 1835, mainly through the influence of Dr. Allen, who became president at that time. Again in 1842, after another lapse of six years, this society was reorganized and Dr. Allen was again made president. From that time until his death he was an active and valuable member of this county organization and president half of this time. Aside from his membership in the local medical societies, he was a member of the Lyceum of Natural History of New York, of the Geological Society, and the Physico-Medical Society of New York. He was also a member of the Linnaean Society of New England and at one time Secretary of the Abolitionist Society.

His special studies seem to have been materia medica and pharmacy, branches, which he taught at Castleton. He was a practical student of natural history, especially botany. His herbarium, originally in twelve volumes, and probably in duplicate, was divided between his two sons, Charles L. and Jonathan A. The set, which came to the former, is now in the Museum of Middlebury College. The first date in this herbarium is August 11, 1821, but most of the dates are between 1832 and 1842. It has contributions by Philander Keys (1822); Orpha Landon (South Carolina, 1842); Dr. Branch of South Carolina; and Dr. J. M. Bigelow of Lancaster, Ohio, a native of Peru, Vermont. Specimens from Indiana and Michigan were evidently collected in 1837 by Dr. Allen. He made a handsome and valuable collection of minerals, afterwards purchased by Middlebury College, and wrote various scientific articles, which were published in "Silliman's Journal of Science."

January 1, 1815, he married Betsy Cheney of Jamaica, Vt. By her he had four children, the second being Charles Linneaus, (q.v.) and the fourth, Jonathan Adams, (q.v.). Betsy Cheney Allen died March 24, 1826, and Dr. Allen married for his second wife, Huldah R. Dygert, January 24, 1827. They had one child who died in early life. Huldah Dygert died January 1, 1829, and he married for his third wife, Philinda Ransom, June 9, 1829. They had no children and she died Sept. 20, 1847.

Dr. Allen died at Middlebury, Vt., Feb. 2, 1848, the cause of his death being an accidental fall from a horse.

CHARLES S. CAVERLY.

ALLEN, Jonathan Adams (1825-1890), of Ann Arbor and Chicago, son of Jonathan Adams Allen, 1787-1848 (q.v.), was born in Middlebury, Vermont, January 16, 1825. Jonathan was a graduate of Middlebury College, Vt., from which he received his A.B. and A.M. In 1846 he was graduated also from Castleton (Vt.) Medical College and removed to Kalamazoo, Michigan, the same year, where, January 1, 1847, he married Miss Mary Marsh, and visited his first western patient the next afternoon. In February, 1848, he was appointed to the chair of therapeutics, materia-medica and medical jurisprudence in the Indiana Medical College at Laporte. On the organization of the medical department of the University of Michigan at Ann Arbor in 1850, he accepted the chair of physiology and pathology which he held until 1855. In 1858 he was elected president of the Michigan State Medical Society and in 1859 he was appointed to the chair of principles and practice of medicine in Rush Medical College, and in September of the same year removed to Chicago. Here he soon became the most popular medical teacher in the college faculty, holding this professorship for thirty-one years, until his death, August 15, 1890, during the last thirteen years being president of the college. He was editor and proprietor of the "Chicago Medical Journal" which he conducted until its sale in 1875, when it was consolidated with the "Chicago Medical Examiner." Besides his articles on medical subjects in the journal, he was the author of several published works and frequent papers read before medical societies. He left a fund of knowledge in a series of journals, only some of which have found their way into print.

For twenty-four years he was surgeon in chief of the Chicago, Burlington and Quincy railway. He stood high in the Masonic fraternity both in Michigan and Illinois and his portrait has a place in their temple at Detroit among the grand masters of Michigan. At Chicago he was grand commander of Knight Templars, and honorary member of the 33° of Scottish Rite, Northern Jurisdiction. On days of celebration he was frequently chosen orator of the occasion. On the occasion of his last visit to Europe for travel in an effort to restore his failing health, the students of Rush College rained down dollars on the floor of the class room until more than four hundred were gathered up, with which a handsome watch was purchased and presented to him as a loving testimonial of their high regard.

F. D. DU SOUCHET.

ALLEN, Jonathan Moses (1815-1867), Philadelphia anatomist, was born at Princeton, Worcester County, Massachusetts, April 30, 1815, the son of Moses Allen, a farmer, and Mehitable Oliver. Receiving a common school education in his native place, he went on to Amherst Academy and in 1884 entered Yale but did not graduate. In 1838 he went to Philadelphia, entered the University of Pennsylvania, graduated M. D. in 1840, and immediately became a teacher and lecturer in a private institution. Later, for several years, he was demonstrator of anatomy, then passed to professor of anatomy and physiology, at the Pennsylvania Medical College, a post held for about eight years. During this time he wrote "The Practical Anatomist; or, The Student's Guide in the Dissecting-Room," 631 pp. (1856).

He married Louisa Kedsly, of Wilmington, Delaware; they had no children. His health broke down from excessive application, a long illness followed and he never fully recovered. He went to Lowell, Massachusetts, to visit his brother, Nathan Allen, and died there of pneumonia. April 7, 1867.

ALLEN, Nathan (1813-1889), writer, of Lowell, Mass., was born in Princeton, Massachusetts, April 13, 1813. His parents, Moses and Mehitable Oliver Allen, were both born in Barre, Massachusetts, the great ancestors of this family of Allens having been Walter Allen, one of the original proprietors of Old Newbury, Massachusetts, in 1648. Nathan Allen was graduated from Amherst College in 1836, received his M. D. from the Pennsylvania Medical College in 1841, and settled in Lowell the same year. Here he practiced until his death, January 1, 1889, the result of a fall down-stairs.

He received the honorary M. D. from Castleton (Vermont) Medical College in 1847, and LL. D. from Amherst in 1873.

Dr. Allen devoted himself to the study of physical culture, degeneracy, insanity, heredity, hygiene, education, and intemperance. In 1856 he was chosen a trustee of Amherst College, and in 1864 Governor John A. Andrew appointed him a member of the State Board

of Charities. He served on the board for fifteen years. In 1872 he visited Europe as a delegate appointed by Governor Washburn to the international congress of prison reform in London. His published writings comprise over one thousand octavo pages. Some of the more noted are: "Physical Culture in Amherst College," "Intermarriage of Relatives," "Physiological Laws of Human Increase," "Normal Standard of Women for Propagation," "Report on Lunacy to the Massachusetts Legislature," and his best known work, "Change in the New England Population."

He married first, September 24, 1841, Sarah H. Spaulding, of Wakefield, Massachusetts. She died without children and he married a second time, May 20, 1857, Annie A. Waters, of Salem, Massachusetts, by whom he had four children.

He was connected for a long time with St. John's Hospital, Lowell, and always labored to secure a better "esprit de corps" in the medical profession. WALTER L. BURRAGE.

ALLEN, Peter (1787-1864), pioneer physician of Ohio and Pennsylvania, was born in Norwich, Conn. on July 1, 1787, the son of John Allen and Tirzah Morgan. He was descended from Samuel Allen, who came to the Massachusetts Bay Colony from England in 1630. His preliminary education was received at the Academy in Norwich, and he later conducted this school as a teacher for two years, obtaining his medical education with Dr. Phineas Tracy, of his native town. In 1838 Jefferson College conferred upon him her honorary M. D. Dr. Allen removed from Norwich, Connecticut, in 1808 and became one of the early pioneers in Kinsman, Ohio, having made the journey thither on horseback by way of Philadelphia and Pittsburg. The nearest point at which medicines could be obtained was Pittsburg, and here he secured the supplies with which to begin practice. It was from this source he also ordered medical books.

In 1812, being appointed surgeon in the Western Army, under General Simon Perkins, he served in the regiment of Colonel Hays in the campaign on the Maumee River. In passing through Cleveland, General Perkins desired to secure for Dr. Allen a case of instruments belonging to the United States Government. Finding it impossible by any requisition to secure these, he sent a squad of soldiers and seized them delivering them to Dr. Allen to be used in the campaign. A necessary result of Dr. Allen's pioneer position was of course the endurance of many hardships, on account of his extended practice. There were no roads and the paths were often marked only by blazed trees. Sometimes at night he was piloted through the forest by torches made of hickory bark. His son, who was born in 1814, remembers to have heard him prophesy that the time would come when there would be no grass or stumps in the roads between the wagon tracks.

Dr. Allen in his practice covered twelve townships in Northern Ohio and Western Pennsylvania, and he was called largely in consultation and for operation over a much wider territory. Among the operations which he performed without an anesthetic were ligation of the femoral artery for aneurysm, tracheotomy, amputation of leg, thigh, arm and shoulder-joint, together with operations for strangulated hernia and the removal of tumors. The casualties incident to pioneer life requiring his attention were numerous. Dr. Allen kept well up to date, and the position as student under him was much sought, and he had usually three or four with him. It was his custom to assign to them regular reading, and to spend a portion of every evening in questioning them upon what they had studied. He was a censor in the medical college at Willoughby, which was the first medical college in Northern Ohio, and later in the Cleveland Medical College, which was its successor. In 1835 he was elected first president of the Ohio Medical Convention, which was the parent society of the Ohio State Medical Society. He was elected president of the latter society in 1856. In his address, delivered at that time, he speaks of having made a journey to Columbus in the latter part of 1826, for the purpose of organizing a state medical society. The journey was made on horseback and required a week in going, another in returning, and a third in Columbus, the journey being made over roads which were well nigh impassable except for a man on horseback.

In 1840 he was elected a member of the state legislature, but absolutely refused further political honors.

Dr. Erastus Cushing characterizes him as one of the most prominent medical men in the Western Reserve, and Dr. Delamater wrote, "I would rather have Dr. Allen's influence with the Cleveland Medical College than that of any physician in Northern Ohio."

May 13, 1813, Dr. Allen married Charity Dudley, who was born in Bethlehem, Connect-

icut. She died in 1840. Their only child was Dudley Allen, who succeeded his father in his practice.

Dr. Peter Allen died in Kinsman, Ohio, September 1, 1864, of cholera morbus.

His writings were confined to addresses and papers read before the various medical societies of the state. DUDLEY P. ALLEN.

ALLEN, Timothy Field (1837-1902), writer on homeopathy, botanist, was born in Westminster, Vermont, April 24, 1837, and died at his home in New York City, December 5, 1902. He graduated A. B. at Amherst College in 1858, and subsequently received the degree of A. M. from the same institution. He graduated M. D. in 1861 at the University of the City of New York and in the same year began practice at Brooklyn, N. Y. In 1862 he was an acting assistant surgeon in the United States Army, and in the following year established himself in New York City, which remained the field of his labors for nearly forty years. Becoming associated professionally with Dr. Carroll Dunham, he early adopted homeopathy, and soon rose to a prominent position among homeopathic practitioners. In 1865 he received the degree of M. D. from the Homeopathic (Hahnemann) Medical College, of Philadelphia; two years later he became professor of materia medica in the New York Homeopathic College, and from 1882 was its dean. For many years he was surgeon to the New York Ophthalmic Hospital, and was largely instrumental in the establishment of the Laura Franklin Free Hospital for Children and the Flower Hospital, in New York City. He was one of the editors of the "New York Journal of Homeopathy," 1873-75, and later edited an "Encyclopedia of Pure Materia Medica" in ten volumes, 1875-79; he was also the author of "A Handbook of Materia Medica and Homeopathic Therapeutics," published at Philadelphia in 1879.

Early in his career he became a botanical enthusiast, and maintained his interest in this branch of scientific study in spite of his arduous professional work. He was one of the founders and curator of the Torrey Botanical Club; indeed, he is commonly credited with having been the first to suggest the organization of the Club under the name of "New York Botanical Club," now one of the strongest scientific societies of New York City. He was the first to occupy the office of vice-president in the Club, and was re-elected annually until his death nearly thirty years later. Most of his contributions to botanical periodical literature appeared in the "Bulletin of the Torrey Botanical Club," although there were several in other magazines, notably one in the "American Naturalist" for May, 1882.

As a scientist, Dr. Allen was best known for his work upon the Characeae. This difficult group of algea has attracted but few botanists, and for many years he was almost the only American student of these plants. His most important printed contribution to this subject was "The Characeae of America," issued in parts from 1888 to 1896. His "Contributions to Japanese Characeae," first printed in instalments in the "Bulletin of the Torrey Botanical Club" from 1894 to 1898, also appeared separately in pamphlet form. Both of these works were illustrated by beautiful plates by Evelyn Hunter Nordhoff. By correspondence, by exchange, by purchase, and by paying the expenses of collectors in North America, South America, and Japan, Dr. Allen brought together one of the finest accumulations of specimens and books relating to the Characeae in existence; all these he presented to the New York Botanical Garden the year before his death, when failing health made it impossible for him to study them further. His botanical work was by no means confined entirely to the Characeae; several species of plants, named in his honor, bear witness to the breadth of his interest in botany, as the grass "Danthonia Alleni," Austin; "Erigonum Alleni," S. Watson; "Kneiffia Alleni" (Button), Small.

Dr. Allen married, June 3, 1862, Julia Bissell, of Litchfield, Connecticut. They had six children, one of whom is now a physician in New York City. JOHN H. BARNHART.

ALLIS, Oscar Huntington (1836-1921), the son of William and Marie Jones Allis and a descendant of the William Allis who came to this country with Winthrop's Fleet in 1630, was born in Holley, Orleans County, New York, September 9, 1836. He took his A. B. from Lafayette College in 1864, his A. M. in 1866, and his LL. D. in 1910. After graduating from the Jefferson Medical College in 1866, he served as interne in the Philadelphia Hospital for a year before going into general practice. Dr. Allis was one of the original staff of surgeons of the Presbyterian Hospital in Philadelphia, elected in 1872; he was for some years surgeon to the Jefferson Hospital, lecturer on orthopedic surgery in Jefferson

Medical College, consulting surgeon to the Roosevelt and the American Oncologic Hospitals, MÜtter lecturer, College of Physicians of Philadelphia, in 1888 and 1896, and Lane lecturer, Cooper Medical College, San Francisco, in 1903, where he received an ovation for his application of the principle of the lever to articulations. He was a close student, an original thinker on mechanical lines, and a widely recognized authority on fractures and dislocations. He shone rather as an investigator of surgical problems and a deviser of useful surgical instruments than as an operator. While he was a man of the finest character, universally respected and trusted, yet he was somewhat dour and set in his opinions. He contributed much to surgical literature and received the Gross prize of $1000, in 1895, for his monograph, "Obstacles to the Reduction of Dislocation of the Hip." He spent much time in the study of anatomy, and in dissection. At his death he had just finished a work illustrated with a model he had devised, demonstrating the functions of the spinal column with its musculature and pointing out new factors; with this device, he called attention to the effect of posture upon normal curvature and the result of faulty posture upon the intervertebral discs and the antagonisms of the paired muscles. He spent years working over the etiology, prevention, and cure of spinal deformity. An immediate practical outcome was the study of faulty postures in our schools by reason of desks and chairs not adjusted to the individual scholar. A further suggestion of great value was that the emphasis should be placed upon preventive measures and not upon cure, since cure, once a marked curvature was well established, was well nigh impossible. Through his studies of ocular circulation, he concluded that the intraocular balance of the blood pressure was not disturbed under sudden, severe, or prolonged physical exertion, because of a special adjustment between the venous and arterial systems, so formed as to maintain the equilibrium through the anastomosis of the recurrent choroidal artery, the long posterior ciliary artery, and the choroidal veins forming the venae vorticosae. He was interested in investigations relative to the peritoneum and the physiological processes involved when respiration and immediate post-natal circulation become established at birth.

Special ingenious and valuable contributions included the tissue forceps and the dissector, the ether inhaler and the splint—all widely used and called for under his name. He described a sign of fracture of the neck of the femur, relaxation of the fascia lata—Allis's sign.

In 1877, he married Julia W., daughter of Judge Oswald Thompson of Philadelphia; they had two children, Oswald T. and Mary E.

Dr. Allis died May 16, 1921, at his home in Philadelphia from apoplexy. He had been in good health and active physically and mentally until he was stricken with cerebral hemorrhage. HOWARD A. KELLY.

Allison, Richard (1757-1816), first physician in Cincinnati. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 21.

ALMON, William James (1754-1817), was born in New York in 1754, and died at Bath, England, in 1817, after having practiced in Halifax, Nova Scotia, for upwards of thirty years. He was found dead in bed. An interesting diary kept during his last illness has been published. In 1771 he was apprenticed to Andrew Anderson, physician and surgeon, of New York. On the outbreak of the Revolutionary War he sided with the Royalists and was employed as a surgeon at the Battle of Bunker Hill. On the evacuation of Boston in 1776, he came to Halifax with Lord Howe's forces, but remained only a short time, as he accompanied the troops to New York and remained in active service for several years. In 1779 he received from Lord Townshend a commission as assistant surgeon to the 4th Battalion of Royal Artillery. Before the close of the Revolutionary War he returned to Halifax and received the appointment of surgeon of artillery and ordnance, a position which he held for many years. He was also a justice of the peace for Halifax and surgeon-general of the militia. He acquired an extensive practice and enjoyed, to the fullest extent, the confidence of the community.

He was very absent-minded, a characteristic which gave rise to many amusing anecdotes. Readers of Marryat's "Newton Foster" will readily recall the awkward predicament in which the hero's uncle was placed when he discovered himself unexpectedly in a bedroom with a woman not his wife. The incident is based on a misadventure of Dr. Almon's, which was related to Marryat by the family

when the sailor-novelist was on the Halifax station. On another occasion, when paying a professional call on the Hon. Richard Bulkeley, he inadvertently slipped a gold watch and chain, which was lying near, into his pocket, where it was found that evening by his wife, but not before its loss was being proclaimed by the town crier.

In 1785 he married Rebecca Byles, a daughter of the Rev. Dr. Mather Byles, and had a large family. His son, Dr. William Bruce Almon, succeeded to his practice.

DONALD A. CAMPBELL.

ALMON, William Johnston (1816-1901), was the son of Dr. William Bruce Almon. He was born at Halifax in 1816 and died there January 18, 1901. At King's College, Windsor, Nova Scotia, he took his arts course, as his father had done before him, and after graduating as B. A. at King's, took his professional course at Edinburgh and Glasgow, graduating from the latter as M. D. in 1838.

He was a member of the Medical Society of Nova Scotia, and its president in 1855, 1856, and 1865. He began practice in Halifax about 1837 and succeeded his father as surgeon of the Provincial Poors' Asylum in 1840. He was elected one of the members to represent Halifax in the Dominion House of Commons in 1872, and was a member of the Dominion Senate from 1879 till his death.

Succeeding his father in 1840, he soon secured a large practice and high social standing. He was a strikingly handsome man, of commanding presence, of great vigor, much of which he retained even beyond his fourscore years, along with his head of abundant dark curly hair, even then but little streaked with gray. Antiquarian research and relics connected with notable persons and places always greatly interested him, and his home, "Rosebank," on the North West Arm, was a veritable museum of curios. Just a few specimens may be mentioned; a brass mortar captured from the Russians at the Redan the day after the death of the Nova Scotia heroes, Parker and Welsford; a St. Helena medal, such as were given to the survivors of the Napoleonic wars; a Louis XIV chair which had belonged to Governor Wentworth the last of the Royalist governors of New Hampshire; and a vast collection of old walking sticks, including one that had belonged to Major André whom Washington hanged as a British spy; and another, a malacca with gold head owned by Dr. Benjamin Rush. He had also a collection of original letters and autographs of distinguished people, such as letters of the poet Pope, Benedict Arnold, Isaac Watts, Benjamin Franklin, the Duke of Wellington, and autographs of Queen Anne, George II, and Lord North.

In 1840, Dr. Almon married Elizabeth, a daughter of Judge Ritchie, sister of Sir William Ritchie, chief justice of Canada. He had a family of six sons and five daughters. His eldest son, Dr. William Almon, a graduate of Harvard, became a surgeon in the Confederate Army and died of fever in Virginia in 1862. Another son, Dr. Thomas R. Almon, educated at King's College, Windsor, and at the College of Physicians and Surgeons, New York, was associated in practice with his father, but died April 20, 1901, three months after him.

DONALD A. CAMPBELL.

ALT, Gustav Adolf Friedrich Wilhelm (1851-1920), Adolf Alt—as he called himself—American ophthalmologist, copious contributor to the literature of his specialty, and founder of the first ophthalmological journal published west of New York, was born at Mannheim, Grand Duchy of Baden, Germany, August 13, 1851. He was a son of Dettmar and Maria Alt, the former a well-known physician. Adolf Alt began the study of medicine in 1869, but, his father dying and the Franco-Prussian war breaking out, both in 1870, he enlisted in the second regiment of Badish grenadiers. Having participated in eleven battles, he returned to the study of medicine at Heidelberg in 1871. In 1872, he migrated to Strassbourg University but, in the following year, returned to Heidelberg. Here, in March, 1875, he received his medical degree with honors. Completing his term of military service, he removed, in September, 1875, to America. For about four years he lived in New York; half this time he was first assistant to Dr. Hermann Knapp at the New York Ophthalmic and Aural Institute, where he lectured on the normal and pathological histology of the human eye. In 1879, he moved to Toronto, Ontario, where he became a member of the College of Physicians and Surgeons, as well as lecturer on ophthalmology and otology in the Trinity Medical College. In 1879, he published simultaneously in Germany and New York a volume on "The Normal and Pathological Histology of the Human Eye," which gave the author a world-wide reputation. The following year, he settled in St. Louis, Missouri, where he had a practice

coming from many states and wrote a number of highly valuable volumes on the eye, as well as numerous articles for the medical periodical press. In 1883 he founded the "American Journal of Ophthalmology," which he edited until it was merged in 1918, with a number of other journals to form the present journal of the same name. He was one of the founders of the American Academy of Ophthalmology and Oto-Laryngology. Shortly after coming to St. Louis, Dr. Alt was made professor of ophthalmology in the Beaumont Hospital Medical College, and during 1901-03 held the same position in the St. Louis University Medical School and the Marion Sims-Beaumont School of Medicine. About 1911, he left this school for the Washington University Medical School, which made him professor emeritus in 1917.

Dr. Alt was a short, stout man, with brown hair and blue eyes. He was gay, brisk, and talkative. His chief recreation was playing the violin. He founded the Cecilia Society of St. Louis and was for many years its president.

He married, in 1879, Helena Bogardus of Albion, New York. To them were born a son and a daughter.

In 1918, Dr. Alt became ill with myocarditis and never recovered his health. He died on June 28, 1920. THOMAS HALL SHASTID.

Alter, David (1807-1881), electrician and discoverer of the principles of the prism in spectrum analysis. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pp. 22-23.

ALTHOF, Hermann (1835-1877), ophthalmologist of New York City, was born the eighth of August, 1835, at Horn, in Lippe-Detmold, Germany, and died in New York January 14, 1877, of erysipelas. He was the youngest son of a school teacher in his native town. In 1847 he accompanied his father on a visit to his elder brother, who had settled in New York City. After his return he began to study medicine, first in Wurzburg, later in Zurich, Vienna, Prague, and Berlin, where he received his diploma in the year 1857. Here Prof. A. von Graefe began to interest himself in the progress of his gifted pupil, with whom he tried to form a closer alliance by offering him a position as one of his assistants. Dr. Althof, however, left Berlin to continue his studies in Paris, where he studied ophthalmology under Desmarres, and afterwards practiced in New York in 1858. Two years later he left the city again for Europe, spending part of a year in Wurzburg, with Prof. Müller, devoting himself to the study of pathological and microscopical anatomy, and part in Berlin with Graefe. After his return he devoted a large portion of his time to those public institutions to which he had become attached, the German Hospital and Dispensary, as well as the New York Eye and Ear Infirmary; in the latter he filled the place of executive surgeon for about eighteen months before his death. He was one of the founders of the Ophthalmological Society of New York and of the American Ophthalmological Society.

His contributions to ophthalmological literature are all of importance. He published in "Graefe's Archiv," Bd. viii. Abthl. 1. Klinische Notizen on 1. "Intraoculare Blutungen." 2. "Auflagerungen auf die Lamina elastica anterior." 3. "Cancroid der Conjunctiva bulbi." Further, a paper on "Canthoplasty: a Clinical Study," in the "Transactions of the American Ophthalmological Society," vol. ii., part 2. Besides these, the transactions of the above named societies contain a number of valuable communications relating to diseases of the eye. Among these a report of "Eight Cases of Subretinal Effusion," in all of which a spontaneous cure was observed.

Dr. Althof was esteemed by his colleagues for his extensive and well digested information; for his extraordinary powers of diagnosis, wonderful manual dexterity, and sound judgment; for his great, unselfish devotion to the duties of his profession.

AMBLER, James Markham Marshall (1849-1881), heroic physician of the Jeannette expedition, came of an old Virginia family and was born in Fauquier County, Virginia, December 30, 1849, son of Richard Cary Ambler, a physician. As a boy he joined the 12th Virginia Cavalry and when the Civil War ended, entered Washington and Lee University, remaining three years, then taking up the study of medicine at the University of Maryland, having first studied under Nathan R. Smith, who had been also his father's preceptor. After graduating at the University of Maryland, in 1870, he became clinical recorder at the Maryland University Hospital; later he was assistant physician at the Quarantine Hospital at Baltimore, then entered into private practice with J. G. Hollyday, but

gave this up for medical work in the United States Navy.

His first appointment was at the Naval Academy at Annapolis, followed by a cruise on the "Kansas," and after being stationed on the flagship "Minnesota", in New York harbor, he was sent to the Naval Hospital at Portsmouth, Virginia; he was at this time passed assistant surgeon. Here in 1879 he received word from the Surgeon General that the department would be glad if he would volunteer for the Jeannette expedition to the Arctic regions. Young Ambler replied: "I respectfully ask to be sent." The same request had been sent before to other officers and had been declined. He prepared himself for the voyage by studies at the Smithsonian Institution and visits to the John Hopkins University; studied reports of previous expeditions and consulted specialists. He was one of the last, if not the very last, to die of starvation after the "Jeannette" had been crushed and sunk by the polar ice-pack (June 13, 1881). The members of the expedition set out in three boats. The first one was lost. All but three of fourteen in the second under DeLong died of starvation, when the boat had been stranded, and the party was on the way back. Ambler died after DeLong, who kept a journal during this perilous time, making the last entry the day of his death, October 30, 1881 George W. Melville, chief engineer of the expedition, commanded the third boat, and in a book with the title "In the Lena Delta" (Boston, 1885), wrote of his search for his companions and finding their bodies the following March. He bears testimony to Ambler's medical skill and nobility as a man. He says: "In the history of Arctic research there has only been one ship that was free from scurvy; this was the 'Jeannette'. This is the best encomium that I can pass upon Ambler. On the march his services were invaluable. During the illness of Chipp he was roadmaster as well as surgeon. Afterward he volunteered to work in harness, and requested that in addition to caring for the sick he might be allowed to participate in the labors of the working parties. Wherever we were and whatever our situation, Ambler proved himself a skilled physician, an excellent officer and a noble man."

It is related that Dr. Ambler baptised the hunter Alexey before his death, and a note found on his body says that he bowed his head in submission to the Divine will.

HOWARD A. KELLY.

AMORY, Robert (1842-1910), experimental therapeutist, of Boston, was born in that city May 3, 1842, and died at Nahant, Mass., August 27, 1910. He was the third of six sons of James Sullivan Amory, a manufacturer of cotton goods, and his wife, Mary Copley Greene, a great-niece of Copley, the portrait-painter. Their Brookline home had a peculiar charm; friend and stranger alike were impressed by the warm, cordial hospitality, courteous manners and the atmosphere of refinement and culture; much attention was given to the religious and moral development of the boys. The older ones attended Mr. Epes Dixwell's school in Boston. Robert graduated from Harvard College in 1863 and from Harvard Medical School in 1866.

After the medical school days, the year 1867 was spent abroad chiefly in Paris, France, where Robert Amory devoted his time to the experimental study of the action of drugs on animals. He returned home, settled in Brookline, and soon had a small laboratory in his stable, where his experimental researches were continued. In 1869 he became lecturer on the action of drugs in the Harvard Medical School, and in 1871 was made professor of physiology at Bowdoin College Medical School in Brunswick, Me. He taught there four years, and gave it up most reluctantly in order to resume his Brookline practice.

In time the little stable laboratory was replaced by a commodious house on LaGrange Street, Boston, where lectures and laboratory courses were given to all interested in experimental biology. The Boston Society of Medical Science held meetings there. Dr. Amory was one of its founders; he was a fellow of the Massachusetts Medical Society, the Boston Society of Medical Observation, and the American Academy of Arts and Sciences. When the state of Massachusetts created the office of medical examiner, Dr. Amory was the first to be appointed from his district. He held several positions in the medical corps of the Massachusetts Volunteer Militia. In 1880 he was president of the National Decennial Convention for the Revision of the United States Pharmacopoeia.

During the summer months Dr. Amory had a medical practice in Bar Harbor, Maine, where he built himself a cottage. He was always interested in physics and it was natural that the invention of the telephone should fascinate him; so when Professor Alex-

ander Bell came to Boston to test and perfect his new inventions, Dr. Amory sought him out to extend to him and to his colleagues an invitation to use his laboratory, where several devices were invented and tested.

Later on Dr. Amory withdrew from medical work to devote his time to business. He became the treasurer and later president of the Brookline Gas and Electric Light Company, where he remained until 1908.

In 1864 he married Marianne Appleton Lawrence, daughter of Amos Adams Lawrence and his wife, Sarah Appleton. She died in 1881. In 1885 he married Katharine Leighton Crehore.

Among many contributions to the medical journals may be mentioned, "Chloral Hydrate; Experiments Disproving the Evolution of Chloroform in the Organism;" "Nitrous Oxide Gas;" the "Pathological Action of Prussic Acid;" "Photography of the Spectrum."

He published two books, one in 1875, a translation of Professor Kuss' Lectures on Physiology; another in 1883, a textbook on electrolysis. He also edited the second, third, and fourth editions of Wharton and Stillé's "Medical Jurisprudence," which after so many years is still used as a textbook in toxicology.

AUGUSTUS THORNDIKE.

ANDERSON, Alexander (1775-1870), of New York, forsook medicine early to become the pioneer engraver on wood in America, the virtual inventor of the art on this side of the Atlantic. His anatomical cuts enriched the science of medicine as well as general literature.

Dr. Anderson, of Scotch descent, was born near Beekman's Slip, New York City, on the twenty-first of April, 1775, two days after the first bloodshed in the war for independence had occurred at Lexington and Concord. His father differed in politics from most of his countrymen in America at that time, who were generally distinguished for their loyalty to the king; and at the time of Alexander's birth he was the publisher of a republican newspaper in the city of New York called "The Constitutional Gazette." He continued to publish it in opposition to the ministerial papers of Rivington and Gaine until the autumn of 1776, when the British took possession of New York City, and the "rebel printer" was compelled to fly, with his books and printing materials, nearly all of which were lost before he reached a place of safety in Connecticut.

At the age of twelve years young Anderson began to use the graver for his own amusement. He was a timid lad, shrank from asking questions, and gained information by silent and modest observation. Peeping into the shop windows of silversmiths he saw the shape and the method of manipulating the graver in the lettering of spoons; and rolled-out copper cents gave him his plates for first efforts. Some of his earlier efforts in the engraver's art were in making copies of anatomical figures from medical books. His father perceived this proclivity with pleasure, and deprecating the lad's manifest love of art, he allowed him to make preparations for the profession of a physician. In 1795 the yellow fever broke out in New York and Anderson gave up engraving and took a place as house surgeon at Bellevue Hospital on a salary of four dollars a day. He remained there for three months. In May, 1796, at the age of twenty-one years, he received the degree of Doctor of Medicine from the faculty of Columbia College. The subject of his address on that occasion was "Chronic Mania;" and the theories which he then advanced concerning its cause and cure have now been long-established facts in medical science.

Soon after young Anderson began his professional studies, when about seventeen years, his proficiency in art had become so great notwithstanding the many difficulties that lay in his way, that he was employed by William Durell, a bookseller, to copy the illustrations of a popular little English work entitled "The Looking-Glass for the Mind." The engravings that adorned it were made on wood by Bewick, the father of modern wood-engraving. Up to this time Anderson's engravings had been made on type metal and he had no idea that wood was used for the purpose. When he had completed about half the illustrations he was informed that Bewick's pictures were engraved on boxwood. He immediately procured some pieces of that wood from a rule-maker's shop, invented proper tools, experimented, and, to his great joy he found the material much more agreeable to work upon and more easily managed than type-metal.

In the first year of his practice of medicine Dr. Anderson drew and engraved on wood, in a most admirable manner, even when compared with the art at the present day, a full-length human skeleton, from Albinus's "Anat-

omy," which he enlarged to the length of three feet. This, it is believed, is the largest fine and carefully elaborated engraving on wood ever attempted, and has never been excelled in accuracy of drawing and characteristic execution.

When Dr. Anderson was at the age of twenty-three years his family consisting of his wife, infant son, brother, father, mother-in-law and sister-in-law, all died of the yellow fever. Attacked by the disease while in attendance upon the physician with whom he had studied, he was himself prostrated by it. Both recovered; and Anderson made a voyage to the West Indies to visit a paternal uncle, Alexander Anderson, who was "the king's botánist" at St. Vincent. On his return he resolved to abandon the medical profession as a business and devote himself to engraving, for which he had conceived an irrepressible passion.

He married the sister of his first wife, established himself as an engraver and up to the year 1820 he used both wood and metal, as occasion required. He illustrated the earliest editions of "Webster's Spelling-book", which for about seventy years was a leading elementary book in the schools of the United States.

During his long and busy life Dr. Anderson engraved many thousands of subjects. In the year 1799 he engraved several large copper-plates for Josephus' "History of the Jews," and in 1808 he executed on wood sixty or seventy illustrations for an American edition of Bell's "Anatomy," copied from the originals, etched by Bell himself. His last engraving on copper was made about the year 1812 to illustrate a quarto Bible. The subject was "The Last Supper," from an English design.

In the spring of 1859, when in the eighty-fifth year of his age, Dr. Anderson changed his place of residence in Jersey City, removing from his dwelling place of thirty years. At that time he issued a new business card, drawn and engraved by himself, with the appropriate motto—Flexus Non Fractus—"Bent, but not broken." At the age of ninety-three he made a series of illustrations for Barber's Historical Collections of New Jersey, his last work.

At the time of his death, January 17, 1870, Dr. Anderson was in the ninety-fifth year of his age. In person he was a little below the medium height, rather thick-set, and presented a countenance always beaming with benevolence and kindly feeling. He was extremely regular and temperate in his habits. "I would not sit up after 10 o'clock," he used to say, "to see an angel". He was genial in thought and conversation, and uncommonly modest and retiring. It was not without much persuasion that he consented to sit for the daguerreotype from which his portrait was copied, and which he himself engraved when he was past the eightieth year of his age.

WALTER L. BURRAGE.

ANDERSON, Turner (1842-1908), Louisville surgeon, was born in Meade County, Kentucky, August 11, 1842; his ancestors had come over here in 1770 with their relative Lord Stirling. Turner studied medicine at the Cincinnati College of Medicine and Surgery, graduating there in 1862 and settling in Louisville.

During the war he was assistant surgeon at Brown Hospital, Louisville, and afterwards surgeon major to the twenty-eighth Kentucky Infantry. When the fighting was over he married Anna Evans who died three years later, leaving him a daughter. His second wife was Sarah G., daughter of Judge Simrall. She and three children survived him, Lulie, Cornelia and Simrall who became a doctor.

Endowed with the courage which comes from a thorough acquaintance with a subject, he was a bold operator, with a admirable technic. His first hundred laparotomies were all successful, and to him is ascribed priority in the subperitoneal treatment of the pedicle in hysterectomy. He promulgated Anderson's modification of Kelly's operation for perineorrhaphy and was the first surgeon west of the Alleghenies to do pneumonotomy for the draining of pulmonary abscess.

Anderson was a genial, clever but practical man greatly venerated by his students and a favorite with the faculty. His death, on the thirteenth of October, 1908, deprived Louisville of a fine surgeon and a good Christian citizen.

He was president of the College of Physicians and Surgeons of Louisville; a member of the Louisville Obstetrical Society, the Kentucky State Medical Society and its vice-president in 1874. He occupied the chair of materia medica and therapeutics in the University of Louisville and successively those of obstetrics and clinical gynecology.

THOMAS LAWRENCE MCDERMOTT.

ANDERSON, Washington Franklin (1823-1903), for forty-six years a practitioner in Salt Lake City, Utah, was born in Williamsburg, Virginia, January 6, 1823, of English, Scotch and Irish ancestry, though his parents and grandparents were Americans. He attended medical lectures at the University of Virginia in 1841-1842, and the University of Maryland in 1843-1844, graduating from the latter in the last year. He was a resident student of the Baltimore Almshouse Hospital from 1842 to 1844, where he had unusual privileges in dissection, post-mortem examination and pathology. Among the last were studies in remittent fever, made with Dr. Charles Frick of Baltimore. They were published in the April number of the "American Journal of the Medical Sciences," 1846.

He practiced in Mobile, Alabama, until the Mexican War in 1846, when he joined the Alabama regiment and served in the ranks as orderly sergeant of his company. He finally settled in Salt Lake City and practised there until his death. With two physicians of recognized ability, Dr. John Milton Bernhisel and Dr. William France, an English physician, he maintained the integrity of the medical profession in Utah. In 1876 Anderson was elected president of the first medical society in Utah. He had an extensive practice in surgery. Cases of urinary calculi in young and old seem to have been very common; for many operations the necessary instruments were remodeled or fashioned by crude mechanics, the procuring of medical and surgical appliances from New York meaning months of waiting and uncertain transportation across the desert.

In 1881, when aseptic surgical technic was in its infancy, he performed a laparotomy for the removal of a large ovarian cyst, this being probably the first operation of the kind performed in Salt Lake City, the patient making a good recovery.

In 1862 he married Isabella Evans. Thirteen children, four boys and nine girls, were born, and three daughters received medical degrees from the University of Michigan.

He died in Salt Lake City, August 21, 1903.

WILLIAM B. EWING.

ANDERSON, William, English surgeon and anatomist, who coming to the United States in 1820, thoroughly identified himself with American medicine, deserves a place in biographies of medical men of this country. He was a licentiate of the Royal College of Surgeons in Edinburgh. He lectured in New York on surgical anatomy to a class of students, holding the exercises in Murray Street; he spent some time in Philadelphia, and was professor of anatomy and physiology in the Vermont Academy of Medicine. His associates in New York were Valentine Mott and Wright Post; one of his pupils was David L. Rogers, author of "Description of a New Instrument for Excising the Tonsils" (1831); and "Surgical Essays and Cases in Surgery" (1849).

Anderson's friendship for Valentine Mott is strongly expressed in the dedication to his "Surgical Anatomy" as follows: "Dedication to Valentine Mott professor of surgery in the University of the State of New York, whose private life is to his credit as a man; whose liberal motives and honourable endeavors to improve his profession, are an example to his brethren, and whose acquirements in the several departments of scientific and practical surgery, are an honour to his country, this volume is presented in testimony of the esteem, respect, and friendship of the author."

The work containing this interesting dedication is: "System of Surgical Anatomy. Part first, on the Structure of the Groin, Pelvis, and Perineum, as Connected with Inguinal and Femoral Hernia; Tying the Iliac Arteries; and the Operation of Lithotomy" (1823). Nine plates are a feature of the book. Four are made by Asher Brown Durand (1886-1896), and all of them engraved by him. As examples of Durand's work (he was apprenticed to the engraver, Peter Maverick, in 1812) these plates are notable; four of the plates were made by Benjamin A. Vitry who later went to study medicine in Paris. Of him Dr. Anderson says: "I think much is to be expected from him from the talent he has evinced in this department of the fine arts." Anderson declared his purpose was to "continue the subject of surgical Anatomy yearly until a Series shall be completed," but this seems not to have been carried out. He instructed his students that "the surgeon must be the medical philosopher; he must be the complete physician, he must have the brain of a man of science; for this is the great and high qualification that the operator should possess; he must know when to operate as well as how to operate; and he must be able moreover to anticipate the issue of his patient's case."

He edited John Shaw's "Manual for the Student of Anatomy," the "First American

from the Last London edition" (1825). He edited an edition of Samuel Cooper's "Dictionary of Surgery" (1823), and wrote an appendix to each of the two volumes, giving as one reason the omission in Cooper's work of "some brilliant surgical achievements, that have their origin on this side of the Atlantic."

In 1837 he is shown as being active in the endeavor to establish a hospital in New York, writing to Mayor Aaron Clark of the city a "Project for the Foundation of an Hospital, to Be Called the Samaritan, Proposed to Be Attached to the Medical Department of the University of the City of New York. . . " (City Document, August 18, 1837, pp. 287-388.)

HOWARD A. KELLY.

ANDERSON, Winslow (1860-1917), surgeon of San Francisco, was born in Leverett, Franklin County, Massachusetts, in 1860. He had a collegiate education before graduating from the Medical Department of the University of California in 1884. After graduation he went to London, where he became L. R. C. P. and M. R. C. P., Lond., 1891; M. R. C. S., England, 1891; L. S. A., Lond., 1891. He had been a member of the General Medical Council of Great Britain since 1896, and he was a fellow of the American Medical Association. Anderson was president and professor of gynecology and abdominal surgery at the College of Physicians in San Francisco from 1896 to 1911, and emeritus professor since that time; founder of and surgeon-in-chief at St. Winifred's Hospital since 1899; surgeon to the Sierra Railway, 1904-7; abdominal surgeon and gynecologist to the city and county hospitals, 1905.

During the years 1893-7 and 1900-3 he was a member of the California State Board of Health, and he was an ex-member of the Board of Medical Examiners of California. He was surgeon-general of the National Guard of California, 1900-01 and 1907-1911.

From 1890-1911 he was editor of the "Pacific Medical Journal;" he wrote on diseases of the lungs for the "20th Century Practice of Medicine."

In 1890 he married Bertha Lillian Collins.

He died in New York City, May 7, 1917, aged fifty-seven years.

ANDRADE, Eduardo Penny (1872-1906), health officer of Jacksonville, Florida. The son of José and Eliza Penny Andrade and grandson of Gen. José E. Andrade, Eduardo was born at Maracaibo, February 2, 1872, and educated and brought up there. He began the study of medicine in the National College of Maracaibo in 1888 and the next year continued it in the University of Caracas, finally graduating from Georgetown University in 1895. About this time he was appointed a member of the Venezuela Legation at Washington, a post he held for two years, and while there studied bacteriology in the hygienic laboratory of the Marine Hospital Service. In 1901 he came to New York and entered the clinic of Dr. Knapp, and in 1902 went to Cuba and graduated at the University of Havana. Here it was, in 1902, after fourteen years of preparation of the most searching character, that he first entered upon actual practice, yet, in a few months, when the State Board of Health of Florida opened a bacteriological laboratory in Jacksonville its offered directorship was accepted. Here he remained until his death, September 20, 1906. He married in 1905, Mary McLaughlin, the youngest daughter of Major McLaughlin of Jacksonville, and was survived by his wife and a little son.

The thoroughness with which he did all his work will be best shown by the fact that he had studied medicine fourteen years before he began to practice and graduated from no fewer than four colleges and attended clinics in five different countries. He was a fluent speaker and well versed in the literature of all modern languages, a classical scholar who had a broad knowledge of the history of the world. He was the first to discover the existence of Malta fever in Venezuela. After returning home from Washington, in 1897, with Dr. B. Mosquera, he worked up a number of cases of Malta fever (Graceta Medica, Caracas, July 15, 1898), thus demonstrating for the first time the existence of this disease on the American Continent. Dr. Andrade furnished the inspiration, and those who knew his enthusiastic and indefatigable zeal cannot escape the conviction that he did a liberal share of the work, though in the report he is ranked only as assistant. The custom of the country and his own innate modesty kept him from getting proper credit. He was the first to find and report a case of filariasis in the state of Florida. Though his practice was chiefly in diseases of the eye, ear, nose and throat, his heart was in bacteriology.

A loyal friend, a genial companion, and a sparkling conversationalist, he had a keen sense of humor and enjoyed a good story. For months he knew that a disease which

held out no hope of cure was slowly but surely killing him, but he nevertheless attended as assiduously to his duties in behalf of suffering humanity as physical pain would permit.

ANDREWS, Edmund (1824-1904), physician, was one of the founders of the Chicago Academy of Sciences and also of the Northwestern University Medical School.

He was born in Putney, Vermont, of sturdy New England stock, on April 22, 1821. Removing in 1840 to Detroit, Michigan, he completed his literary studies in the University of Michigan, graduating in 1849. Three years later he finished his medical course in the University of Michigan and went to Chicago. In 1855 he became a professor at Rush Medical College, which then maintained a course of two years. Dissatisfied with this brief course, he severed his connections with Rush, and with Dr. Hosmer Johnson, N. S. Davis, W. H. Byford, Titus Delville, Ralph Isham and Dr. Rutter established the Lind University Medical School, which eventually became the medical school of the Northwestern University where for forty-six years Dr. Andrews was professor of surgery. At the beginning of the Civil War he was appointed surgical chief at Camp Douglas, and later, becoming surgeon to the First Regiment of light artillery, he served in Tennessee and Mississippi. In 1854 he founded the Chicago Academy of Sciences. During his long career Dr. Andrews gave to the medical profession a number of valuable surgical instruments and devices and contributed liberally to the current medical literature, chiefly on statistical, orthopedic and operative surgery.

He married in April, 1853, Eliza, daughter of N. T. Taylor of Detroit, and had five children, two of whom, E. Wyllys and Frank Taylor, worked with their father.

In Mercy Hospital, the institution in which he and his two sons did so much earnest and conscientious surgical work, he suddenly passed away on the twenty-second day of January, 1904. Edmund Andrews had been engaged in surgical work in Chicago for forty-eight years.

ANDREWS, George Pierce (1838-1903), of Detroit, Michigan, was born in Kailua, Hawaii, April 9, 1838, his father Dr. Seth L. Andrews, of Romeo, Michigan, being there as a medical missionary. Ill health prevented George completing his course at Andover, Massachusetts, but on recovery he studied medicine with his uncle, Dr. Edmund Andrews, professor of surgery in Chicago Medical College, but took his last course of lectures at the College of Physicians and Surgeons, New York, receiving his M. D. in 1861. Settling in Detroit shortly after graduation he was appointed assistant surgeon at the Government Hospital, on Woodward Avenue. In 1866 he aided in founding the "Detroit Review of Medicine and Pharmacy," and continued an editor till 1871. Dr. Andrews was a great lover of plants, keeping a greenhouse for the study of rare species, under native conditions. He was an expert microscopist for his time; in chemical studies he delighted. He was an expert in fine China, etchings, paintings, and oriental curios. As a teacher of medicine he was clear, concise, forceful, exerting a profound influence upon his students.

He was a founder of the Michigan State Medical Society in 1866; of the Wayne County (Michigan) Medical Society in 1866; of the Detroit Academy of Medicine, 1868; of the Detroit Obstetrical and Gynecological Society. He was active in founding the Detroit Medical College in 1868, and its professor of principles and practice of medicine till 1881. From 1886 till 1890 he was on the staff of several hospitals: the Children's Free, Harper's, St. Mary's and the Woman's Hospital. In 1876 he was president of the Detroit Academy of Medicine.

In 1862 he married Sarah Dyar, of Romeo, Michigan, and had three children, only one—Winifred—surviving. In 1890 failing health induced him to return to the Sandwich Islands, where he practised till his death from heart failure in May, 1903.

LEARTUS CONNOR.

ANDREWS, Judson Boardman (1834-1894), alienist of New York State, was born in North Haven, Connecticut, April 25, 1834. His preparatory education was received at the Hopkins Grammar School of New Haven, from which he entered Yale College and graduated A. B. 1855 and A. M. 1858. After graduation he taught school until he began the study of medicine at Jefferson Medical College in Philadelphia in 1857. At the close of the lecture course he resumed teaching in Saratoga County, N. Y., and was thus engaged at the opening of the war.

He enlisted in the 77th regiment, New York volunteers, which was recruited in Saratoga County, and was elected captain of a com-

pany. The regiment took part in the Peninsula campaign against Richmond, and participated in the siege of Yorktown, and in many famous battles. After the retreat to Harrison's Landing in July, 1862, he resigned his commission on account of ill health, and returned to New Haven where he completed his medical studies and graduated from the Yale Medical School in February 1863. To fit himself for army service he entered the Germantown Hospital, Philadelphia, as medical cadet, and in July was commissioned assistant surgeon and assigned to the 19th Connecticut Volunteers, on duty in the fortifications about Alexandria, Va. During the active service of his regiment, Dr. Andrews followed its fortunes, doing duty on the field in immediate care of the wounded and in the hospital of the division.

In 1867 he was appointed third assistant physician in the New York State Lunatic Asylum at Utica, under the charge of Dr. John P. Gray. (q.v.) In 1871 he became first assistant, and continued in this position until 1880, when, on the opening of the Buffalo State Hospital, he was appointed superintendent of the institution, a position which he held until his death.

On becoming a resident of Buffalo Dr. Andrews was made lecturer on insanity in the Buffalo Medical College and later was elected professor of psychological medicine. In 1886 he was elected president of the Erie County Medical Society. On coming to Utica he was made a member of the Oneida County Medical Society, and in 1874 he was elected a permanent member of the New York State Medical Society. He was one of the founders and one of the most prominent members, and president of that organization in 1892. He was president of the section of psychological medicine and nervous diseases of the Ninth International Congress, held in Washington in 1887, and in 1892 was elected the first president of the American Medico-Psychological Association, formerly the Association of Medical Superintendents of American Institutions for the Insane. During his professional career he was a frequent contributor of papers to medical societies and journals. He was for ten years an associate editor of the "American Journal of Insanity" and wrote extensively for its columns, his articles on "Phosphoric Acid" and "Chloral" being frequently quoted by medical journals and by writers on materia medica and practice.

Dr. Andrews was an advocate of state care for the insane, and aided materially in establishing the system. In the Buffalo Hospital he inaugurated and carried to a successful issue the training of attendants as nurses for the insane. As one of the pioneers of this important movement the Buffalo school furnished an impetus to, and served to popularize, the systematic training of nurses for the insane in the United States. Dr. Andrews was an able, active, energetic worker in his chosen field of labor, and the success of his career as a practical alienist was fully attested by the history of the Buffalo State Hospital and his enviable record at Utica. He died August 3, 1894, after an illness of more than a year.

Angell, Anna A. (1844-1906), of New York, the first woman to become a resident physician. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 31.

ANNAN, Samuel (1797-1868), was born in Philadelphia in 1797. He went abroad and took his medical degree at the University of Edinburgh in 1820, and the same year was president of the Royal Physical Society, Edinburgh. In 1820-21 he was assistant at Guy's Hospital and at St. Thomas's Hospital, London. Returning to the United States he was one of the founders of Washington Medical College, Baltimore, in 1827, and professor of anatomy and physiology from its opening until 1834. In 1846-47 he was professor of obstetrics and diseases of women and children; in 1848 professor of practice in the Transylvania University, Lexington, Ky., and he was the first superintendent of the Western Lunatic Asylum, Hopkinsville, Ky., from its opening, 1854, until his resignation in 1858.

From 1861 to 1864 he was surgeon in the Confederate Army.

Annan published the first recorded cases of bronchotomy in Maryland. He died at the Church Home, Baltimore, Jan. 19, 1868.

ANTHON, George Christian (1734-1815), first surgeon at Detroit under the British flag, was born at Salzungen, in the Duchy of Saxe, Meiningen, August 25, 1734; his father a clergyman and teacher in the town school for boys; his mother a pastor's daughter. On the death of his father, in 1739, his mother married a surgeon of Salzungen, John Gott-

lieb Boumbort. Beginning the study of medicine with his stepfather he continued it with Dr. Mackel of Gurnstungen, and in 1750 he passed an examination before the medical authorities in Eisenach, and one in 1754 before the college of surgeons at Amsterdam, securing thereby the position of surgeon in the Dutch West India service. On his second trip in the "Vrouw Anna" he was captured by a British privateer and taken to New York. His usefulness as a surgeon being recognized, he was made assistant surgeon to the General Military Hospital at Albany in 1758 and at the end of the year was appointed assistant surgeon to the first Battalion, Sixtieth Regiment, Royal Americans. His commission in the British Army is dated Albany, June 25, 1761, signed by the commander-in-chief, Sir Jeffrey Amherst, and appoints him "Surgeon's Mate to his Majesty's Hospital in North America." In 1760 he was detached with the party that took possession of Detroit under Major Rogers, November 29, and for the next twenty-six years was the sole medical officer of the post, for Army, Navy and Indians. During Pontiac's siege of Detroit, Dr. Anthon desiring to have a look at the enemy, climbed an old tree nearby. The Indians began firing on him, but Gladwin, unwilling to lose his medicine man, made a sortie, and rescued the doctor. In 1765 Sir William Johnson appointed Dr. Anthon surgeon for the Indians and sent him with Deputy Col. Croghan on an expedition to the Illinois country. The Kickapoos took him prisoner below the mouth of the Wabash, and, when released after an imprisonment of three months, he used to tell of the avidity with which he ate the refuse flung him during their repasts. In 1786 he removed to New York City, there finishing his career. In 1802 he was one of the thirteen governors of New York Lying-in Hospital. From 1796 to 1815 he was a trustee of Columbia College. He was a strong believer in the non-contagiousness of yellow fever. Dr. Anthon had the massive, severe appearance of Luther, suggesting an origin from the same Thuringian Saxon race, but relieved by mild sympathetic expressive eyes. Though outwardly stern in manner, he was remarkable for tenderness towards his family, kindness towards his patients and benevolence towards the community in which he lived. Dr. Anthon married on August 13, 1770, Mariana Navarre, who died childless, October 8, 1773. She was a daughter of Robert Navarre, who was appointed by the French Government, Notaire-royal and sub délégué at Detroit. His second wife was Genevieve Jadot, a niece of his first wife, by whom he had eleven children, three being born in Detroit. Of these John, Henry and Charles were renowned as lawyer, minister and scholar respectively. Dr. Anthon died at his home, 11 Broad Street, New York City, December 22, 1815.

LEARTUS CONNOR.

ANTISELL, Thomas (1817-1893), of Washington, D. C., teacher of chemistry, army surgeon, was born in Dublin, Ireland, January 16, 1817, son of Queen's Counsellor Thomas Christopher Antisell, of King's County, Ireland. He was educated at Trinity College, Dublin, studied also at the Dublin School of Medicine and the Irish Apothecaries Hall and graduated at the Royal College of Surgeons, London, in November 1839. In 1844 he pursued studies in chemistry in Paris and Berlin, under the most celebrated chemists of the time, Dumas, Pelouze, Biot and Berzelius. From 1845 to 1848 he was lecturer on chemistry in the "Original School of Medicine," in Dublin, meanwhile practicing medicine. As a member of the "Young Ireland Party" Antisell was sentenced to exile. A friend procured a position on an outgoing vessel; he sailed for America and landed in New York, November 23, 1848. There he practiced medicine until 1854 when he became geologist to the survey for a southern railway to the Pacific, on the thirty-second parallel of latitude, under Lieutenant Parke, topographical engineer, U. S. A. After making a geological reconnaisance of southern California and Arizona he settled in Washington, D. C. in 1856, where, with the exception of an interval of army service and five years spent in work for the Japanese government in developing northern Japan (1871-1876) he passed the rest of his life.

Dr. Antisell became connected with Georgetown University soon after taking up his residence in Washington. First and last he served the University as professor of chemistry and toxicology, of military surgery, of physiology and hygiene, and finally as emeritus professor of chemistry and toxicology. He was a popular teacher, lived an unobtrusive home life and was faithful to duty. An appended list of some of his writings shows how active he was as an author and what a wide field he covered. From 1866 to 1871 he was chief chemist to the United

States Department of Agriculture and in 1869-1870 he acted as professor of chemistry in the Maryland Agricultural College, in addition to his duties at Georgetown University.

During the civil war Dr. Antisell was brigade surgeon, United States Volunteers, 1861-1865; medical director, Twelfth Army Corps; surgeon-in-charge Harewood Hospital, also of the sick and wounded officers in Washington, D. C. He was brevetted colonel for faithful and meritorious services and mustered out in October, 1865. Some of the other positions he filled were: Extra professor to the Dublin Royal Society, 1845-1848; professor of chemistry in the Berkshire Medical Institution, (Massachusetts,) 1848; professor of chemistry in the Woodstock Medical College (Vermont), 1854. In appreciation of his valuable services to Japan the Emperor conferred upon him the "Order of the Rising Sun of Meiiii"; Georgetown made him a PhD.

He was twice married, first, in 1841, to Eliza Ann Nowlan of Dublin and second, in 1854, to Marion Stuart Forsyth of Detroit, Michigan. He died in the District of Columbia, June 14, 1893.

A partial list of his contributions to medical and scientific literature follows:—

"Soils of Ireland," Royal Dublin Society, 1840; "On Sanitary Improvement of the City of Dublin," 1847; "Manual of Elementary Geology," Dublin, 1846; "Outlines of Irish Geology," Dublin, 1847; "Manual of Agricultural Chemistry," Dublin, 1847; "Addresses on the Philosophy of Manufactures," delivered at Castle Garden, New York City, during the twenty-second annual fair of American institutes, October, 1849; "Home Cyclopedia of the Arts and Manufactures," New York, 1852; "Applications of Chemical Science to Agriculture," 1859; "Geological Reconnaissance of Southern California and Arizona," in "United States, Explorations and Surveys," vol. vii, Washington, District of Columbia, 1856. "Reports on the Sanitary Condition of Washington," Medical Society, District of Columbia, 1864; "Epizootic of Horned Cattle," "Transactions American Agricultural Association," 1861; "Report of Committee on Medical Education to the American Medical Association," 1865; "Cultivation of Cinchona," 1867; "On the Value of the Sewerage of the City of Washington," included in the "Report of United States Agricultural Department," 1869; Introductory and Valedictory Addresses in Medical Colleges at Washington, six in number, from 1854 to 1871; "The Currents of the Pacific Ocean," 1876.

ANTONY, Milton (1789-1839), organizer of the Medical College of Georgia, was born August 17, 1789, the place of his birth not being recorded, but it is known that his father when young came to Georgia and settled in Jasper County. His family must have been in limited circumstances, as the boy had no more than two and a half years schooling. At sixteen he began to study medicine with Dr. Joel Abbott, presumably at Washington, Wilkes County, Georgia.

At nineteen he went to Philadelphia for medical studies, but lacking means, was able to attend only one course, the requirements for graduation being two courses, so he returned to Georgia without a diploma. It is to be noted that two Universities conferred the honorary degree of M. D. on him later in life. Reaching home without funds, he began his professional life with no other asset than determination and ambition, and shortly after moved to Monticello, Georgia, where he began his active professional life, within a short time building up an extensive practice. After the expiration of seven years, desiring a larger field with greater opportunity for study, he moved to New Orleans, Louisiana, staying there, however, but a short time, eventually, in 1819, settling in Augusta, Georgia. A man of broad mind and with an earnest desire for the elevation of his profession, he was active in establishing the State Board of Medical Examiners, whose duty it was to examine and license all applicants for practice in the state. In 1828, in connection with the physicians of Augusta and a few distinguished men in the State he applied to the Legislature at Milledgeville for a charter to organize the Medical Academy of Georgia, its object to make the academy a school more thoroughly to prepare students for the northern universities. The school was opened in Augusta with three professors and a large class, and was authorized to confer the degree of bachelor of medicine. The name was changed the next year to the Medical College of Georgia. Since 1873 it has been the University of Georgia Medical Department.

His last effort was for a higher standard of medical literature; to accomplish this he established the "Southern Medical and Surgical Journal," and was for several years its

editor. In the school which he established he ably filled the chair of the institutes and practice of medicine, obstetrics and diseases of women and children. As was often the case with the general practitioner of long ago, he was equally skilled in the different departments of medicine and was the first gynecologist to adopt and point out the advantages of the knee-chest posture in the treatment of uterine displacement. ("Southern Medical and Surgical Journal," 1839 vol. 3). It is also to be noted that he perfected the treatment of fractures of the thigh by weight extension. His skill and boldness as a surgeon can be fully realized when it is known that in 1821 he excised the fifth and sixth ribs, and removed a portion of gangrenous lung. This remarkable piece of work is reported in the "Philadelphia Journal of Medical and Physical Sciences," 1823, vol. vi.

Though the life of this distinguished man began with all the disadvantages consequent to poverty and want of education, his energy and perseverance enabled him to attain a high position in his profession and to maintain it until the fatal epidemic of yellow fever in Augusta, Georgia, 1839, brought his life to a close.

At the request of his faculty, his body was buried in the college grounds and a tablet to his memory stands in the wall of the principal lecture room of the college which he founded.

THOMAS R. WRIGHT.

Appleton, Moses (1773-1849), pioneer physician in Waterville, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pp. 34-35.

APPLETON, Nathaniel Walker (1755-1795), first secretary of the Massachusetts Medical Society, the son of Nathaniel Appleton of the Harvard class of 1749,—a Boston merchant and member of the "Committee of Correspondence,"—was born in Boston, June 14, 1755. His mother was Mary Walker; his grandfather, Rev. Dr. Nathaniel Appleton, of the Harvard class of 1712 and minister of the "Church in Cambridge" from 1717 until his death in 1784. Nathaniel was graduated A. B. from Harvard in 1773, then he wrote interesting letters to his classmate, Eliphalet Pearson, the first preceptor of Phillips Andover Academy, later professor of Hebrew at Harvard and a member of its Corporation, on one occasion acting president. Appleton's letters show accuracy and attention to minutiae that are so characteristic of the records of the medical society that have been preserved for us intact; they manifested a considerable skill in the art of writing, were filled with affection for his friend and evinced a spirit of patriotism, describing as they did the incidents of the Revolution in and about Boston. Of a modest and impersonal frame of mind Appleton wrote too little of himself, from the biographer's point of view. Until the fall of 1774 he lived in Cambridge, taking an A. M. at Harvard; then he moved to Salem where he studied medicine, as was the custom of the day, before the beginning of medical schools in the East, living and working with his father's cousin the centenarian, Edward Augustus Holyoke, he who trained thirty-five practitioners in the art of medicine and was the first president of the Massachusetts Medical Society. Finishing his novitiate Dr. Appleton settled in practice in Boston and married Sarah Greenleaf, May 24, 1780. They had seven children, four of them dying in childhood and the other three living to the ages of 68, 69 and 70 years.

Holyoke was president of the State Medical Society from 1782 to 1784, and again from 1786 to 1787. The other presidents during Appleton's secretaryship were Cotton Tufts, who although living in Weymouth, twelve miles away, was most punctilious in his attention to the duties of his office, and William Kneeland of Cambridge, who attended no meetings during his two years in office. A careful study of the records would lead to the belief that the society could not have continued its existence without the fostering care of Appleton and Tufts.

According to contemporary accounts Dr. Appleton had a good practice. "The Boston Directory" of 1789, the first year such a book was published, gives the doctor's residence as, "South Latin-School Street, near the Stone-Chappel," that is to say he lived in the present School Street, near King's Chapel. In this year Appleton became a Fellow of the American Academy of Arts and Sciences and he was serving as chairman of the committee of the Massachusetts Medical Society that brought out the first volume of the "Medical Communications" in 1790, a publication that was to continue in yearly numbers until 1914, one hundred and twenty-four years. He served also on a committee of the society on education that drafted the qualifications of candidates for a license to practice, in conformity with the act of the Legislature having refer-

ence to the society, passed in 1789. According to the Boston Town Records Appleton was elected a member of the school committee of twelve members in 1789 to put into operation the "New System of Education," being reelected each year through 1794. It would appear that his health was not good, for in a letter to his friend Pearson, dated March 23, 1782, he says that he was sending a messenger with his letter "being somewhat unwell myself and not daring to be out in the evening air," and again in 1784, "at present I am confined with a bad cold." In 1788 he asked leave to resign as secretary but the society would not grant it and he kept on for four years more.

Dr. Appleton's records as secretary require special mention for they exhibit a thoroughness that has been only too rare in the history of similar societies. Beyond the fact that his handwriting was good he thought it worth while to set down all the important doings of the society and its council. He did not delegate this to others; he did it himself, and he wrote conscientiously and regularly through a series of years. Who will gainsay that this attention to details was a leading factor in establishing on a sound basis a new society that was to exercise a potent influence for bettering the standards of medicine in the community? He and Dr. Welsh wrote the preface for the first volume of the "Medical Communications," published in 1790, and put the book through the press.

On January 2, 1793 he signed the records for the last time after resigning his office and received the thanks of the society for his past services. He attended meetings of society and council until April 3, 1794; April 16 he sent a letter presenting the society with "a folio edition of Smellie's anatomical tables; a quarto edition of the medical works of Richard Smead, M.D., and a small box containing a few anatomical preparations." He was made an honorary Fellow and moved to Marietta, Ohio, to return to Boston and die April 15, 1795, two months before his fortieth birthday.

The Rev. John Clarke preached a funeral sermon on Appleton April 19, 1795 at the "First Church in Boston," taking for his text: "Lover and friend hast thou put far from me; and mine acquaintance into darkness." Having been in the next class to Appleton in college, when classes contained only thirty or forty members, it is likely that Clarke knew a good deal about the subject of his discourse. We feel sure that Appleton would have approved of the clergyman's remarks for in one of his letters to his friend Pearson in 1784 he speaks of sending him a similar sermon preached by Dr. Clarke on the death of the Rev. Dr. Cooper in 1783. The custom of the time did not countenance in a funeral oration anything but "reflections" so posterity must be content with the only direct reference to Appleton as contained in the following quotation: "It is acknowledged that the person, whose death has led to these reflections, was the man of pure and undefiled religion;—was a pattern of all the excellencies which adorn the human character. His integrity, his veracity, his meekness, his benevolence, his profound reverence of the Diety, his respect for the Saviour, and his ardent love for his country, were displayed on numberless occasions; and gathered new brightness through every successive period of life."

Appleton wrote two papers for the Massachusetts Medical Society that were published in the "Medical Communications": "An account of the successful treatment of paralysis of the lower limbs, occasioned by a curvature of the spine," and "History of a hemorrhage from a rupture of the inside of the left labium pudendi."

WALTER L. BURRAGE.

ARCHER, John (1741-1810), the first in America to receive a degree in medicine, medical teacher, founder of the Medical and Chirurgical Faculty of Maryland, was born May 5, 1741, near the present village of Churchville, Harford county, Maryland. His father was a north of Ireland farmer and an agent for the local iron works. John was educated at the West Nottingham Academy and at Princeton College where he received an A. B. in 1760 and an A. M. three years later. Meanwhile he had begun the study of theology under Presbyterian auspices and had preached a trial sermon; then he turned his attention to medicine becoming a pupil of John Morgan (q.v.) and began attendance at the courses of lectures at the Philadelphia College of Medicine which later became the University of Pennsylvania Medical Department. The degree of Bachelor of Medicine was conferred on him June 21, 1768, the first so conferred after actual attendance on the lectures, in this country. Even before Archer got his degree he had begun practice in New-

castle county, Delaware; it is said he declined an offer from Dr. Morgan to go into partnership; at all events he returned to his native county in July 1769 and began a practice which lasted forty years. During the Revolution he was a member of the local committee from November, 1774 and in December of the same year was captain of a militia company, becoming major in January, 1776. In August of that year he was a member of the convention which framed the Maryland constitution and bill of rights.

Dr. Archer gave instruction to some fifty medical students during his many years of practice, following the custom of the time, which was that a student should remain as an assistant to a well-known practitioner for a period of three years, this novitiate serving often in lieu of a degree in medicine. His assistants formed a medical society, the minutes of which are preserved in the library of the Medical and Chirurgical Faculty of Maryland, at Baltimore, the state medical society, which Archer helped to found in 1799. He was on the examining board and one of the executive committee. In 1801 he was a presidential elector and he served as representative in Congress from that date until 1807. He contributed a few papers to the "Medical Repository," of New York and introduced "senega" as a remedy in the treatment of croup.

In 1766 he married a daughter of Thomas Harris, of the family that founded Harrisburg, Pennsylvania, and they had ten children, many of whom died in infancy. Of those who survived five studied medicine, four taking degrees in medicine at the University of Pennsylvania. The youngest child, Stevenson, was chief justice of the federal court of appeals, a congressman and from 1817 to 1819 United States judge for the territory of Mississippi. Dr. Archer's health began to fail at the time of the completion of his service in Congress; he had a partial paralysis and gave up active pursuits. He died suddenly, probably from another cerebral hemorrhage, while sitting in his chair at his home in Harford county, September 28, 1810.

Three portraits of John Archer are extant; one in the court house at Belair, Harford county, Maryland, a second in the hall of the Medical and Chirurgical Faculty at Baltimore, and a third in the State House at Annapolis, Maryland.

ARDAGH, John (1810-1872), superintendent of the insane asylum at Orillia, Canada, was born at Waterford, Ireland, in 1810. He took his degree of M.D. at Edinburgh University, and his M. R. C. S. in England in 1831. He then engaged in practice in his native place, and was for eight years physician to the House of Industry and the insane asylum there. In 1842 he made a visit to Canada, where his cousin, the Rev. S. B. Ardagh (first rector of Barrie, Ont.), had come to settle. The following year he came again and settled at Orillia, Ont., where he continued to practice until his death, August 6, 1872. He experienced all the hardships incident to the practice of medicine in the early days of the colony. He was no stranger to long, lonely horseback rides through a thinly settled country, with roads at times almost impassable, and in all sorts of weather. He was highly esteemed as a skilful physician, and was much beloved, especially by the poor, to whom in their sickness he never failed to pay the utmost attention, giving his professional services gratuitously, however far he might have to travel and however inclement the weather might be. In this way he became known in the country as the "poor man's doctor." For some years he was medical attendant to the Indians stationed on the reserve at Rama; and when the branch Lunatic Asylum was established at Orillia in August, 1861, he was appointed medical superintendent. He conducted the affairs of the institution with great judgment and unremitting attention up to the closing of the establishment in November, 1870, owing to the transfer of the patients to a new asylum then opened at London, Ont.

ARMOR, Samuel Glasgow (1819-1885), Ohio teacher of medicine, was born January 29, 1819, in Washington County, Pennsylvania, and soon after came to Ohio with his parents who were of Scotch-Irish descent. He went first to Franklin College, New Athens, Ohio, an institution which in 1872 honored him with the degree of LL. D., then he read medicine with Dr. Irvine, Millersburg, Ohio, and graduated from the Missouri Medical College in 1844. Rockford, Illinois, was chosen for his life's work, but the turning point in his career came in 1847 when he accepted an invitation to deliver a short course of lectures on physiology in Rush Medical College. Later he was tendered the chair of physiology and pathology, but declined because of the pre

vious acceptance of the same chair in the medical department of the University of Iowa, at Keokuk. This position was soon exchanged for the chair of natural sciences in the University of Cleveland (non-medical), in connection with which he also engaged in general practice. In 1853 Dr. Armor was awarded a prize by the Ohio State Medical Society, which held its annual meeting in Dayton, for an essay, "On the Zymotic Theory of the Essential Fevers." This paper focused the attention of the college men of southern Ohio on the talented young author and led to his accepting in the fall of that year the chair of physiology and pathology in the Medical College of Ohio, where he soon fell heir to the chair of practice, made vacant by the death of L. M. Lawson. (q.v.)

In May, 1856, he married Miss Holcomb, of Dayton, and in 1861, having been tendered a professorship in the University of Michigan, he went to Detroit, becoming a member of the firm of Drs. Gunn & Armor. After a service of five years he accepted the chair of therapeutics, materia medica, and general pathology in the Long Island College Hospital, Brooklyn, and in the following year succeeded to the professorship of practice and clinical medicine made vacant by the resignation of the elder Flint.

After years of wandering this peripatetic teacher found himself at last permanently anchored and retained this position until his death in 1885. Dr. Armor was tall and well-formed. His complexion was dark, with hair straight and black as an Indian's. He was immensely popular in college and one of the finest lecturers to whom I have ever listened. His graceful delivery and modulated voice, the rounded sentences of pure English, and a wealth of illustration enabled him to breathe life and beauty into the driest of medical themes and to interest the dullest of students. He was not a voluminous writer, although his contributions covered a wide range of subjects and were valuable.

Dr. Armor died from cancer of the abdominal viscera in 1885 and sleeps by the side of his first wife in Woodland Cemetery.

WILLIAM J. CONKLIN.

ARMSBY, James H. (1809-1875), founder of the Albany Medical College, came into the world on December 31, 1809, in Sutton, Massachusetts, the son of an impecunious but long-headed farmer. When twenty he left the farm and began studying medicine under Dr. Alden March (q.v.) in Albany, N. Y. After graduating M. D. from the Vermont Academy of Medicine in 1833, he associated himself in Albany with Dr. March as teacher in a "School of Anatomy and Surgery," a school which had been originated by Dr. March twelve years before in a garret. Soon after his arrival in Albany he got up a petition to render dissections of the human body legal and for the establishment of a medical college and hospital. In 1838 he delivered a course of popular lectures illustrated by dissections of the human subject which were attended by some three hundred of Albany's citizens and brought in subscriptions for the projected college, organized in that year, with Dr. Armsby as professor of surgery and president.

This school founded, he took time from his anatomical studies to advance the establishing of the Albany Hospital and, that accomplished, he lent his whole energies to those who were interested in obtaining a university, a design which first met with little encouragement but was finally realized in 1873, when the Albany Medical College was united with Union University.

He went to Europe and brought back a rich collection of models for the college museum, and when serving as United States Consul at Naples the Neapolitans had their experience of a scientific American lecturer. In Albany he was known as an accomplished operator and surgical lecturer. His profound knowledge of anatomy, his mechanical dexterity, and his clearness in elucidating every point made his lectures eagerly sought by students.

He married in 1841, Anna L., daughter of the Hon. Gideon Hawley, and had two children, the son, Gideon H., becoming a physician. By his second wife, Sarah Winne, married in 1853, he had one daughter.

His death, which came very unexpectedly December 3, 1875, from pulmonary congestion and heart disease, deprived Albany of a most devoted citizen and clever surgeon.

He gave the surgical world an interesting illustrated work, "Photographs of Pathological Specimens from the United States Isa Harris General Hospital," two volumes, and a "History of the Albany City Hospital."

His portrait is in the Surgeon General's Library at Washington, D. C.

ARNOLD, Abram Blumenthal (1820-1904), teacher of medicine, the son of Isaac and Hannah Blumenthal, was born in Jebenhaus-

en, Wuertemburg, Germany, February 4, 1820, and came to America in 1832-3. After graduating at Mercersburg College he studied medicine with R. Lehwers, New York, took his first course of medical lectures at the University of Pennsylvania in 1848 and received his M. D. at Washington University, Baltimore. His first practice was in Carlisle, Pennsylvania. From 1872 to 1877 he was professor of the practice of medicine in Washington University; professor of nervous diseases in the College of Physicians and Surgeons, Baltimore, from 1877 to 1879; from the last date until his death emeritus professor. He was consulting physician to the Hebrew Hospital, Baltimore, retiring in 1892, and he was president of the Maryland Medical and Chirurgical Faculty, 1877-1878.

Arnold was the author of "Manual of Nervous Diseases," 170 pp., New York, 1855, and of "Circumcision," "New York Medical Journal," 1866. xxxix.

He married Ellen Dennis and had a daughter and three sons, one of whom was J. Dennis Arnold, (1856-1919) a physician of San Francisco.

He died at San Francisco, March 28, 1904.

ARNOLD, Jonathan (1741-1798), surgeon of the Revolution, was born in Providence, Rhode Island, December 14, 1741, received a common school education and began to study medicine under a preceptor. At the outbreak of the Revolution he was a member of the General Assembly of Rhode Island and had the honor of drafting the act repudiating English rule in that colony. He became a surgeon in the Continental army. When the French fleet arrived in 1780 at Providence, Arnold and Dr. Isaac Senter conferred with Dr. Craik, sent by Washington, regarding the care of the sick. He was a member of the Old Congress in 1782-84. When the war was over he took up his abode in St. Johnsbury, Vermont, and was judge of the Orange County Court from 1782 until his death which occurred February 2, 1798. His son, Lemuel Hastings, was elected to Congress and was governor of the state of Rhode Island in 1831 and 1832.

ARNOLD, Richard Dennis (1808-1876), was born in Savannah, Georgia, August 19, 1808, the son of Captain Joseph Arnold, a native of Rhode Island, and of Eliza Dennis of New Brunswick, N. J. He was educated at first by private tutors, then went to Princeton where he graduated S. B. in 1826 and received an A. M. in 1829. He began the study of medicine with William R. Waring, of Savannah, then entered the University of Pennsylvania, graduating M. D. in 1830, his thesis being "Asthenia or Debility."

He returned to Savannah to practice. In 1833 with W. H. Bullock he began publishing the "Daily Georgian," but withdrew in 1834. In 1835 he became one of the physicians to the Savannah Poor-House and Hospital, to which he was then annually appointed for over thirty years. Dr. Arnold was one of the original members of the American Medical Association and served on the committee which drafted the "Code of Ethics," adopted in 1847. He was active in organizing the Georgia State Medical Association in 1849 and was its president in 1851, delivering an address on "Reciprocal Duties of Physicians and the Public to Each Other." In 1850, the Savannah Medical College was founded and Arnold became professor of the theory and practice of medicine.

A strong advocate of medical organization and reform, and of "improved sanitary regulations to be enforced by city government," an ample supply of fresh water was secured for Savannah largely through his persistent efforts. For over thirty-five years he was president of the board of water commissioners. He served in the legislature of Georgia and was alderman in the city council; he was mayor in the years 1841-43, in 1851, 1852-1859, 1860, and again in 1863, serving until the close of the Civil War.

He wrote: ".... Relation of Bilious and Yellow Fever" (1856); "Dengue, or Break-Bone Fever as it appeared in Savannah.... 1850" (1858); "The Identity of Dengue, or Break-Bone Fever and Yellow Fever (1858-59)."

He died of tuberculosis, July 10, 1876, in the same room where he had been born.

ASCH, Morris Joseph (1833-1902), New York laryngologist, son of Joseph M. and Clara Ulman Asch, was born on July 4, 1833, in Philadelphia. His early education was mainly under private tutors and in the autumn of 1848 he entered the University of Pennsylvania where he was graduated on July 2, 1852, with the baccalaureate degree. His Master's degree was received in course July 3, 1855. He was a member of the Alpha Chapter of the P. K. E. fraternity (University of Pennsylvania). In the fall of

1852 he entered the Jefferson Medical College of Philadelphia from which he received the doctorate in 1855. Soon after graduation Dr. Asch was appointed clinical assistant to Dr. Samuel D. Gross, (q.v) with whom he remained for several years.

When war was declared and his country called, it was but natural that he should enter the Army where three brothers had already volunteered. He passed the examination for assistant surgeon of the United States Army, which he entered on August 5, 1861. He was on duty at the surgeon-general's office from August, 1861, to August, 1862. He subsequently became surgeon-in-chief to the Artillery Reserve of the Army of the Potomac, medical inspector Army of the Potomac, medical director of the 24th Army Corps, medical inspector of the Army of the James, staff surgeon of General P. H. Sheridan from 1865 to 1873. Some of the battles of the Civil War in which Dr. Asch participated were Chancellorsville, Mine Run, Gettysburg, The Wilderness and Appomattox Court House. On March 13, 1865, he was brevetted major for faithful and meritorious services during the war. He resigned from the Army of the Potomac on March 3, 1873, and entered the practice of medicine in New York City, devoting himself largely though not exclusively to the study and treatment of diseases of the nose and throat and holding the position of surgeon to the throat departments of the New York Eye and Ear Infirmary and the Manhattan Eye and Ear Hospital. When the American Laryngological Association was formed he was one of its founders, and he was president of the section of laryngology, being always zealous in its behalf. He was also a member of the New York Academy of Medicine and actively interested in the work of its section of laryngology. He held for a time the position of professor of laryngology in the New York Polyclinic. He was a member of the Military Order of the Loyal Legion, of the Union, University, Century and New York Yacht Clubs. His contributions to the literature of his chosen specialty were many. He wrote the article on "Stenosis of the Larynx" in the "Reference Hand Book of the Medical Sciences," Vol. IV. of which Dr. A. H. Buck was editor, the one on "Chronic Affections of the Nose," and a description of an operation for the cure of deviations of the cartilaginous septum, in the "American Text Book of Diseases of the Eye, Ear, Nose and Throat," De-Schweinitz and Randall. Of all his writings his name will ever be connected with the one descriptive of the operation for the cure of septal deviations, which for some time past has been known as the Asch operation: "A New Operation for Deviation of the Nasal Septum, with a Report of Cases," "N. Y. Medical Journal," vol. LII, 1890. He gave to it years of study of the most patient kind, perfecting it in its minutest detail, waiting until the results could be fully demonstrated before he presented his report, and this is well attested by the fact that the first published description of his manner of operating was never changed. He realized that no one method could ever be presented that would answer for every kind of deformity, but he demonstrated fully that his operation answered for the vast majority of cases, and he lived to see it become the most popular method in the country, and to know that it was performed in every part of the world.

Whatever Dr. Asch undertook was always conscientiously and well done. Faithful attention to duty was the surest way to win his esteem and friendship. Of courteous bearing, with a commanding presence, with a wide knowledge of human nature, he was withal gentle, retiring and far too modest.

An honorable career was ended on October 5, 1902, when Dr. Asch died at the age of 69 at Irvington-on-Hudson. Although a sufferer for nearly three years the end came suddenly from an attack of cerebral embolism.

ASH, John (1823-1886), oculist of Victoria, Canada was a native of Yorkshire, England, and was educated at Guy's Hospital, London, where he obtained his degree. He held also the London M. R. C. S. Very little is known of his boyhood or of his ancestry. He arrived in Victoria, B. C., in 1862, during the days of the Cariboo gold excitement.

A man of great force of character, he soon achieved distinction not only in his chosen profession but also in politics. He was a member of the old Vancouver Island Assembly, and after British Columbia joined the Canadian Confederated Provinces, July, 1871, he represented the district of Comox (Vancouver Island) in the Provincial Legislature for four terms, 1871 to 1884.

After retiring from public life he visited England twice, and then quietly settled down in Victoria to renew practice in which as an oculist he especially enjoyed a more than provincial reputation. Patients from the neighboring states came to consult him, as he was

in those days considered a skilful and successful operator.

He married on the eleventh of December, 1875, Adelaide Ann Amelia, daughter of Sir John de Veulle, Knight, High Bailiff of the Island of Jersey.

He died of apoplexy on March 17, 1886, in his sixty-third year. OSWALD M. JONES.

ASHBY, Thomas Almond (1848-1916), surgeon, teacher, author. Thomas A. Ashby was born near Front Royal, Virginia, November 18, 1848, the son of Thomas Newton and Elizabeth Almond Ashby, of good old English stock descending through Col. John Ashby, a friend of Washington. He secured his preliminary training in Washington College, Virginia (now Washington and Lee University), under Gen. Robert E. Lee. Graduating in medicine at the University of Maryland in 1873, he was a resident physician in the hospital in 1875. In 1877 with several associates he founded the "Maryland Medical Journal," remaining its editor for fourteen years. He helped to found the Women's Medical College of Baltimore in 1882, and remained associated with it until 1897, when he took the chair of diseases of women at the University of Maryland as successor to the widely known Dr. Wm. T. Howard (q.v.), close friend and extravagant admirer of Marion Sims (q.v.).

In 1890 he was president of the Medical and Chirurgical Faculty of Maryland; he was a member of the American Gynecological Society, and a fellow of the American College of Surgeons.

Ashby wrote a book on the diseases of women but the manuscript was burned in the fire of 1904. He published later a "Text Book of Gynecology;" the "Life of Turner Ashby;" "The Valley Campaign," and a boyhood reminiscence of the Civil War.

Dr. Ashby's faith expressed to his close friend and associate L. E. Neale, during the last winter of his life, was that he would awake sometime after death, it might be in a few seconds or it might be after long ages, and then he would find that all was well with him.

Dr. Ashby was familiarly and affectionately called "Tim" by his intimates; he was a politician in the good sense of the word, always cordial, kindly and friendly, and keeping in touch with everybody. He died June 26, 1916, in Baltimore after an attack of diabetes and tuberculosis lasting for some months.

HOWARD A. KELLY.

ASHURST, John (1839-1900), surgeon, was born in Philadelphia, August 23, 1839. He was educated by private tutors and at the University of Pennsylvania, where he received an A. B. in 1857, having attained high rank. Three years later the same university gave him both A. M. and M. D. His college degrees were completed in 1895 when Lafayette University conferred her LL.D. on him. While an interne at the Pennsylvania Hospital in 1861-1862 he came under the tutelage of Joseph Pancoast (q.v.) and George W. Norris. (q.v.). Giving up a projected course of European study Dr. Ashurst enlisted in the United States Army and was ordered on August 13, 1862 to the United States American General Hospital, at Chester, Penn., where he came under the command of Surgeon John L. LeConte, United States Volunteers. In the following December he was transferred to the Cuyler United States American Hospital at Germantown, Penn., and there remained as executive officer until the close of the war in 1865. He became surgeon to the Episcopal Hospital, Philadelphia in 1863, serving that institution until 1880 when the increasing duties of professor of clinical surgery in the University of Pennsylvania (1877-1900) forced him to resign. He had become surgeon to the Children's Hospital in 1870 and there made studies in bone surgery, especially excision of the larger joints, for which he acquired a considerable reputation. Later in life he devoted himself to the surgery of the large blood-vessels and to plastic surgery and was an authority in this domain. He was Barton Professor of Surgery in the University of Pennsylvania from the resignation of Dr. D. Hayes Agnew, in 1888 until his death in 1900.

From his student days Dr. Ashurst was a learned man. Brinton called him the most learned of American surgeons. He was a hard worker, took few vacations, was an accomplished writer, providing practically all the surgical reviews in the "American Journal of the Medical Sciences," the standard monthly medical journal of the country, for the ten years from 1867 to 1877. In the former year he published a monograph on "Injuries to the Spine", treating the subject in the then novel statistical manner and describing the morbid anatomy as it had not been done previously. Soon after, he edited an American edition of Erichsen's "Science and Art of Surgery" and in 1871 brought out the first edition of his own "Principles and Practice of Surgery", a book which became a standard

text-book and went through six editions. As editor of the "International Encyclopaedia of Surgery" (six volumes, 1881-1886) his name became as familiar in Europe as it was in the United States.

He was a member of the Pathological Society of Philadelphia and its president in 1870-1871; a fellow of the College of Physicians of Philadelphia and president in 1898-1900; member of the Obstetrical Society of Philadelphia; a fellow of the Philadelphia Academy of Surgery and vice-president in 1897-1900; a fellow of the American Surgical Association and vice-president in 1896. Nearly all his publications up to 1876 are to be found in the pages of the "American Journal of the Medical Sciences" and in the Proceedings of the Pathological Society of Philadelphia. After that date several series of clinical lectures were printed in the "Philadelphia Medical Times," "Philadelphia Medical News" and the "New York Medical Record" also in the "International Clinics, International Medical Magazine" and the "University Medical Magazine." He published memoirs of James H. Hutchinson, M. D. and Professor Wormley in the Transactions of the College of Physicians, Philadelphia in 1890 and 1897, respectively.

Dr. Ashurst was married to Sarah Stokes Wayne, December 8, 1864. They had seven children of whom William and Astley Paston Cooper Ashurst became physicians. Dr. Ashurst suffered a cerebral hemorrhage with left side paralysis on August 2, 1898. From this he never entirely recovered and died at his home in Philadelphia, July 7, 1900, at the age of sixty.

ASHMEAD, Albert Sidney (1850-1911), worker in leprosy, pellagra and Asiatic diseases, was born in Philadelphia, April 4, 1850, the second son of Albert Sidney and Elizabeth Graham Ashmead, grandson of Thomas Ashmead, and a direct descendant of Sarah Rush, the paternal aunt of Dr. Benjamin Rush (q. v.). The Ashmead family coming from Cheltenham, Eng., and settling in Philadelphia in 1681, is said to be of Moorish descent and to have been driven from Granada with the Moors and Jews under Ferdinand and Isabella. Ashmead's early education was received at Hastings Academy, West Philadelphia; he studied medicine under R. Skillern and William W. Keen, and graduated from the University of Pennsylvania in 1869, taking an auxiliary medical course at the university and later a post-graduate course at the Jefferson Medical College.

He practiced medicine in Philadelphia from 1871 to 1873 when he was called to Washington to attend Prince Adjuma, brother of the Emperor of Japan, a student at the Naval Academy at Annapolis. This interested the Japanese Government and he was appointed foreign medical director of the Tokyo Fu Hospital, Tokyo, Japan. He opened the hospital and taught the first class of eighty students of the Tokyo Charity Hospital Medical School. On his staff were sixteen native physicians, among them Sasaki, professor of medicine, Iwasa, and Dr. Tsuboi, Emmerich's assistant in Munich. The hospital was the largest in Japan, and in 1874, during the smallpox epidemic, 600 vacinations were performed in a day; $84,000 a year came to it from the Yoshiwara; a lock hospital system controlled its venereal wards.

While in Japan Ashmead was a prolific writer on local diseases, especially syphilis and leprosy; on the immunity of the Japanese from scarlet fever and beri-beri; the benefits accruing to Japan from the absence of cow's milk; cremation; Kakke, etc.

In 1876, he returned to this country and practiced medicine in Doniphan County, Kansas, until 1882, when he removed to New York. During his residence in Kansas, he was United States examining surgeon for pensions. Gov. St. John commissioned him as major and aide-de-camp of the first division of the Kansas State Militia. Ashmead studied insanity under Isaac Ray (q.v.) and was called to give expert testimony in the celebrated will case of the miser, James H. Paine, in 1886. He was one of the founders of the Berlin Leper Conference of 1897, and contributed largely to the literature of leprosy.

He was married in 1873 to Florence M. Fleming of Philadelphia, and the second time, in 1883, to Isabelle M. Wale, of New York. He died after an operation for "disease of the intestines," February 20, 1911, at the Jefferson Hospital, Philadelphia.

Askew, Henry Ford (1805-1876), a prominent practitioner of Wilmington, Delaware. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, pp 43-44.

ASPINWALL, William (1743-1823), inoculator for smallpox, was born in Brookline, Massachusetts, May 23, 1743. His ancester, Peter, one of the immigrants from England, settled

in Dorchester, Mass., in 1630 and moved to Brookline about 1650. Peter's farm in Brookline has remained in the possession of his descendants to this day, the site being the region about Aspinwall Avenue. William, the sole survivor of three generations, was born in the old house situated in later years on Aspinwall Avenue near St. Paul's church. It was built by Peter in 1660 and was torn down in 1891.

Dr. Aspinwall was fitted for college by the Rev. Amos Adams, a minister of Roxbury, and was graduated from Harvard in 1764. He studied medicine with Dr. Benjamin Gale, (q.v.) of Killingsworth, Connecticut, completing his medical education in the Pennsylvania Hospital, Philadelphia, where he spent seven months in study under Dr. William Shippen, (q.v.) who granted him a certificate of proficiency dated May 27, 1769.

He settled in practice in his native town. On the breaking out of the Revolution he was induced by his friend and kinsman, Dr. Joseph Warren, to enter the medical department of the provincial army, although his inclinations led him in the direction of fighting in the ranks. In the beginning he followed his bent and as a volunteer at the battle of Lexington conducted himself with distinction, bearing from the field the body of the commander of the Brookline Company, Isaac Gardner, father of his future wife. Receiving the appointment of surgeon to Gen. Heath's brigade and later deputy director to the army hospital in Jamaica Plain, Massachusetts, he rendered valuable service during the war.

After the death of Zabdiel Boylston, (q.v.) the first inoculator for smallpox in America, Dr. Aspinwall took up the business of inoculation and practised it extensively in a licensed private hospital in Brookline. On the introduction of vaccination he was present at one of Dr. Benjamin Waterhouse's (q.v.) demonstrations, and becoming convinced of the superiority of vaccination gave up inoculation, although at a great pecuniary loss to himself. "This new inoculation will take from me a handsome annual income, yet, as a man of humanity, I rejoice in it," said he, in a letter to Dr. Waterhouse.

For forty-five years he conducted a very large practice, most of the time going his rounds on horseback, and often covering forty miles in a day. He lost one eye by an accident in his youth, and late in life was afflicted by a cataract in the remaining one. Dr. Nathan Smith (q.v.) attempted unsuccessfully to remove the cataract, therefore his last years were passed in darkness. He died in the house which he built on Aspinwall Hill, April 16, 1823, of "natural decay," at the age of 79.

He was elected a fellow of the Massachusetts Medical Society in 1812, and Harvard College conferred on him the honorary M. D. in 1808.

He married Susanna Gardner in 1776, and they had seven children.

Gilbert Stuart painted his portrait, which was in the possession of his son-in-law, Lewis Tappan, a noted New York abolitionist, at the time when antislavery rioters broke into his home. The portrait so much resembled George Washington that the mob, thinking it a picture of the father of his country, spared it.

The following offices were held by him during his lifetime: Town treasurer, warden, surveyor, State representative, and senator. While studying medicine in 1769 he wrote a sketch of his ancestors, which has been preserved by his descendants.

WALTER L. BURRAGE.

ATKINSON, Isaac Edmundson (1846-1907), dermatologist, was born in Baltimore, January 23, 1846, and took his M. D. from the University of Maryland in 1865, when he was only nineteen. He was a remarkable clinician and a brilliant lecturer, and while he did not devote exclusive attention to dermatology his writings on this subject were authoritative because of his vast experience and intelligent judgment. In 1881 he had charge of a clinic for internal medicine at the Hospital of the University of Maryland; from 1886 to 1900, he was professor of materia medica and from 1890 to 1895, dean of the medical department of the University of Maryland. He was vice-president and later president of the Medico-Chirurgical Faculty of Maryland, and was one of the founders of the American Dermatological Association and its president in 1888.

He was the author of "The Botanical Relations of Trichophyton Tonsurans", New York Medical Journal, 1878.

He died in Baltimore, November 24, 1907.

J. McF. WINFIELD.

ATKINSON, William Biddle (1832-1909), an obstetrician of Philadelphia and also one who gathered the lives of well-known American physicians into a volume of biography, was the son of Isaac S. and Mary R. Biddle Atkinson and was born in Haverford, Pennsyl-

vania, June 21, 1832. His father's people were among the earliest settlers in Burlington, New Jersey.

His degrees of A. M. and A. B. were taken from the Central High School in Philadelphia and his M. D. from the Jefferson Medical College in 1853, after three years' study with Dr. Samuel McClellan. For several years he was correspondent for the "New Jersey Medical and Surgical Reporter," the "New York Medical Times," the "Nashville Medical Journal," the "New Orleans Medical Journal," and others. He also co-edited the "Medical and Surgical Reporter" with Dr. S. W. Butler in 1858, but in another year Atkinson became obstetric editor for S. D. Gross, of the "North American Medico-Chirurgical Review," but the war caused its discontinuance. These duties gave him training in the art of writing to bear fruit in his book of biographies. When secretary of the State Medical Society of Pennsylvania he edited the "Transactions" publishing a history of the society in volume 27, and also he edited the "Transactions of the American Medical Association" when permanent secretary. His services here were held in high esteem by the association. The last work of this sort that he edited was the "Medical Register and Directory" of Philadelphia.

His important written work was "Physicians and Surgeons of the United States, 1878", which includes the lives of 1,873 medical men. A second edition with supplement appeared in 1880. This was the first attempt to cover the whole ground of American medical biography and has been a most useful book of reference to those interested in the lives of the medical fraternity in this country. He made the mistake of including many living men, with their portraits, for a sufficient consideration, so that the book called forth a racy caustic review in the "Ohio Medical Recorder" of October, 1878, with the caption: "Blow ye the trumpet, blow." Of positions he held many: Professor of obstetrics and diseases of women in the Howard Hospital, Philadelphia; assistant to the professor of obstetrics and diseases of women and children in 1859 at the Pennsylvania Medical College, where he stayed until the entire faculty resigned and the college became defunct. In 1878 he was president of the Philadelphia County Medical Society. His retiring address, "Hints in the Obstetric Procedure," was, in consequence of its popularity, extended and published in book form. In 1881 he published "Therapeutics of Gynecology and Obstetrics." At one time he lectured on the diseases of children at the Jefferson Medical College and as inspector of the State Board of Health he issued valuable reports He was a man without guile, kindly and obliging and a warm friend.

In 1867 he married Miss Jennie R. Patterson of Philadelphia who died in 1871, leaving one child, a boy. He afterwards married Miss S. J. Hutchinson and had two children, a son and a daughter. He died at his home in Philadelphia November 23, 1909.

ATLEE, John Light (1799-1885), who revived the operation of ovariotomy, was born November 2, 1799, and passed practically all of his active life in Lancaster, Pennsylvania, where he died October 1, 1885. He received the degree of M. D. from the University of Pennsylvania in 1820. Although he had a very large general practice, it was in the fields of surgery and obstetrics that he won his chief celebrity. He was engaged in active practice for a period of sixty-five years, during which time he performed 2,125 important surgical operations, including ovariotomy, lithotomy, amputations, operations for strangulated hernia, trephining, ligation of arteries, tracheotomy, and operations on the eye. He also attended 3,264 parturitions.

Dr. Atlee's chief claim to fame, however, is that he was a surgeon who revived the operation of ovariotomy. This operation had been suggested by William Hunter in 1762, and was subsequently alluded to as feasible by John Hunter and John Bell. Ephraim McDowell (q.v.), of Kentucky, was so impressed with the teaching of the last that upon his return to the United States in December, 1809, he successfully removed an ovarian cyst by abdominal section. The operation was, however, regarded with such general disfavor that prior to 1843 but five cases were reported. On the twenty-ninth of June, 1843, Dr. Atlee performed his first operation of ovariotomy, removing both ovaries with complete success. During the period from 1843 to 1883, Dr. Atlee performed the operation of ovariotomy seventy-eight times, with sixty-four recoveries and fourteen deaths.

He was held in the highest esteem both within and without his profession. He was president and one of the founders of both the State Medical Association and the American Medical Association, also professor of anatomy and physiology in Franklin and Marshall College, and president of the board of trus-

tees of the State Lunatic Asylum at Harrisburg, Pennsylvania.

Dr. Atlee's son, Walter Franklin (October 12, 1828—August 17, 1910), was a graduate in medicine at the University of Pennsylvania and practiced in Philadelphia. A grandson, Lewis William Atlee, son of Walter Franklin, was graduated from Jefferson Medical College, served in the Navy; and now practices in Philadelphia. Another grandson, John Light Atlee, is practicing in Lancaster.

FRANCIS R. PACKARD.

ATLEE, Washington Lemuel (1808-1878). The work of a pioneer is primarily that of demolition of existent ignorance, and the dust he raises so chokes and blinds those close behind that they see not his good work until able to step safely where he has led. They revile him meanwhile for the disturbance of hoary ignorance. This was exactly the fate of Washington L. Atlee, the man who did more than anyone in the world to establish ovariotomy as a legitimate practice. Born in Lancaster, Pennsylvania, February 22, 1808, he was the youngest son of William Pitt Atlee and grandson of the Hon. William Augustus Atlee, one of the early judges of the Supreme Court. The surgeon-to-be was at fourteen placed in a drygoods store. Being the boy he was he naturally did not stay there but began to study medicine with his brother John at Lancaster. While a medical student he collected an herbarium of 400 specimens of Lancaster County plants which he subsequently presented to Pennsylvania College at Gettysburg. He took his diploma in 1829 from Jefferson Medical College, Philadelphia, and soon after married Miss Ann Eliza Hoff of Lancaster and settled in the village of Mount Joy. In 1834 he returned to Lancaster and practiced there for ten years, always investigating and on the alert for fresh knowledge; the year 1845 saw him professor of medical chemistry in the University of Pennsylvania, but so many were the demands of private patients that he finally devoted himself wholly to these. While still in Lancaster he was known as a skilful and courageous operator and some of his cases published in the "American Journal of the Medical Sciences" caught the attention of his medical confrères. Before leaving Lancaster he did two ovariotomies, the first on March 29, 1844, and his three hundred and eighty-seventh on May 31, 1878. In 1845, after great research, he collected statistics of 101 ovariotomies, and published them in the "American Journal of the Medical Sciences" for April, 1845. Being associated with his brother in an ovariotomy in 1843, he became interested in the subject and in 1844 he writes concerning his own first case:

"In traveling westward on the Pennsylvania Central Railroad, soon after passing Landisville Station, a small stream is crossed, on the opposite banks of which stands a one-story brick tenement. It was here after many days and nights of intense anxiety that I first essayed this operation. It is the text for many, many thoughts. No one can know the mental and moral conflicts of that hour and I can not describe them . . . Although this effort was unfortunate I had weighed the matter well and my convictions were on the side of humanity and duty." The next operation was successful and the third, in Philadelphia, took place in 1849. Atlee says: "I found I had raised a hornets' nest. Ovariotomy was everywhere decried. It was denounced by the general profession. . . . . I was pointed at as a dangerous man, even as a murderer. . . . A celebrated professor in his published lectures invoked the law to arrest me in the performance of this operation." The call to operate from many in the state who had faith in him alone gave him courage to face an amount of misrepresentation and abuse that would have crushed an ordinary man. But appreciation was coming and so were patients. One came against the positive advice of her doctor and the doctor came, too, to be with her when she died on the operating-table! Yet she lived and the doctor's opposition was dead long before the patient.

The importance of tapping as a means of diagnosing was clearly demonstrated by Atlee and the estimation of the character of the removed fluids.

Atlee in 1853 was stirring the medical world again by his methods of heroically attacking uterine fibroids with the knife. Dr. Marion Sims (q.v.) (New York Medical Journal, April, 1874) writes: "The name of Atlee stands without a rival in connection with uterine fibroids . . . no man has yet dared to imitate him. A generation has passed since he gave to the world his valuable essay on the subject, but it is only within the past five or six years that the profession has come to appreciate the great truths he labored to establish."

One of the founders of the American Gynecological Society, he also took an active part in the organization of the Philadelphia County Medical Society, the State Medical Society of

Pennsylvania and the American Medical Association. Of the two former he was at one time president and of the latter vice-president, and in the last year of his life when very feeble he journeyed to meet the State Society at Pittsburg. He died of starvation caused by cancer of the stomach September 6, 1878. His wife preceded him by eight years after a happy family life with their ten children.

It is remarkable that with so little leisure he managed to carry on an extensive correspondence; to contribute frequently to medical journals and to write an octavo volume on ovarian tumors and many essays on subjects connected with gynecology.

Among his chief writings were numerous scientific articles contributed to the "American Journal of Science and Arts," the "American Journal of the Medical Sciences," and the "Medical and Surgical Reporter;" including: "The Surgical Treatment of Certain Fibrous Tumors of the Uterus;" "A Retrospect of the Struggles and Triumphs of Ovariotomy in Philadelphia;" "The Treatment of Fibroid Tumors of the Uterus, 1876;" "Sarcoma of the Ovaries," 1877, and his large work, "General and Differential Diagnosis of Ovarian Tumors with Specific Reference to the Operation of Ovariotomy," Philadelphia, 1872.

DAVINA WATERSON.

ATWOOD, LeGrand (1832-1917), pioneer alienist of St. Louis, was born at Le Grange, Tennessee, October 16, 1832. His father was N. B. Atwood, who owned a chain of wholesale drug houses, sending drugs by boat from St. Louis to New Orleans and by mule team as far west as Santa Fe. His mother was Elizabeth Le Grand of Murfreesboro, Tenn., of Huguenot descent. When Le Grand was a few months old his mother returned with him to the family home in St. Louis. There he attended the Wyman school and began the study of medicine at the early age of fifteen under his kinsman, Dr. Joseph Nash McDowell (q.v.), a nephew of Ephraim McDowell (q.v.). Joseph McDowell's eccentric personality had a profound effect on his pupils and on none more than upon young Atwood. Later in life Atwood collected specimens of birds, skins and reptiles for the museum of the McDowell Medical College while traveling across the isthmus of Tehauntepec; the prince of story tellers, he dearly loved to tell anecdotes of his master. He took his M. D. at the Missouri Medical College in 1849 while in his eighteenth year, and became assistant demonstrator of anatomy in his alma mater long before he was of age.

After practicing three years, he crossed the plains to California, washed gold and practiced among the miners for two years; was a member of the "Vigilantes;" then found his way home by way of Nicaragua, staying a month or two at Graytown to assist the consul in the medical care of the natives.

He settled in Marshall, Missouri, and here he married Eliza Cowan, of Shelbyville, Tenn., in 1860.

At the breaking out of the war, Dr. Atwood was among the first to volunteer on the side of the South, enlisting as surgeon to the first regiment of Missouri State Guards. He was at the first battle of Boonville, Mo., taken prisoner at Lexington, and after his release settled in St. Louis County where he practiced for fifteen years. He was a man of great personal courage and did more than his part in catching horse thieves and in seeing justice done to the persecuted negroes. When at last he came to St. Louis his interest in nervous and mental diseases began. First came an appointment as superintendent of the St. Louis Insane Hospital, a position he held from 1886 to 1891; he was lecturer on therapeutics and toxicology at the St. Louis Medical College and then lecturer on nervous diseases in the Marion Sims Hospital College, and on nervous and mental diseases at Beaumont College, being a teacher of medicine continuously all the years of his practice. He was much in court as an expert witness, especially in insanity cases.

Dr. Atwood was most active in securing the passage through the legislature of bills regulating the practice of medicine. He had a gift of oratory which, coupled with a retentive memory, made a most favorable impression upon committees.

Appointed superintendent of the state hospital for the insane at Fulton in 1891 he made a fine beginning in ridding the institution of graft, erected a much needed building and was getting the institution in efficient condition when the politicians had their way and he was replaced. Disheartened, he made his home in Ferguson, just outside St. Louis, in 1892 and became mayor of that city, continuing his practice. His wife died in 1895.

Dr. Atwood was a lifelong Democrat, a Master Mason for forty-nine years, and was much in demand as an after-dinner speaker.

He died at the age of eighty-four, August 22, 1917, survived by his six children, having done what he could to teach medicine and to raise its ethical standards in the community.

WALTER L. BURRAGE.

Aub, Joseph, ophthalmologist of Cincinnati

See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912. I. p. 41.

AWL, William Maclay (1799-1876), pioneer alienist of Columbus, Ohio, was born in Harrisburg, Pennsylvania, May 24, 1799. There he began the study of medicine at the age of 18 under a physician of the town. Two years later he entered the medical department of the University of Pennsylvania, at Philadelphia, but did not finish the course. In 1834 he received an honorary degree in medicine from the Jefferson Medical College and a similar one from the Medical College of Ohio, in 1837. Dr. Awl began practice in Harrisburg, moved to Lancaster, Ohio, in 1826, practised his profession successfully in several towns in that state and finally settled in Columbus in 1833, to remain for the rest of his life. In his early career he devoted himself to anatomy and surgery, having the reputation of being the first surgeon west of the Alleghanies to tie the left common carotid artery. This was in 1827, the case appearing in the columns of the "Western Medical and Physical Journal" for October of that year. After reaching Columbus he gravitated toward the treatment of mental diseases. He had a knack at the management of the insane that was quite unusual. He was a tall, slender individual of fair complexion and blue eyes but afflicted with a spasmodic wry neck. Every few moments his head gave a sudden twist to one side. He boasted that if he could once fix his eyes on those of even the most violent lunatic he could control him without difficulty. Scoffers asserted that as he was unable to fix his own eyes he could not fix those of the insane. He succeeded and often appeared in court as an expert.

Dr. Awl was a member of the Legislature with Marmaduke B. Wright, (q.v.) another prominent medical man of the time. They promoted a bill to place the insane of Ohio in the care of the state. The bill became law in 1835 and the "State Hospital" was opened in 1838 with Awl as superintendent. In this year he became president of the Association of Superintendents of Asylums for the Insane of the United States and Canada, retaining the position until 1851. He drew the bill for the founding of the schools for the education of the blind and the feeble-minded in Ohio. In 1846 he joined with the great Daniel Drake (q.v.) and other leading members of the profession in establishing the Ohio State Medical Society.

Dr. Awl married a Miss Loughey in 1830 and they had five children. In 1876 he suffered a cerebral hemorrhage which caused his death November 19, of that year after lingering for several months.

AYERS, Edward A. (1855-1917), physician, lecturer, writer, was born in Jacksonville, Illinois, Dec. 20, 1855, the son of Marshall P. Ayers, a banker and railroad builder, and Laura Allen. His early education was received in the public schools, and at Whipple Academy; he graduated from Illinois College in 1877. He graduated in medicine from the New York University in 1880, and practiced in New York for several years. He was professor of obstetrics in the New York Polyclinic; a founder and first president of the Mothers and Babies Hospital of New York, and was a well-known scientific lecturer. His paper, "The Mosquito as a Sanitary Problem," won the Carpenter Prize of the New York Academy of Medicine. This formed a lecture which he gave in many places, using illustrations made by himself. It is a full, admirable, popular, well-illustrated exposition of the life-history of the mosquito in its relation to disease and the methods of extermination. This paper was published in Fulton's "Expository Writing" as one of "fifteen best examples of the English language." He contributed to magazines and medical journals, and wrote "Physical Diagnosis of Obstetrics."

Ayers was a musician, a trained organist, and skilled as an artist, making illustrations for many of his articles. He was a notable golf player and won nine cups.

For two years he was a member of the New Jersey State Board of Health and medical inspector of the local schools.

In 1895 Dr. Ayers married Joy, daughter of Van Sinderen Lindsay, of Nashville, Tenn.

In 1908 he went to Branchville, New Jersey, where he practiced until he moved to Franklin, in the same State, not long before an attack of pneumonia, which lasted but four days. He died at the Franklin Hospital, Dec. 3, 1917, survived by his widow, a son, Edward L., who served on ambulance duty in France, and a daughter, Ellen.

AYRES, Daniel (1822-1892), a Brooklyn surgeon, was born in New York City, October 6, 1822. He was educated at Princeton College and after attending medical lectures at Castleton Medical College, Vt., graduated M. D. at the University of the City of New York in 1845. He served as assistant physician at Bellevue Hospital and settled in Brooklyn where his life was spent. From 1846 to 1853 he was surgeon to the Brooklyn City Hospital, which he helped to establish, and in 1856, at the founding of the Long Island College Hospital, he became surgeon to that institution and professor of clinical surgery and surgical pathology in the medical school connected with it, positions he held until 1874 when he became professor emeritus. He was said to be successful as a lecturer and to illustrate his subject with many ingeniously prepared specimens, which he made himself. Another office he held after 1870 was consulting surgeon to St. Peter's Hospital. In 1856 Wesleyan University conferred the honorary degree of LL. D. upon him. Dr. Ayres did a successful plastic operation for exstrophy of the female bladder in November, 1858, reported in the "American Medical Gazette," N. Y., 1859, x, 81-89, 2 plates. This was similar to the first successful operation for this affection that had been done by Joseph Pancoast, (q.v.) of Philadelphia, in February, 1858, but not reported until the following year, therefore Ayres should have the credit of having worked out the details of a new operation, independently.

Dr. Ayres published in addition papers on "Successful Reduction of Complete Dislocation of the Cervical Vertebrae;" "Operation for Artificial Anus;" and "Trepanning of the Skull for Reflex Epilepsy."

During the latter part of the Civil War he served as corps surgeon.

In 1849 he married Charlotte Augusta, daughter of Daniel Russell, of Portland, Connecticut. They had two sons who followed their father in the practice of medicine.

After forty years of teaching and practice Dr. Ayres retired and devoted himself to advancing the interests of the Long Island College Hospital and the Hoagland Laboratory to which he made large money gifts, as he did to Wesleyan University. He died January 18, 1892, at the age of sixty-nine.

AYRES, Henry P. (1813-1887), born in Morristown, New Jersey, was one of the pioneer physicians of Indiana, having settled in Fort Wayne in 1842, which was then a small but promising village. To practice medicine in a small town then meant arduous work for the doctor. There were no roads worth mentioning, and country clients had to be visited on horseback; the distances were often great and the mud deep when the weather was bad. His reputation for skill in obstetrical cases was quite extensive.

He came of old colonial stock. He was a descendant of the seventh generation of Capt. John Ayres of Massachusetts, who emigrated from England in 1635 and settled in Salisbury.

His mother, Comfort Day, also belonged to the Day family which settled in Newark, New Jersey, during colonial times. His father died when he was seven years old and his mother was left with a large family to care for.

He attended his first course of medical lectures in the University of Louisville, Kentucky, 1841-42, and afterwards settled in Fort Wayne, Indiana. In 1845 he went to New York, and in 1846 received the degree of M. D. from the University of New York.

He was one of the organizers of the Allen County Medical Society, also for many years an active member of the Indiana State Medical Society and its president in 1871. In 1860 he contributed an exhaustive article of 138 pages to the "Journal of the American Medical Association" on "The Education of Imbecile and Idiotic Children." He was an occasional contributer to the "Medico-Chirurgical Review," published in Philadelphia by his friend and former teacher, Dr. S. D. Gross, as well as to other journals.

He married Eliza Kate Rowan in 1839 and had six children, three of whom died in childhood. He was very fond of children and had a winning way which made them reciprocate his affection. Their oldest son, S. C. Ayres of Cincinnati, Ohio, became professor of ophthalmology in the Medical College of Ohio.

Dr. Ayres died in Fort Wayne, Indiana, December 25, 1887. For nearly twenty years before his death he had suffered from paralysis agitans, involving first the left side, and a few years later the right.

ALEXANDER G. DRURY.

BABCOCK, James Woods (1856-1922), the first to recognize pellagra in the United States and to identify it with Italian pellagra, was born in Chester, South Carolina, August 11, 1856. He had his education at Harvard College, taking his degree of A. B. in 1882 and

then entering the Harvard Medical School where his M. D. was conferred in 1886. Deciding to make a specialty of mental diseases Babcock became a house officer at the McLean Asylum, then situated at Somerville, Massachusetts. From 1885 to 1891 he was assistant physician to that institution, resigning in the latter year to accept the position of physician and superintendent to the South Carolina Hospital for the Insane at Columbia, an office he filled until 1914. Babcock was chairman of the Columbia water and sewer commissions and a member of the Columbia board of health. At one time he was a member of the South Carolina legislature; in 1905 the South Carolina College gave him the degree of LL. D. It was at this time that he began his studies on pellagra, making extensive researches and carrying on propaganda with word and pen in articles in the press and communications to the American Medical Association and at the biennial meetings of the National Association for the Study of Pellagra, which had been founded and directed by him. From 1909 to 1912 he was president of this association. With C. H. Lavinder, of the United States Public Health Service, he published in 1910 the first treatise on pellagra in the English language. Among his earlier writings may be mentioned: "Tuberculosis and Insanity", "Amer. Jour. of Insanity"; "The Colored Insane", "Alienist and Neurologist"; "Development of Charities in South Carolina," in "Charleston News and Courier". From 1915 until his death he was professor of psychiatry in the Medical College of South Carolina. Babcock was a likeable man while in college and the medical school. A hearty whole-souled young man, developed into the best type of southern gentleman whose death was mourned by a large circle of friends, both in the south and the north.

In 1892 he married Katharine Guion of Lincolnton, North Carolina. She and several daughters survived him when he passed away at his home in Columbia March 3, 1922.

WALTER L. BURRAGE.

BACHE, Franklin (1792-1864), with Dr. George B. Wood, prepared the "Dispensatory of the United States of America" in January, 1833, a book which has gone through over twenty editions and as a volume of over 2,000 pages is in use to-day, Dr. Bache writing for each revision until his death.

The boy Franklin, son of Benjamin Franklin and Margaret Markoe Bache, was born in Philadelphia on October 25, 1792, great grandson of Benjamin Franklin, for his grandfather, Richard Bache, emigrating from Lancashire, England, in 1737, married Franklin's only daughter. At a school kept by a Dr. Samuel B. Wylie young Franklin had his early education, afterwards going to Pennsylvania University and graduating A. B. there in 1810; M. D. in 1814. After spending a year in the army as surgeon's mate and two years as full surgeon, he resigned his commission in 1816 and began practice in Philadelphia, marrying Aglae, daughter of Jean Dabadie, a French merchant. She died seventeen years after, leaving him with six children. He was physician to the Walnut Street Prison, professor of chemistry in the Franklin Institute, physician to the Eastern Penitentiary and professor of chemistry in the Philadelphia College of Pharmacy in succession and with such training was appointed in 1841 professor of chemistry in the Jefferson Medical College, a position he filled for the rest of his life. When he became a fellow of the College of Physicians of Philadelphia in 1829 he was appointed a reviser of the "United States Pharmacopœia," Dr. Hewson (q.v.) and Dr. George B. Wood (q.v.) aiding him. "For all this expenditure of time, thought and labor, not only in this revision but in all those with which he had been concerned, he neither expected nor received any other recompense than the consciousness of duty performed and public benefit conferred." In the spring of 1864, just after finishing the revision, he was attacked by typhoid fever, which carried him off on the nineteenth of March.

As a writer, during the ten years he acted as co-editor of the "North American and Surgical Journal," he contributed many and valuable articles besides editing three important chemical works and writing largely for the "American Cyclopedia of Medicine and Surgery," edited by Dr. Isaac Hays (q.v.).

He translated a Memoir of Acupuncturation, cases occurring in the practice of Julius Cloquet, by Moran, Paris, 87 pp. Phila. 1825.

Besides the appointments named he was vice-president of the College of Physicians of Philadelphia, member of the Philadelphia Academy of Natural Science and for two years president of the American Philosophical Society.

BACKUS, Frederick Fanning (1794-1858). Azel Backus, D. D., was a staunch old divine of Connecticut whose sternness was only equalled by his philanthropy, and his son Frederick Fanning, settling down as a general practitioner in Rochester, then numbering three hundred and thirty-one inhabitants, was a chip of the old block and took the burden of woes physical, spiritual and civic on his own shoulders determined to make things better. He was born on the fifteenth of June, 1794, and graduated from Yale College at nineteen, in 1813, taking his M. D. from the Medical College of New Haven in 1816, and two years later marrying "a lady of cultivated mind," one Rebecca, daughter of Col. William Fitzhugh of Maryland.

His chief merit lay in his indefatigable efforts on behalf of the insane. His reports on their neglected condition laid the foundation for the Asylum at Syracuse. No one had done much before this and when his efforts had gained some measure of success he retired from the Senate to a damaged practice. In 1858 he had a second attack of paralysis following one two years previously, and on November 4 he died, leaving his wife, his daughter and four sons a small competence.

DAVINA WATERSON.

BACON, David Francis (1813-1866), physician and writer, was born at Prospect, Connecticut, November 30, 1813, and died at New York City, January 23, 1866. He was graduated at Yale in 1831 and at the Yale Medical School in 1836. Soon after graduating he was sent as principal colonial physician to Liberia by the American colonization society. During the greater part of his life he lived in New York, and was actively interested in politics. He was a frequent contributor to periodical literature, and published "Lives of the Apostles," New York, 1835, and also "Wanderings on the Seas and Shores of Africa," 1843.

BACON, Francis (1831-1912), son of Leonard Bacon, D. D., LL. D., and Lucy Johnson Bacon, was born in New Haven, October 6, 1831. After a preliminary education at the Hopkins grammar school he entered the Yale Medical School where he finished his course in 1851, but did not receive his degree on account of his youth until two years later. In 1852 on the outbreak of a yellow fever epidemic in Galveston, Texas, he volunteered as an assistant surgeon to the Galveston Hospital, and remained there for a year and a half when he was stricken with the fever himself. He then returned home, but was recalled six months later to take entire charge of the same hospital and there continued for eight years. At the end of this time, as civil war seemed inevitable and he possessed abolitionary views, he resigned and settled in New York City for the practice of medicine. On the death of the inventor Charles F. Goodyear, to whom he had been a personal medical attendant, he removed to New Haven and practiced there until he enlisted as assistant surgeon in the Second Connecticut Infantry. While occupying this position he was especially commended for his devotion to the wounded under hot fire at the Battle of Bull Run. When the three months' term of enlistment of that regiment had expired, he re-enlisted as surgeon with the rank of major in the Seventh Connecticut Volunteers, which, like the earlier Second, was under the command of Colonel Alfred H. Terry. Subsequently he was at the Siege of Pulaski, at Beaufort, Tybee Island and in other engagements, and finally was promoted to be medical inspector of the Army of the Potomac. Shortly thereafter he was made director general of the medical department of the Gulf, having charge of all the Union hospitals in the South. He was elected in 1864 to succeed Jonathan Knight as professor of surgery in the Yale Medical School, and continued in this position until 1877, when he resigned to devote himself entirely to the practice of his profession. In 1899 he returned to the Medical School as lecturer on medical jurisprudence and held that position until his death.

Majestic in figure, a scholar in thought and action, and possessed of a graceful English diction he soon became eminent in his profession, being especially well known as a surgeon and as an alienist. He was president of the New Haven County Medical Association in 1875, 1880 and 1881 and served as president of the Connecticut State Medical Society in 1887 and 1888. For thirty years he was a director of the New Haven Hospital and also served as one of its visiting surgeons. He with his wife founded the Connecticut Training School for Nurses and continued his interest in it until his death. He was president of the New Haven Anti-Tuberculosis Association from its organization in 1902, and served as a member of the Connecticut Board of Pardons from the time of its creation in 1883 until 1910. He

was one of the organizers of the American Public Health Association. In 1906 the honorary degree of Doctor of Sciences was conferred upon him by Yale University.

For recreation he loved to dip into the writings of Sir Thomas Browne and was one of the best informed scholars on him and his works. Upon the tercentenary of Browne's birth, a celebration was held at his birthplace in Norwich, England, and at this time Doctor Bacon was invited to deliver one of the addresses. It is very much to be regretted that the address upon Browne, which he prepared at this time, was never printed. His address on the occasion of the centennial celebration of the New Haven County Medical Association on January 26, 1903, unfortunately has shared a similar fate. The quality of his published writings make us wish that he had written more.

He married June 6, 1867, Georganna Muirson Woolsey who actively aided him in all his philanthropic work until her death in 1906. He died at his home in New Haven, April 26, 1912, of angina pectoris after an illness of several weeks. WALTER R. STEINER.

BAER, Benjamin Franklin (1846-1920), gynecologist of Philadelphia. Bennie Baer as he was familiarly called, was born in Carlisle, Cumberland County, Pennsylvania, January 29, 1848. After a desultory education in the public school, he entered at sixteen the Union Army and was at the surrender of Lee at the Appomatox Court House. At the close of the Civil War he entered business but gave it up in 1874 to enter the medical department of the University of Pennsylvania, graduating in 1876. He became an assistant of William Goodell (q.v.) and so came into gynecology in its formative period, as it leaped forward to become for a time a leading specialty under the quickening impulse of the new antiseptic regime. As an untiring student and an apt pupil, Baer rapidly absorbed the lore of his master and became a leader. As instructor in gynecology 1878-85, he conducted the University dispensary at a time when the vogue was topical treatments consisting in the application of strong tincture of iodine to the vault of the vagina in one case and of carbolic acid, chloral, and glycerine in the next. Ovariotomy was the great operation while fibroid tumors and pus tubes were just looming up on the horizon and looked at askance by the older surgeons. He was elected professor of gynecology in the Philadelphia Polyclinic, of which he was a founder, in 1885, a position held for forty years. Persistent plodding, application, and a "this one thing I do" principle in a field he loved characterized his life work.

In 1866, he married Lucy A. Heath, to whose faithfulness and self-sacrifice he owed a vast deal. Six of their ten children survived him, his namesake, an oculist, was successor to Dr. George de Schweinitz, and his third daughter the first woman in the faculty of the University of Pennsylvania where she was assistant professor of home economics.

Baer wrote much and ventilated his ideas for the most part in the Philadelphia Obstetrical Society in its teeming days; his papers exploited the current interests—fibroid tumors, pelvic abscess, extra-uterine pregnancy. He learned to write well, simply, and clearly. He was president of the Philadelphia Obstetrical Society and an active member of the American Gynecological Society. Dr. Baer did two original things: he performed a simplified supra-vaginal hysterectomy for fibroid tumors, where the cervical stump was dropped below the peritoneum, without a single suture in it or a ligature constricting it (Phila. Obs. Soc., 1891; Trans. Am. Gyn. Soc. XVII), and in the Philadelphia society he repeatedly advocated closing the abdomen without drainage after an abdominal operation upon a pelvic abscess—a most heretical and formidable proposition in the late eighties when the rest of us were draining from eighty to ninety per cent. of our cases through Keith glass tubes. We did not then know that in most cases the pus was sterile and so not likely to give rise to a peritonitis.

Dr. Baer died of broncho-pneumonia, September 11, 1920. HOWARD A. KELLY.

BAGBY, George William (1828-1883), first a practitioner of medicine, then writer of editorials, lecturer, and eminent man of letters and essayist, was born in the heart of Virginia, in the county of Buckingham, on August 13, 1828. His father, George William Bagby, was a merchant of Lynchburg, Virginia; his mother was Virginia Young Evans. He was educated at Princeton, New Jersey, and at Delaware College in Newark, Delaware, under John S. Hart. At the end of his sophomore year, when eighteen, he began to study medicine, taking his degree at the University of Pennsylvania (1849) offering a thesis on "Hysteroptosis." He began to practice in Lynchburg, Virginia, on the site of the present

Opera House, but, as Thomas Nelson Page says, "the pen was much more grateful to his hand than the scalpel . . . and he soon began seeking in the nearest newspaper the expression of his dreams. His first article to attract attention was a paper on Christmas, an editorial in the "Lynchburg Virginian." "All his life much of his work was thrown into the devouring maw of the daily press. His latest essays as among his first, were papers which passed for letters or editorials but were really literary essays which were masked under these ephemeral names. . . . . They gave him local celebrity but nothing more. "He is set down in a recent biographical encyclopedia merely as 'Physician and humorist;' he was much more than this—he was a physician by profession; a humorist by the way; but God made him a man of letters. "Among all Virginia's writers few have had the love to feel, and the gift to portray, Virginia life as Bagby had. He was the first to picture Virginia as she was. . . When the old life shall have completely passed away, as all life of a particular kind must pass, the curious reader may find in George W. Bagby's pages, pictured with a sympathy, a fidelity and an art, which may be found nowhere else, the old Virginia life precisely as it was lived before the War, in the tidewater and southside sections of Virginia. . . . He first of all discovered that in the simple plantation homes was a life more beautiful and charming than any of the gorgeous palaces could reveal."

Page also says of "The Old Virginia Gentleman," that it was to my mind the most charming picture of American life ever drawn."

Bagby was interested in the "Lynchburg Express," soon defunct; he wrote for "Harper's Magazine," for the "New Orleans Crescent," the "Charleston Mercury," the "Richmond Despatch", the "Southern Literary Messenger" and sometimes for the "Atlantic Monthly," as well as for "The Sun" (Baltimore) and "New England through the Back Door."

His essays of general interest were published in book form by Scribner in 1910, under the title "The Old Virginia Gentleman and Other Sketches," edited with an introduction by Thomas Nelson Page, and a sketch of his life by Edward S. Gregory. From these pages and from Mrs. Bagby, the above data and excerpts have for the most part been gathered.

In the Civil War he enlisted as a private, but was detailed by Beauregard for clerical work at headquarters. He did a vast amount of literary work and corresponding during this period. After the War he sought in New York a journalistic and literary career, but his eyesight failing, he entered the lecture field, "in which a rich reception and a bountiful harvest awaited him." In the winter of 1865-1866 his lecture on "Bacon and Greens" fairly took the city of Richmond by storm. In 1869 he was appointed assistant secretary of state and custodian of the State Library under General James McDonald.

In 1863 he married Lucy Parke, daughter of Dr. Lewis Webb Chamberlayne, of Richmond, who survived him. They had eight children, four daughters and four sons; a daughter, Martha, married George Gordon Battle, of North Carolina.

Dr. Bagby suffered for years with chronic dyspepsia and other complications, and died November 29, 1883, "not all at once, but by gradual stages, as of a siege."

HOWARD A. KELLY.

BAILEY, Pearce (1865-1922), neurologist, the son of William E. and Harriet Pearce Bailey, was born in New York City, July 12, 1865. He was a descendant on his maternal side of Dr. Jacques Jerauld, a French Huguenot who settled in Boston in 1700 and later practised medicine in Medfield, Massachusetts. Pearce attended private schools until he entered Princeton, graduating A. B. in 1886 and A. M. in 1889. In the latter year he took his medical degree from the College of Physicians and Surgeons, New York, and after an intern service in St. Luke's Hospital, spent several years in study abroad. On his return to America, he practiced in New York City, specializing in diseases of the mind and nervous system. At Columbia University, he became assistant in neurology in 1892, assistant in pathology in 1895-97, and adjunct professor of neurology in 1906-10. He was also consulting neurologist to St. Luke's, Roosevelt, New York, and other hospitals. During the World War, he served as colonel in the medical corps, U. S. A., in charge of the neuro-psychiatric division in the Surgeon General's Office and was awarded the distinguished service medal.

Dr. Bailey was on the editorial board of "Archives of Neurology and Psychiatry," contributed to the literature, and was the author of "Accident and Injury: Their Relation to Diseases of the Nervous System," 1898. He

was a member of the Society of Medical Jurisprudence, President of the American Neurologic Association, Chairman of the New York State Commission for Mental Defectives, one of the founders of the New York Neurologic Institute, and originator of the Classification Clinic recently established in New York City for determining the mental efficiency and aptitude of young men for various vocations.

He died from pneumonia at his home in New York, February 11, 1922.

BAILEY, Richard (1745-1811), New York surgeon, was born at Fairfield, Connecticut, in 1745, of French-English descent. He studied medicine under Dr. Charlton of New York, but went, after marrying Charlton's daughter, to London where he had the good luck to gain the friendship of William Hunter and permission to work in his dissecting-room. On returning to New York he practiced with Dr. Charlton, and at this period he began to study the then prevalent and fatal croup, a disease of which little was known. His opinions on this complaint and his successful practice founded on them were published in "Richter's Surgical Repository," in which Michaelis, Chief of the Hessian Medical Staff had expressed his views but giving way to Bailey's ideas.

In 1781 Bailey published his letter to Dr. William Hunter on "Angina Trachealis" and subsequently a "History of the Yellow Fever in New York in 1795," attempting in the latter to differentiate between contagion and infection. A serious blow had befallen Bailey in the loss of his wife. He had gone for a winter to London in 1776 and scanty means rather than inclination led him to take a surgeoncy on board a British man o'war coming to America. He found himself established with the troops on Rhode Island after it had been taken by the English and with no chance, except by resigning, of seeing his wife, then ill in New York. When, finally, he threw up his commission, he arrived in time only to see her die. The attention Bailey gave to anatomy and pathology made him the subject of injurious criticism from some of his narrow-minded contemporaries who accused him of experimentation on sick soldiers. Nevertheless, anxious to share his advance in knowledge, he delivered lectures to students in an unoccupied house while his son-in-law, Wright Post (q.v.), lectured to them on anatomy. But the students of 1778 were no wiser than those of to-day and by their imprudence unintentionally roused the people, and the celebrated "Doctor's Mob" broke into the building and unfortunately wreaked their vengeance on the rare collection of morbid anatomy which they threw into carts, took away and buried, thereby losing to anatomists many delicate and dexterously prepared specimens.

When the faculty of Columbia College thought it wise in 1792 to constitute a medical faculty Bailey and Wright Post became professors respectively of anatomy and surgery. The following year the positions were exchanged. Bailey was specially good as a lithotomist, and also in 1782 had successfully removed an arm by the operation at the shoulder-joint, this being, so far as can be ascertained, the first time it was done in the United States. Although devoted to surgery and delighting in pathological work, his orderly mind was always upset by the slowness of his fellow townsmen to work for urgent reforms. He and a few others got the New York Dispensary established and when yellow fever came he slaved day and night for the sick and proclaimed everywhere that the fever was "a murderer of our own creating," and due partly to a filthy harbor. He noticed it was worse when the West India ships came in the summer and he did not rest until he had obtained moderately good quarantine laws.

Like many another physician his life was forfeited to duty. In 1811 he found ship fever on an Irish immigrant ship and ordered the passengers to go on shore to the tents and rooms provided but to leave their baggage on board. In the morning he found the well and the sick with all baggage huddled together in one big room where they had passed the night. The atmosphere into which Bailey walked can be imagined. He stayed a while directing matters but was soon after seized with intense pain in the stomach and head. He had to go home to bed in the afternoon and died seven days after, a most serious loss in every way to his city. James Thacher says he was a perfect gentleman; inflexible in attachments, invincible in his dislikes, in temper fiery. A busy surgeon fighting opposition in his own branch and dull ignorance in health officers may perhaps had some of that "fiery temper" put to his credit as righteous anger.

BAKER, Alvah H. (1806-1865), of Ohio, who issued the first number of the "Cincinnati Medical News," was born in Chester County, Pennsylvania, on November 3, 1806. He came with his family to Plattsville in 1820 and at the age of eighteen opened a school to obtain means to study medicine. While teaching he went on studying medicine, and in 1830-31 attended lectures at Jefferson Medical College, Philadelphia, graduating in 1831. In 1833 he removed to West Alexandria, Preble County, Ohio, where he remained about three years. Afterward he went to Eaton, Ohio, where he practiced until another removal, this time to Cincinnati, in 1846. He was one of the founders of the Cincinnati College of Medicine and Surgery and was its first professor of surgery.

In January, 1858, Dr. Baker issued the first number of the "Cincinnati Medical News." Starting with that name in 1858 it became the "Cincinnati Medical and Surgical News" in 1860, a monthly which was suspended in 1863. Baker was energetic and had a singular charm of personality but was crude and lacked polish as a teacher. He was a practical organizer and presided over the Medical Convention of Ohio in 1847.

He died in Cincinnati, July 30, 1865.

ALEXANDER G. DRURY.

BAKER, Frank (1841-1918), anatomist, was born in Pulaski, New York, August 22, 1841. His ancestors were English, settled in New England, and identified themselves with their new home and fought in the War of the Revolution. His father was Thomas C. Baker and his mother Sybil S. Weed. Frank served in the 37th New York Volunteers 1861-1863, then was transferred to Washington; later he entered government service. He received his medical degree from Columbia University, which also gave him an A. M. in 1888 and Ph. D. in 1890. From 1883 to 1918 he was professor of anatomy in the Medical School of Georgetown University. In 1889 he was made assistant superintendent of the United States Life Saving Service and in 1890 superintendent of the National Zoological Park, District of Columbia, serving until 1916. He was a founder of the biological, anthropological and medical history societies of Washington and was president of the Association of American Anatomists (1897), the Anthropological Society of Washington (1897-1898), the Medical History Club of Washington (1915-1916), and secretary of the Washington Academy of Sciences (1890-1911). He was editor of the "American Anthropologist" from 1891 to 1898, and collaborated with John S. Billings in the "Medical Dictionary" (1890); he gave the definition of medical and anatomical terms in the Standard Dictionary (1890), and contributed anatomical articles to Wood's "Reference Handbook of the Medical Sciences," and to the "International Cyclopedia." Baker wrote two papers on President Garfield's case (1881-1882), showing "that the wound was caused by the second bullet and its course had been correctly diagnosed in a well accredited diagram made two days after the event." Other writings were: "The Rational Method of Teaching Anatomy" (1884); "What Is Anatomy?" (1887); "Anthropological Notes on the Human Hand" (1888); "Primitive Man" (1899). Dr. Baker's monograph on the "History of Anatomy" published in Stedman's Handbook compares favorably with the well-known article of Sir William Turner (Encyclopaedia Britannica) which has remained the ranking contribution in English. His contributions to medical history include "The Two Sylviuses" (1900) and "The Relation of Vesalius to Anatomical Illustration" (1915), read before the Historical Club of the Johns Hopkins Hospital. Baker had collected a valuable library on anatomy which was divided after his death between the library of the Surgeon-general's office and the medical library of McGill University. He had a set of lantern slides selected from the earlier books, generously lent on occasion.

Dr. Baker was of goodly height and presence. His fine head was remarkably like that of some of the great anatomists of the past, notably Quain and Sir Richard Owen. He had a lively sense of humor and his pleasant, affable, quizzical ways endeared him to all. As a teacher he believed that the proper place for instruction is the dissecting room; his lectures were humanistic, historical, morphological, of ample scope, set off by demonstrations on the cadaver, which he performed himself. After the death of Dr. Robert Fletcher (q.v.) he was probably the most erudite physician in Washington. In his early days, while in the government service, he was intimate with Walt Whitman and John Burroughs.

Dr. Baker married Mary E. Cole of Sedgewick, Maine, in 1873; she survived him with six children, one of whom, Colonel Frank C. Baker, served in the Great War.

He died at his home about September 30, 1918.

FIELDING H. GARRISON.

BAKER, Samuel (1785-1835), pioneer in the upbuilding of Baltimore as a medical centre, and founder of the library of the Medical and Chirurgical Faculty of Baltimore, was born in Baltimore, Oct. 31, 1785. His father, William Baker, emigrated from Germany when young and married a wife of Irish extraction. At the age of fifteen Samuel went to the Chestertown academy under Dr. Ferguson. He next entered the apothecary shop of Dr. Henry Wilkins to gain a practical knowledge of pharmacy, and later became a pupil of Dr. Littlejohn and Dr. Donaldson. The winters of 1806-7 and 1807-8 found him in attendance on the medical lectures in the University of Pennsylvania, and graduating in the last year with a thesis on chorea.

In 1808 Baker married Sarah, a daughter of the Rev. John Dickens.

Returning to Baltimore to practice he became professor of materia medica in the Medical College of Baltimore 1809-1833, secretary of the Medical and Chirurgical Faculty 1809-1813, founder of the library of the Medico-Chirurgical Faculty in 1830, and founder and president of the Medical and Chirurgical Faculty of Maryland in 1830. He was dean of the University, 1829-1830. The records state that "the disease which proved fatal was so illusory that but little apprehension was felt for him until a day or two prior to his dissolution. He died at the ripe age of 50," Oct. 16, 1835.

BAKER, William Henry (1845-1914). Baker's title to recognition lies in his having brought the new specialty of gynecology from the Woman's Hospital in the State of New York to Boston in 1875, and there for twenty years teaching it to the students of the Harvard Medical School both by lectures, as professor of gynecology, and by clinics at the Free Hospital for Women, which he founded on the general plan of the parent hospital. The facts of his life are these: He was born on March 11, 1845, at Medford, Massachusetts, the son of Rev. Abijah R. Baker, D. D., a Congregational clergyman, and of Harriet Woods, daughter of Rev. Leonard Woods, president of Andover Theological Seminary. His early education was received at Atkinson Academy, N. H., which he left at the age of eighteen to enter business in New York City. Here he prospered so that at the end of six years he was able to carry out a cherished ambition, to study medicine. After receiving an M. D. from Harvard Medical School in 1872 he served as a surgical interne at the Boston City Hospital, and took a like appointment at the Woman's Hospital in the State of New York, then situated at Forty-ninth Street and Lexington Avenue. Association with Sims, Emmet, Peaslee and Thomas inspired Baker to carry their ideas to new fields and arriving in Boston he was appointed on the staff of the Boston Dispensary where he demonstrated that gynecology could be taught to students in a public clinic, in spite of the opposition of many of the older members of the profession, who held that it was immodest and that the public would never permit such instruction.

In 1875 he raised what would now seem a small fund of money with which he founded the Free Hospital for Women in a dwelling house in East Springfield street, near the City Hospital, developing the institution by donations from his private patients and friends, whose loyalty he took great pains to preserve by constant favors and by his winning personality, until the hospital finally occupied its beautiful building on the Boston Parkway in the town of Brookline.

Baker was a shrewd business man, a keen judge of human nature besides being an able plastic surgeon. He retained the position of surgeon-in-chief and trustee to the hospital he had founded, until 1907, when he retired with the title of surgeon emeritus. Twelve years before, he had resigned his position as professor of gynecology at Harvard. During his active career he was a member of the American Gynecological Society, the Obstetrical Society of Boston, and the Boston Society for Medical Improvement. His wife was Charlotte A. Ball, of Boston, and she and two sons survived him upon his death from heart disease at his home at Roberts, Waltham, November 26, 1914. One son, Harold Woods Baker, M. D., has followed in his father's footsteps.

WALTER L. BURRAGE.

BALDWIN, William (1779-1819), botanist, born in Newlin, Chester County, Pennsylvania, March 27, 1779, was the son of a Quaker preacher. When school days were over he studied medicine with William A. Todd of Downington, Pennsylvania, then took his first course of lectures at the University of Tennessee in 1802. When the second session opened he found himself without funds, so returned to his Downington preceptor. His next venture was to go as ship's surgeon on the merchant ship "New Jersey" to Canton, taking with him, it was said by a fellow

passenger, only three shirts for the long voyage; but he won golden opinions on board as a doctor, and returned in 1806 with money enough to study for his M. D., which he took at the University of Pennsylvania in 1807.

There are known to be in existence three portraits of him, one painted by Peale for his museum, a miniature painted on ivory in China in 1805 and a steel engraving, the frontispiece of "Reliquiae Baldwinianae." These are owned by his grandson, who tells me he found at a second hand book store for 5 cents a reprint of his grandfather's graduation thesis, on the fly leaf of which is written "To Richard Brown, M. D., with the best wishes of his friend, the author." The "Dissertation" is dedicated to Dr. William A. Todd of Downington, his preceptor. It is titled "A Short Practical Narrative of the Diseases which prevailed among the American seamen at Wompoa in China in the year 1805, with some account of diseases which occurred among the crew of the ship 'New Jersey' on the passage from thence to Philadelphia." 1807. The thesis is a curious document. He had evidently entered the profession in the old style which was in vogue before medical colleges were established and had taken his degree of Doctor of Medicine not as a necessity but as an ornament after he was already a "respectable physician" of considerable reputation, as shown by his membership in the county and Linnaean societies.

He settled down to practice in Wilmington, Delaware; his leisure time was employed in studying local flora. Here he married Hannah Webster, and as both were Quakers they were turned out of meetings for having the ceremony performed by a Presbyterian minister; when Baldwin apologized he was taken back, but was turned out in 1812 for entering the navy, although he declared that he had gone to war "not to make wounds but to heal them." In 1811 he had gone to Georgia to benefit his health which was affected by tuberculosis, of which all his family had died, and his service during the War was chiefly at St. Mary's, Georgia. The winter and spring of 1816-1817 were spent exploring in East Florida, until he was recalled to be surgeon-botanist to the frigate "Congress," then under way for Buenos Ayres and other South American ports. He returned in 1818 rather better in health, and with a fine store of specimens for his friends, partly catalogued. In 1819 he was appointed as surgeon and botanist to go with Major Long up the Missouri. During this year he published two papers describing his treasures, one in the "American Journal of Science" and one in the "American Philosophical Transactions."

This year, also, was the last of his life; he died at Franklin, on the banks of the Missouri, in the home of his friend, John Lowry. Five days before his death he wrote to his wife to remind her of his promise to let William Darlington (q.v.) have his herbarium, and this she was quite willing to do, but Darlington's compassion for the young widow and her three little children induced him to try to sell it, its obvious value prohibiting his buying it himself at the price he could afford. Zachary Collins, the botanist, bought it and meant to place it in the Academy of Natural Sciences, Philadelphia, but his representatives sold it to Lewis David de Schweinitz (1780-1834), botanist, who gave it to the Academy.

HOWARD A. KELLY.

BANCROFT, Charles Parker (1852-1923), New Hampshire alienist, was born in St. Johnsbury, Vt., January 11, 1852. He was educated in the public schools of Concord, N. H., at Phillips-Andover Academy, and at Harvard University. He received his A. B. degree from Harvard in 1874, and graduated from the Medical School there in 1878. He engaged in general practice in Boston, and served as house officer in the Boston City Hospital. He also served as assistant superintendent of the New Hampshire Asylum for the Insane, now the New Hampshire State Hospital, for a brief period, and in 1882 was appointed Superintendent of the New Hampshire State Hospital, succeeding his father, Jesse Parker Bancroft (q.v.) who had been Superintendent of this institution for twenty-five years. Dr. Charles P. Bancroft resigned as Superintendent of the hospital in 1917, after serving in that capacity for thirty-five years. The combined services of father and son extended over a continuous period of sixty years. In 1890 Dr. Bancroft carried out the movement initiated by his father for state care of the insane, which transferred patients from the county poor farms and placed them under care of the State, thereby making better and more scientific treatment possible. In 1888 Dr. Bancroft established a Training School for Nurses at the New Hampshire State Hospital, one of the pioneer schools in hospitals for the insane.

He was an able alienist. His services were sought both in and out of his State in courts

of law for instruction to the court and jury. He had written much in short monographs that have been justly prized for their scientific and honest deductions. He had time to be a helpful citizen. His interests were as many as there were needs in deserving causes. With the soundest integrity, without ostentation, Dr. Bancroft was a fine example of a normal man possessing a well-balanced, scientific mind.

Dr. Bancroft was a member of the American Medical Association, the American Psychological Society, the New England Society of Psychiatry and Neurology, the Boston Society of Psychiatry, the Boston City Hospital Alumni Association, having been the president of the last four societies. He also had been the president of the New Hampshire Medical Society.

At the time of his death he held the position of chairman of the State Board of Charities for New Hampshire and also of the Board of Trustees of the New Hampshire State Hospital.

He died suddenly of cerebral hemorrhage on December 14, 1923, at the Mary Hitchcock Hospital in Hanover, N. H., where he had been engaged at the time in the duties of consultant in mental hygiene, in which capacity he had served at Dartmouth College for three years.

BANCROFT, Frederick Jones (1834-1903), of Denver, Colorado, was born in Enfield, Connecticut, May 25, 1834, and died in San Diego, California, January 23, 1903. He began to study medicine while teaching school in Connecticut and New York, graduating from the Medical Department of the University of Buffalo in 1861. His ancestry in East Windsor, Connecticut dates from 1660, his father being a farmer of the old Puritan stock and his mother a Miss Wolcott of the Oliver Wolcott family. Frederick settled at Blakely, Penn., and soon after entered the Federal army, and spent the first six months in charge of a hospital at Harrisburg. In 1862 he was appointed surgeon to the 76th Pennsylvania Infantry. He also rendered medical service to the troops on Pickney Island. He was afterwards surgeon-major to the 3rd Pennsylvania Heavy Artillery. In 1863 he arranged a hospital for Confederate prisoners at Fort Delaware, and then rejoined the Pennsylvania Artillery at Camp Hamilton, Virginia. From June, 1863 to the close of the war he served as post surgeon at Fortress Munroe. While here he was required to render medical service to Jefferson Davis, then a prisoner, but when the latter learned that Bancroft was a New Englander, he declined his services and requested those of one more in sympathy with his cause.

After the close of the war he took a course of lectures at the University of Pennsylvania, and then in 1866 came to Denver, where he spent the balance of his life. From 1872 to 1887 he was a railroad surgeon. He was the first president of the Colorado State Board of Health, 1876, president of the State Medical Society in 1881, and a founder of the medical department of the University of Denver, where for many years he filled with distinction the chair on fractures and dislocations. He was, until a few years before his death, on the staff of St. Luke's Hospital, of which he was one of the founders. He came to Colorado in ill health. He was 6 feet 4 inches in height, and for the last fifteen or twenty years of his life weighed from 250 to 350 pounds. Being a sufferer from a heart affection, and being a man of wealth, he spent the last few years in retirement from active practice. He wrote some articles on the climate of Colorado and public health matters, but little or nothing on surgical subjects, yet was justly distinguished in the treatment of fractures and dislocations, and for many years was without a rival in this section, though he knew little of pathology and the later advances in general surgical technique.

He was endowed with a dry wit and a keen sense of humor, which gave zest to every company he graced.

In 1871 he married Mary Caroline, daughter of George A. Jarvis, of Brooklyn, N. Y. She died in 1899 in Denver, and three children survived, George J., Frederick I., and Mary J.; of these, Frederick I. became a doctor.

W. W. GRANT.

BANCROFT, Jesse Parker (1815-1891), pioneer New Hampshire alienist, was born in Gardner, Mass., April 17, 1815, the son of Jonathan and Betsey (Parker) Bancroft. Like many New England farmers' sons of that day he felt a strong desire for an education, and not possessing the requisite means was willing to earn them by teaching and hard labor. The earnestness of purpose and the character developed by his early struggles were in evidence during his whole life. He fitted for college at Andover, Mass., entered Dartmouth College in 1837 and took his A. B.

in 1841, being a member of the Phi Beta Kappa Society. He matriculated in the Dartmouth Medical School at once, there coming under Dr. Edmund R. Peaslee (q.v.), pioneer pelvic and abdominal surgeon of New York. Peaslee, a Dartmouth graduate both in the academic and medical departments, was at that time giving the courses in anatomy and physiology at Hanover. Young Bancroft acted as demonstrator of anatomy at the Brunswick Medical School (University of Maine) previous to receiving his medical degreen in 1845. The same year he began practice in St. Johnsbury, Vt., and soon acquired a large general and consultation practice. When he had been attending to his calls for twelve years he decided to devote himself to the study and treatment of mental diseases, and, much to the regret of his numerous patients and friends in St. Johnsbury, accepted the position of superintendent of the New Hampshire Asylum for the Insane at Concord. This was at a time when the care of the insane was of renewed interest to the medical profession of the United States. It had been a neglected branch of practice and was being revived in the neighboring states of Massachusetts and Connecticut, where the Worcester State Asylum and the Hartford Retreat had been established respectively not long before. Dr. Bancroft's subsequent life was identified with the history of the New Hampshire asylum. He introduced the individual treatment of the mentally diseased patient in contradistinction to the mechanical routine treatment. Removing straight-jackets and other forms of restraint and substituting isolation and personal supervision required courage and persistency in the face of the old established methods of dealing with the mentally deranged. The attempts to introduce new procedures in the asylum at last were crowned with success and Dr. Bancroft acquired not only a local but a national reputation as an alienist. In his later years he favored the formation of a state board of lunacy, urging that the state should take over the supervision of the insane,—a reform now everywhere adopted,—and he lived to see it in operation in New Hampshire. His advice was often sought as a medico-legal expert in the courts; a good witness, his opinions were highly valued. The same simple, just and sympathetic qualities that made Dr. Bancroft's advice of importance in public and private affairs throughout the state, greatly endeared him to his intimate acquaintances and his own family.

From 1878 to 1882 Dr. Bancroft was lecturer on mental diseases at Dartmouth and from the latter date until 1886 he was professor of the same subject. Among the societies in which he held membership were: the New Hampshire Medical Society, the Association of Medical Superintendents of Institutions for the Insane and the New England Psychological Society, of which he was president. In 1890 he suffered with kidney disease and was forced to retire. His son, Dr. Charles Parker Bancroft (q.v.) had taken his place in 1882 as superintendent of the New Hampshire State Hospital, as it was then called. Dr. Bancroft died in Concord, N. H., of uremic poisoning, April 30, 1891.

BANGS, Lemuel Bolton (1842-1914), New York genito-urinary surgeon, was born in that city August 9, 1842, a son of Lemuel and Julia A. Bangs, and died at the age of seventy-two in New York City, October 4, 1914. He married Isabel Hoyt, December 5, 1894.

His academic course was interrupted by financial reverses that compelled him to take up business temporarily. He was graduated at the College of Physicians and Surgeons (Columbia University) in 1872, served an interneship at Bellevue Hospital, and took post-graduate courses at Berlin and Vienna. On his return he became the associate of the late Dr. Fessenden N. Otis (q.v.), and helped him in the pioneer work which made genito-urinary surgery a specialty.

Dr. Bangs was an attending surgeon at St. Luke's Hospital from 1885 to 1892; professor of genito-urinary diseases at the New York Post-graduate Medical School and Hospital from 1889 to 1894; thereafter emeritus professor; a member of its board of directors and treasurer of the corporation. The completion of its present building was largely due to his efforts. During 1898-1901 he was professor of genito-urinary surgery at the Bellevue Hospital Medical School. The hospitals to which he was a consulting surgeon were: St. Luke's, Bellevue, City, St. Vincent's and the Methodist Episcopal.

He was a fellow of the New York Academy of Medicine; a member of the American Association of Genito-urinary Surgeons, its president in 1895; the American Medical Association; the state and county medical societies; the Practitioners' and the Clinical Society. Among his non-medical affiliations were

the Society of Colonial Wars, the St. Nicholas Society and the following clubs: Century, University, Church and Quill.

Dr. Bangs contributed frequently to the medical journals and edited the "American Text Book on Genito-urinary Diseases" (1895).

He was a man of force and high ideals, an able practitioner, an astute, resourceful consultant, an inspiring teacher.

The Post-Graduate Medical School and Hospital erected a tablet to his memory having the following inscription: "He made the study of medicine and surgery his avocation, and by his life exemplified its highest ideals in culture and ethics. To the furtherance of post-graduate instruction he enthusiastically devoted his skill, his knowledge and his scholarly attainments." JAMES PEDERSEN.

BANNISTER, Henry Martyn (1844-1920), neurologist, geologist, was born in Cazenovia, New York, July 25th, the son of Rev. Henry and Lucy Kimball Bannister. In 1871, he was graduated from the National Medical College (now George Washington University), Washington, D. C., and the following year joined the party which made the Government geological survey of the territories, including Alaska. Upon his return, he settled in Chicago to practice and for several years was assistant superintendent of the Kankakee State Hospital. With James S. Jewell (q.v.) he founded in 1874 the "Quarterly Journal of Nervous and Mental Diseases" and was co-editor until 1881. Bannister was the author of papers on the geology of the various counties in Illinois, 1868-1873; the "Note on the Age of the Laramie Group," 1879; "The Drift and Geologic Time," 1879; a textbook on insanity, with Daniel R. Brower (q.v.).

On June 14, 1887, he married Delia C. Ladd of Chicago.

Through many years of invalidism from arthritis deformans, he continued his literary work. He was as well read in literature and general science as in medicine. His delightful personality won for him the love of friends. On May 1, 1920, he died in his home in Evanston, Ill.

BARD, John (1716-1799), pioneer New York physician, was the first in the United States to take part in a systematic dissection for the purpose of instruction and he was the first in this country to report a case of extra-uterine pregnancy. His father, Peter Bard, a refugee from France on the revocation of the edict of Nantes, went first to London, and then to Delaware in 1703, on a mercantile venture. This not proving successful he settled in Burlington, New Jersey, where he was appointed judge of the supreme court and a member of the governor's council, dying at an early age and leaving his widow, a daughter of an English physician named Marmion, with a family of seven children to educate on very slender means. John, her third son, born in Burlington, February 1, 1716, was sent to Philadelphia where he received the rudiments of a classical education, partly at the hands of a Scotch gentleman, Annan by name, a man of reduced circumstances but an accomplished teacher of Latin and an exponent of polished manners. At the age of fifteen John was bound apprentice, according to the custom of the day, to Mr. Kearsley, an English surgeon of good talents but of an unhappy temper. He treated his pupils with great severity and subjected them to most menial employments to which John would have scarcely submitted, as he said, were it not for the fear of disappointing his mother and because of his affection for Mrs. Kearsley, who showed him the greatest kindness. For seven tedious years he stayed with the doctor, stealing his hours of study from sleep, after the family had gone to bed and before they got up in the morning. An early intimacy with Benjamin Franklin, (q.v.) of kindred mind and no unequal fortune, served to brighten Bard's leisure hours and to stimulate his industry. They were members of the same club and corresponded and kept up their friendship throughout life.

Dr. Bard settled in practice first in Philadelphia where he married a Miss Valleau, a niece of Mrs. Kearsley, like himself a descendant of a refugee and equally destitute of the goods of this world. Of this union was born Samuel Bard (q.v), organizer of the first medical college in New York and a noted writer on midwifery. After practicing six or seven years in Philadelphia Dr. Bard was induced by Franklin to move to New York in the year 1746, to take the place of Dr. Dubois and Dr. Dupie, who had died there of yellow fever. His cheerfulness, conversational ability and tact, coupled with sound professional attainments, soon won for him a large practice among the better classes. Bard read much in the medical literature of the day and also in the English authors and his retentive mem-

ory enabled him to delight his friends with long and appropriate quotations.

Upon the arrival in New York harbor of a Dutch ship in 1759 containing cases of a malignant ship fever, Dr. Bard was employed by the corporation to take proper quarantine measures. Every nurse and attendant in the hospital had the disease. And Bard was impelled to draw up a memorial urging the expediency of providing a pest house against similar occurrences. The result was the purchase of Bedloe's Island with the building upon it, Bard becoming health officer. He was likewise appointed surgeon and agent for the sick and wounded seamen of the British navy at New York, retaining the position until he retired from practice. He was a friend of Dr. Peter Middleton (q.v.), one of the noted medical men of the time, a founder of the medical department of King's College. Bard assisted Middleton in the first recorded dissection. As regards this, David Hosack says ("American Medical and Philosophical Register," 1812, ii, 228): "As early, however, as 1750, the body of Hermannus Carroll, executed for murder, was dissected in this city by two of the most eminent physicians of that day, Drs. John Bard and Peter Middleton, and the blood vessels injected for the instruction of the youth then engaged in the study of medicine; this was the first essay made in the United States for the purpose of imparting medical knowledge by the dissection of the human body, of which we have any record."

In 1778 Dr. Bard retired from practice and settled on a farm he owned at Hyde Park, on the Hudson, in Dutchess County, but being reduced in fortune by the Revolution he returned to New York at the peace of 1783 and resumed practice. On the establishment of the Medical Society of the State of New York in 1788 he was unanimously chosen its first president.

Dr. Bard was not a voluminous writer. In a letter to Dr. John Fothergill of London, dated December 25, 1759, he communicated "A case of an extra-uterine foetus," that was read to "A society of physicians in London," March 24, 1760, and published subsequently in "Medical Observation and Inquiries," 1763, vol. ii. This first case to be reported has an interest to every medical reader. It was a woman of 28 years who went through her second pregnancy with only slight abnormal symptoms and at the end of nine months had a few labor pains, but delivery did not take place. In spite of the presence of a large right-sided abdominal tumor she had another healthy child by a normal labor, but five days after delivery pain and fever began and at the end of nine weeks of treatment by fomentations, fluctuation in the tumor could be determined. Dr. Bard having made the diagnosis of extra-uterine pregnancy, in the presence of Dr. Huck, an army physician, opened the abdomen by a long incision and delivered a macerated full-time fetus and much pus. The patient who was then nursing her child made a good recovery.

Several papers on yellow fever from Dr. Bard's pen are to be found in the files of the "American Medical and Philosophical Register," and after his death there appeared in the same publication (April, 1811, i, 409-421) an essay on the nature and cause of malignant pleurisy that had been delivered before "A weekly society of gentlemen in New York," in January, 1749. Here we have a reference to one of the earliest medical societies in the country. It was patterned after Dr. Fothergill's London society apparently and, according to Peter Middleton, was in existence twenty years later. The expense of educating his son had been heavy and being dependent on practice for a living Dr. Bard returned to New York after the peace of 1783 and resumed practice. On the organization of the Medical Society of the State of New York, five years later, he was elected president.

In 1795 Dr. Bard, then being in his eightieth year, gave an address before the state medical society calling attention to the presence of yellow fever in the city, meeting much opposition and some obloquy by so doing. Nevertheless, his advice as to treatment of this dread disease—sweating the patient—proved more successful than other methods. In 1798 he gave up practice and retired to Hyde Park where he died, March 30, 1799, at the age of 83. His charm of conversation, vivacity and cheerfulness never forsook him and thus he passed to the great beyond, admired, respected and beloved.

WALTER L. BURRAGE.

BARD, Samuel (1742-1821), president of the College of Physicians and Surgeons, New York, was born in Philadelphia on the first of April, 1742. His father was John Bard, (q.v.) a physician of New York, and noted for being the first person who performed a dissection and taught anatomy by demonstration as well as the first to report a case of extra-uterine pregnancy, on this side of the

Atlantic. His mother was a Miss Valleau, a niece of Dr. Kearsley of Philadelphia, and likewise a descendant of the Protestant refugees. At the time of Dr. Bard's birth his father was practicing in Philadelphia; but at the urgent solicitation of Dr. Franklin, he removed his family to New York when Samuel was in his fourth year. Samuel received the rudiments of education at a grammar school in New York, and at the age of fourteen years entered King's College under the private pupilage of Dr. Cutting. While at college he gave some attention to the study of medicine and afterwards regularly devoted himself to the profession under his father. About this time he imbibed his taste for botany from Miss Jane Colden, daughter of the then lieutenant-governor of the province and a correspondent of Linnaeus, Coldenia bearing its name in the Linnaean catalogue in her honor. She instructed Samuel during his occasional visits to the family and he repaid her attentions by drawing and coloring plants and flowers for her. In the fall of 1760 he sailed for Europe; but being captured by a French privateer he was taken to Bayonne, and confined five months in the castle. Upon his release in the spring of 1761 he immediately proceeded to London. He was now, at the recommendation of Dr. Fothergill, received into St. Thomas' Hospital as the assistant of Dr. Alexander Russell, and continued in that capacity until his departure for Edinburgh. He was graduated in 1765, after having defended and published an inaugural essay "de viribus opii;" and left Edinburgh loaded with honor, in consequence of having obtained the prize offered by Dr. Hope for the best herbarium of the indigenous vegetables of Scotland.

In 1765 he returned to his native country, married his cousin, Mary Bard (in 1770) and began practice in New York in partnership with his father. Dr. Bard had written to his father from Edinburgh that New York should have a medical college and after three years' residence at home he gained the cooperation of Dr. Clossy, Dr. Jones, Dr. Middleton, Dr. Smith and Dr. Tennent, and in 1768 the school was established and united to King's College, Bard becoming professor of the theory and practice of physic at the age of twenty-eight. In his address at the first commencement in 1769 he so moved his auditors that a substantial subscription was raised for the benefit of the school, the Governor heading the list. Dr. Bard continued to serve the institution for forty years, the last twenty as trustee and dean of the faculty of physic.

On the beginning of hostilities in 1776, Dr. Bard's political principles being odious to the generality of the community, he thought it prudent to retire to Shrewsbury, New Jersey. He there occupied himself in making salt; but not succeeding to his satisfaction, and being unable to support his family comfortably, he returned to New York when the British took possession. He immediately regained the lucrative practice he had left, and was so successful in business that at the end of the war he possessed a handsome independence. The high character which Dr. Bard maintained at this period cannot be better shown than by the fact that, notwithstanding political differences (and party-spirit was the ruling principle of the day), he was the family physician of General Washington during his residence in New York.

After several abortive attempts by the regents of the university to revive the medical school on the restoration of peace, the trustees of Columbia College resolved to place it upon a permanent foundation, by annexing the faculty of physic to that institution in 1792. Dr. Bard was continued as the professor of the theory and practice of medicine, and was appointed dean of the faculty. His exertions were chiefly instrumental in the establishment of the city library, and of the New York Dispensary. In the year 1795 he took Dr. Hosack (q.v.) into partnership, and in 1798 retired into the country, leaving that gentleman successor to his practice. In the year 1811 he was elected an associate fellow of the college of Physicians of Philadelphia; and in 1816 the degree of Doctor of Laws was conferred upon him by Princeton College although he was never ambitious of such distinctions.

Dr. Bard's first literary production, his "Inaugural Essay" on the powers of opium, would not have been unworthy of his pen in the brightest period of his fame. At the time he wrote the powers of opium, the mode of its operation, and its various effects upon the body were but imperfectly understood and were matter of much difference of opinion among the profession in Edinburgh. Shortly after, in 1771, he published "An inquiry into the Nature, Cause and Cure of the Angina Suffocativa, or Throat Distemper, as it is Commonly Called by the Inhabitants of this City and Colony." Abraham Jacobi says of this ("Archives of Pediatrics," N. Y., 1917,

xxxiv, No. 1, 2-3): "Bard's book is wise and accurate. His style classical and simple, and the description of diphtheria in skin, mucous membrane and larynx is correct and beautiful. He knew the different forms of the disease even better than Dr. Douglass, of Boston, had distinguished them." In this valuable treatise may be found blood-letting suggested as a remedy, although claimed in later times as a discovery.

Dr. Bard's favorite branch was midwifery. And perhaps no physician in this country has ever enjoyed a larger share of practice in this department or acquired a higher reputation as an accoucheur. After retiring into the country one of his first plans for usefulness contemplated was the publication of a treatise upon this subject. His residence in the country, and the celebrity he had acquired as an obstetrician, accorded him frequent opportunities of witnessing the ignorance of midwives and country practitioners upon this important branch and determined him to issue a treatise with plain, practical directions for the management of natural labors. In the year 1807 he published "A Compendium of the Theory and Practice of Midwifery," intended chiefly for the use of midwives and young practitioners. The work went through three large editions in its duodecimo form; and was twice published greatly enlarged and improved in octavo. At the time of his death he was preparing for the press a sixth edition. In the year 1811 he published "A Guide for Young Shepherds," the best practical treatise then extant upon sheep breeding, the masterly performance of Chancellor Livingston not excepted. Several fugitive essays by him are preserved in the "American Medical and Philosophical Register," and other periodical journals are enriched by his communications. "The Transactions of the College of Physicians of Philadelphia" contain several papers by him on the subject of "Yellow Fever," and he wrote "A Discourse on Medical Education," New York, 1819.

He lived to the age of seventy-nine years. In the latter years of his life he was afflicted with several severe attacks of a stricture of the esophagus, which greatly increased the bodily infirmities incident to old age, but to his last days he retained the perfection and vigor of his mind. Sensible of his approaching end, he had made it a business to prepare for death, and after arranging his temporal concerns and spending his last hours in devotional exercises, he died after a few hours illness of pleurisy, at Hyde Park, New York, May 25, 1821.

BARKER, [Benjamin] Fordyce (1818-1891), generally known as Fordyce Barker, was a broad personality. Both in body and mind he won attention and cooperation from any group he came in contact with. Born, brought up and educated in the State of Maine he carried with him a vigororous physique and a robust and genial personality which communicated itself to those he met. Naturally such a man appealed to those who were sick and suffering, especially when they learned, as they quickly did, that he had quick perceptions supported and informed by a thorough knowledge of his calling. In common at that period with physicians in general and also surgeons he pursued for many years what is known as a general practice, gradually giving himself more and more to obstetrics and what was later termed gynecology. At that time having but limited contact with surgery, as an obstetrician he won a foremost place. As an operator he was very skilful in meeting the exigencies of difficult labors. As a teacher he was at one time hampered by weakness of the vocal chords. This interfered, however, so little with his voice, that though unable to conduct didactic lectures in later years he always excelled in clinical teaching, his lectures being faithful reflection of the readiness with which he fathomed the intricacies of pelvic ailments. Promptly realizing the need for the broadest culture in his professional work, he adopted the plan of annual visits to European centers, selecting Paris and Edinburgh as the foremost exponents at this time of medical and surgical proficiency.

He was born at Wilton, Maine, May 2, 1818, the son of Doctor John Barker and Phebe Abbott. His father, a practitioner at Wilton, was formerly for two years an army surgeon in the war of 1812. Fordyce's early education was under the tutelage of his parents until eleven years of age, then began his classical training under his uncle John Abbott, at China, Maine. From thence he went to Farmington, Maine, to attend the school of Professor Green; next he went to Limerick, Maine, to complete his preparation for college; this he did under the guidance of his uncle by marriage, the Reverend Charles Freeman. He entered Bowdoin College in 1833, graduating with the degree of A. B. in 1837; he then entered the Medical Department in the same University and was graduated with the degree

of M. D. in 1841, previously having received an A. M. in 1840.

Owing to signs of incipient tuberculosis he left Maine, riding on horseback to Norwich, Connecticut, where he finally settled. On September 14, 1843, he was married to Miss Elizabeth E. Dwight of Harrisburg, Pennsylvania. He spent the winter of 1844 and 1845 in Paris, graduating there in 1845 and returning to Norwich the same year, taking the position of lecturer on obstetrics at Bowdoin in 1845 and 1846. In May, 1848, he delivered the annual address before the Connecticut State Medical Society. He moved to New York in March, 1850, to take part in the organization of the New York Medical College, to which he became professor of obstetrics and diseases of women and children. In 1856 he began the annual summer trips to Europe alluded to, which with a single exception, were repeated up to the time of his death. In 1860 he became president of the New York State Medical Society. It was about this time that Bellevue Hospital Medical College, New York City, was founded, Dr. Barker becoming one of a brilliant faculty which was brought together there at that time. First he was professor of obstetrics, then professor of clinical midwifery and diseases of children, then professor emeritus. His associates in the field of obstetrics and allied subjects were Isaac E. Taylor (q.v.) and George T. Elliot (q.v.). He was very active in promoting the union of the library of the Medical Journal Association and that of the Academy of Medicine. He was president of the Academy of Medicine from 1879 to 1885, and he was president of the American Gynecological Society in 1876 and 1877. Columbia College gave him the degree of LL. D. in 1878, Edinburgh in 1884, also Glasgow in 1888, and Bowdoin in 1887. He was president of the New York Obstetrical Society and vice-president of the International Medical Congress, London, 1888. He was attending obstetrician at Bellevue Hospital from 1855 to 1879, afterward consulting obstetrician from the latter date to his death in 1891, also attending surgeon (1876-1877) and consulting physician (1867-1880) at the Woman's Hospital.

He contributed many written essays on the subject of his special work. (See list by Doctor W. T. Lusk, "Transactions of New York Academy of Medicine," 1891, Second Series, volume viii, page 300. See also Index Catalogue, Washington, D. C., 1897, second series, volume ii). In 1856 he was instrumental in introducing the hypodermic syringe into America. His principal work was his book "Puerperal Diseases, Clinical Lectures delivered at Bellevue Hospital, New York," 1874. It was translated into German, Italian, French, Spanish and Russian.

His contact with social life is attested by his club memberships such as the University, the Century and the Union, all of New York City. He was trained in the Congregational Church but died an Episcopalian. He had one son, Fordyce Barker, a banker, who survived him but a few years. His interest in the wider activities of his day, are indicated in his membership in the following societies:—Physicians' Mutual Aid Association, 1868; Fellow London Medical Society, 1878; Member London and Edinburgh Obstetrical Societies; Corresponding Member Philadelphia Obstetrical Society, 1874; Royal Society of Greece; president of the Anglo-American Society of Paris for October, 1890 (unable to be present); American Gynecological Society, 1876-77; vice-president International Medical Congress at London, 1881; visiting physician Bellevue Hospital, 1855-79; consulting physician, 1879-91; member of the Century Association (N. Y.) 1851; New York Academy of Design, 1864; American Geographic and Statistical Society, 1850; life member American Bible Society, 1867; St. John's Guild, 1871; life member, Museum of Natural History; member of Church Temperance Society and Charity Organization Society.

He died at his home in New York City, May 30, 1891, of cerebral hemorrhage, his wife surviving him.

W. M. Polk.

BARKER, Jeremiah, (1752-1835), pioneer medical writer of Maine, was born at Scituate, Mass., March 31, 1752, the son of Samuel and Patience Howland Barker. He had a common school education in the town of his birth and then was apprenticed to Dr. Bela Lincoln, he who had been graduated at Harvard with the class of 1754 and then had gone on to Aberdeen University, Scotland for his medical education. There Lincoln took his M. D. in 1765 and came back to Massachusetts to give the benefit of an advanced medical training to the inhabitants and to his student, Barker. When Barker's novitiate was over he settled in practice in Gorham, Me. Soon after he suffered an accident whereby he was confined to the house for several weeks. During that time he composed a "Vade Mecum", based on some text books on practice and a hand book of anatomy. His book was illustrated by

drawings of his own. The medical field in Gorham being well occupied he moved to Barnstable, on Cape Cod, in 1772, practicing there until 1779 except that during the Revolution he was a surgeon on a privateer, was captured and soon released. In July 1779 Dr. Barker took part in the ill-fated expedition sent out from Massachusetts to capture Castine and the Penobscot peninsula, recently fortified by the British; a fleet of forty ships and some 1200 men, under command of General Solomon Lovell. On his return he settled in Gorham again, soon acquiring an extensive practice there and along the coast of Maine in the region about Portland. He wrote a number of interesting accounts of epidemics of scarlet fever, malignant fever, measles and putrid sore throat which occurred in Maine between the years 1790 and 1810. In addition he had a habit, not uncommon among the better educated medical men of the time, of recording the conditions of the weather, for it was thought that these had to do with the prevalence of epidemics; therefore it behooved them to make records. Edward A. Holyoke, (q.v.) in Massachusetts, and others did the same thing and reported their results to the State medical society from time to time. Barker went so far as to plan a history of the epidemics of Maine and to write the lives of his friends in the medical profession. No manuscripts were found among his effects, however. He made experiments on the use of alkalis in the treatment of disease and came to the conclusion that lime water was one of the most valuable remedies in the pharmacopoeia. He kept in touch with the leading medical men of the time by correspondence, such men as Benjamin Rush, of Philadelphia, Lyman Spalding, of Portsmouth, Samuel L. Mitchill, of New York and Benjamin Waterhouse of Cambridge, (q.v. to all) so that he was informed of recent progress in the art of medicine.

As an active advocate of temperance he was one of the famous "sixty-niners" who held the first temperance meeting in Maine in 1818 with the purpose of prohibiting the drinking of rum in inns and taverns, a forerunner of the prohibition act of 1851. It is related that upon one occasion he was holding a consultation with Dr. Nathaniel Coffin, the most distinguished surgeon of Portland, over a man ill with tetanus, or lock jaw. Barker and Coffin planned to give him a dose of rum and laudanum. Two clergymen, who were in attendance on the very ill patient, protested declaring that it would be sinful that the dying man should meet his Maker both drunk and poisoned. The dose was given and the patient recovered, only to be found years later drowned in a pond, apparently in perpetual protest. Dr. Barker was an omnivorus reader, not confining his reading to the English language; he collected during his life a library of nearly two thousand volumes. He held membership in the Massachusetts Medical Society. He died of the infirmities of old age at his home in Gorham, October 4, 1835 at the age of eighty-three.

Barnes, Edwin (1844-1904), a practitioner of Pleasant Plains, New York State. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 63.

BARNES, Joseph K* (1817-1883), surgeon-general of the United States Army, was born in Philadelphia July 21, 1817, and educated at Round Hill School, Northampton, Massachusetts, and at Harvard University, but was forced to leave college before graduation on account of his health. He studied medicine under Dr. Thomas Harris and later attended lectures at the University of Pennsylvania, whence he obtained his M. D. in 1838 with a graduating thesis on angina pectoris. He served a year as resident physician at the Blockley Hospital and a year as outdoor physician to the poor for the northwestern district of Philadelphia. On June 15, 1840 he entered the army as assistant surgeon rendering notable service during the Mexican War and being present at the battles of Cerro Gordo, Contreras, Churubusco and Molino del Rey. After the war he was on duty at various military posts of the West and South. At the outbreak of the Civil War he was made medical director of Hunter's army. Later he served in the same capacity in the Western Department and with Halleck's army. In 1862 he was called to Washington, where he gained the friendship of secretary Staunton. When Surgeon-General Hammond was deposed it devolved upon Barnes to perform the duties of surgeon-general and in 1864 he was appointed successor to Gen. Hammond with the rank of brigadier general. As surgeon he worked zealously to advance the medical department of the army, and under his administration the Army Medical Museum and the

*Barnes was a man who had no middle name and inserted the letter K as a substitute, being known as the man who put K in Barnes.

Surgeon-General's Office Library were established. Under him, too, the "Medical and Surgical History of the War" was compiled. It was his sad lot to attend Lincoln and Garfield, the two martyr presidents, in their last hours. Gen. Barnes retired June 30, 1882, and died in Washington, April 5 of the following year.

BARRATT, Joseph (1796-1880), of Middletown, Connecticut, physician, botanist, teacher and enthusiast in natural history was born January 7, 1796, at Little Hallam, Derbyshire, England, one of five brothers and a sister. At fourteen, he studied medicine under Charles Chawner, and two years later, at Leicester, he was assistant surgeon to Samuel Harris. In 1819, he was granted two medical diplomas: a license from Apothecaries Hall and a certificate from the Theatre of Anatomy, signed by Joshua Brooks, member of the Royal College of Surgeons. When the Dean of the Faculty, holding his diploma, paused to ask one more question, Barratt, chafing over his prolonged examination replied, "If you don't think I have answered enough of your questions, you may keep your diploma!" This same irritability in his family relations probably led to his emigration to America in June, 1819, where he became naturalized in 1830. He settled in Philipstown, New York, to practice medicine and indulge his interest in botany. In 1824, he became surgeon and professor of chemistry, botany and mineralogy in Captain Alden Partridge's American Literary Scientific, and Military Academy, at Norwich, Vermont. Late in the year 1824-25, the Academy moved to Middletown, Connecticut, where in May, 1826, he rejoined its faculty and taught for nearly three years until it was closed. Refusing to join the reopened Academy at Norwich, he remained in Middletown for the rest of his life and for twenty years had enough practice to keep him comfortable. During the early years of Wesleyan University, founded in 1831, he probably lectured in chemistry, and in 1835 he had charge of a class in botany. In the spring of 1834, an honorary M. D. was conferred upon him by the Yale Medical School.

At a meeting of the Middlesex County Medical Association, (Conn.) to which he was elected in 1832, he presented his views on temperance in an address on "The Evils Resulting from a Free Use and Abuse of Cyder as a Drink and its Tendency to bring on Rheumatism in those Predisposed." In 1845, he read a paper on diseases of the United States for the past forty six years, intended as a continuation of Noah Webster's book on epidemics. Apparently only one medical article has been preserved, "Poisoning by Opium, A Case of Successful Treatment by Flagellation where a large Dose of Laudanum was taken." Early in 1830, Barratt went to study in Torrey's (q.v.) laboratory in New York, where the young Asa Gray (q.v.) was working. Describing a new composite from Mexico, Gray named it Barrattia in honor of his co-worker, the specific name "bald" applying equally to the plant and to Barratt's head. Torrey smiled at the witticism but advised its omission. In the preface to his "Flora of New York," Torrey paid tribute to Barratt's botanical explorations. Barratt's best botanical contributions were on the willows and sedges; in 1834, he read his "Monograph of North American Willows" before the New York Lyceum of Natural History. Sir William Hooker invited him to prepare the chapter on American willows for his book on the "Flora of British North America," but although he furnished the data for it, he couldn't bring himself to prepare the chapter. He was a member of the Lyceum, the Yale Natural History Society, the Academy of Natural Sciences of Philadelphia, and the National Institution for the Promotion of Science at Washington. In 1836, he assisted in founding the Cuvierian Society of Wesleyan and was its president for a number of years. Some of the subjects he brought before that society were, "List of Plants collected, July 15, 1841, by E. W. Southwick, in the White Mountains of New Hampshire, with Notes and References by J. Barratt, M. D.;" "The Verticillate Eupatoriums of North America;" "A Supplement to the North American Carices found about Middletown this season;" "Remarks on the Unios of the Connecticut River." He wrote for the "Sentinel and Witness," a local newspaper, addressed the Farmers' Club, proposed restocking the Connecticut with salmon, advocated cheap postage, kept meteorological records, studied and made observations on the growing seasons, frosts, rainfall, spring floods of the rivers—responding to every interest but rarely pushing his investigations far. When about 1845, a keen interest was aroused in the local history of the Indians, his acquaintance with Nicola Tenesles gave him an intimate knowledge of their customs and language. His pamphlets, "Key to the Indian Language of New England" and "Indian

Proprietors of Mattabeseck," were later included in "The Indians of New England." Attracted only to geology during the last two decades of his life, he found the sandstone deposit in the Portland quarries a fertile field. Although the red sandstone of that region is Triassic and therefore contains no relics of mammalian life, Doctor Barratt insisted his freestone was Eocene and carried the existence of man back to that period. This interest in geology became a monomania. He substituted for "Triassic" the term "Kalorimazoic," the period of warm-blooded animals, and in his last publication: "Fossil Wonders of a Former World," in 1874, this innovation appears always in large type and on a separate line. A few years later, he became more senile and with mind impaired and without friends or funds, he was committed June 22, 1880, to the Connecticut Hospital for the Insane as a town pauper. A stroke of apoplexy caused his death on January 25, 1882.

A unique tombstone marks his grave in Indian Hill Cemetery at Middletown. The base, a block of two fossil logs, is inscribed, "The Testimony of the Rocks;" the face, of the upper stone toward the grave, bears the usual legend, while the reverse side shows the tracks of the dinosaur, Brontozoum Lilliimanicum. His memorials are several author citations in current manuals, a few little pamphlets, and a place in John Fiske's essay on "Some Cranks and their Foibles." His herbarium was purchased in 1879 by Wesleyan University, and his mineral collection forms the nucleus of that department.

HOWARD A. KELLY.

BARTHOLOW, Roberts (1831-1904), chemist, therapeutist, army surgeon, sanitary reformer, writer and physician. All these and more was Roberts Bartholow, of Alsatian and English parentage. He was born in New Windsor, Maryland, November 18, 1831. His parents were sufficiently well off to let him go to the New Windsor College, where he was graduated and took his A. M., afterwards earning his M. D. at the University of Maryland in 1852. A spirit of adventure, after he had taken the rank of army surgeon, led to his going with the force sent to maintain order among the Mormons and Indians in the West, in Brigham Young's time. Four years' camping in that wild country gave him wide experience in fevers and gunshot wounds, and he had no sooner returned home than the Civil War broke out and gave him three more years of military and surgical experience. A wife and family induced him to settle down to civil practice in 1864 in Cincinnati, Ohio, and fortunately he was made professor of chemistry in the medical college there. His predecessors had been professional chemists and the appointment of a practicing physician was not welcomed. Moreover, he had strange and disturbing views about sewerage and ventilation, which upset the conservative Academy of Medicine, but the cholera epidemic of 1866 showed him to be the right man in the right place and as founder and editor of "The Clinic" he had a means of refuting hostile critics of which he took trenchant but dignified advantage. While engrossed for twenty-two years in many medical duties, he was zealously garnering material for his important book, "Materia Medica and Therapeutics."

When he removed to Philadelphia his widespread reputation and his duties at the Philadelphia and Jefferson hospitals did not give him the leisure he craved to write his "Practice of Medicine," but it was written and had a second edition in three months. Then he became a member of the staff of the "Medical News" (Philadelphia), his pen always busy with concise and lucid articles, particularly on medical jurisprudence. With mental powers always in order, he was ready for lecture, consultation, operation or clinic. In 1893 he retired from college work and was made emeritus professor. After an illness from diabetes he died at Philadephia, on May 10, 1904, aged seventy-two.

Among his appointments were: Professor of medical chemistry and professor of the practice of medicine, Medical College of Ohio; fellow of the College of Physicians of Philadelphia; honorary member of the Royal Medical Society, Edinburgh, and the Society of Practice of Medicine, Paris; professor of materia medica, Jefferson Medical College.

His writings included many critical and sarcastic but fascinating articles for "The Clinic," of which he was founder and editor; also books on "Spermatorrhea," and "Materia Medica and Therapeutics," 1876, the latter the result of twenty-two years' experience, his avowed aim being "to stem the tide of therapeutic nihilism;" its editions numbered eleven; its sale 60,000 copies; also "A Treatise on the Practice of Medicine" which went through five editions and was translated into Japanese, and "The Cartwright Lectures," 1881, on the "Antagonism between Medicines and between Medicines and Diseases."

BARTLETT, Elisha (1804-1855), born at Smithfield, Rhode Island, October 6, 1804, Elisha Bartlett was singularly fortunate in his parents, who were members of the Society of Friends, strong, earnest souls, well endowed with graces of the head and of the heart. At Smithfield, at Uxbridge, Mass., and at a well-known Friends' institution in New York, Bartlett obtained a very thorough preliminary education. Details of his medical course are not at hand, but after studying with Dr. Willard, of Uxbridge, Drs. Greene and Heywood, of Worcester, and Dr. Levi Wheaton, of Providence, and attending medical lectures at Boston and at Providence, he took his doctor's degree at Brown University in 1826, a year before the untimely end of the medical department. In June, 1826, Bartlett sailed for Europe, and writing September 4, he speaks of attending every day at the Jardin des Plantes to hear the lectures of Cloquet and Cuvier.

In 1827, shortly after completing his twenty-third year, Bartlett settled at Lowell, then a town of only 3,500 inhabitants, but growing rapidly, owing to the establishment of numerous mills. This was his home for nearly twenty years. In 1832 he held his first teaching position, that of professor of pathological anatomy and of materia medica in the Berkshire Medical Institution, at Pittsfield, and in 1839 was appointed to the chair of practice in Dartmouth College, Hanover, New Hampshire, the school founded by Nathan Smith in 1798.

In 1841 he accepted the chair of the theory and practice of medicine in the Transylvania University, Lexington, Ky., at that time the strongest and best equipped school in the West, but became professor of the theory and practice of medicine at the University of Maryland in 1844, and of materia medica and obstetrics in the Vermont Medical College, the session of which began in March and continued for thirteen weeks. Among his colleagues were Alonzo Clark, Benjamin R. Palmer and Edward M. Moore, and later John C. Dalton (q.v. to all). On March 13, 1849, he received the appointment of professor of the theory and practice of medicine in the University of Louisville. The condition of medical politics at that time in the town was not satisfactory, and a new school had been started in opposition to the University; among the Bartlett letters are a number from the elder Yandell which show a state of very high tension. Bartlett spent but one session in Louisville. He and Gross accepted chairs in the University of New York. The appointment of the former to the chair of the institutes and practice of medicines is dated September 19, 1850. Among his colleagues in the University were J. W. Draper, Martyn Paine and Granville Sharp Pattison (q.v. to all). Things do not seem to have worked very smoothly. In the spring of 1851 overtures were made to him from the College of Physicians and Surgeons of New York, in which Faculty were his warm friends, Alonzo Clark and Willard Parker, and he was elected to the chair of materia medica and medical jurisprudence in the following year, 1852. Here he lectured during the next two sessions until compelled by ill health to retire.

Bartlett began his career as a medical writer with the "Monthly Journal of Medical Literature and American Medical Students' Gazette," only three numbers of which were issued. Among the articles in these three numbers there are some of special merit. One signed S. N., "On the Claims of Medicine to the Character of Certainty," may have suggested to Bartlett his well-known essay, "On the Degree of Certainty in Medicine." In July, 1832, he became associated with A. L. Pierson (q.v.) and J. B. Flint (q.v.) in a much more pretentious and important journal, the "Medical Magazine," Boston, a monthly publication which continued for three years. In 1831 appeared a little work entitled, "Sketches of the Character and Writings of Eminent Living Surgeons and Physicians of Paris," translated from the French of J. L. H. Peisse. Of the nine lives, those of Dupuytren and Broussais are still of interest to us, and there is no work in English from which one can get a better insight into the history of medicine in Paris in the early part of this century.

Bartlett's claim to remembrance, so far as his medical writings are concerned, rests mainly on his work on "Fevers" issued in 1842, and subsequent editions in the years 1847, 1852 and 1857. It remains one of the most notable of contributions of American physicians to the subject. Between the time of Bartlett's visit to Paris and 1840, a group of students had studied under Louis, and had returned to this country thoroughly familiar with typhoid fever, the prevalent form in the French capital at that time. As to the work itself, the interest today rests chiefly with the remarkably accurate picture which is given of typhoid fever—a picture the main outlines of which are as well and firmly drawn as in

any work which has appeared since. "An Essay on the Philosophy of Medicine," 1844, a classic in American medical literature, is the most characteristic of Bartlett's works, and the one to which in the future students will turn most often, since it represents one of the most successful attempts to apply the principles of deductive reasoning to medicine, and it moreover illustrates the mental attitude of an acute and thoughtful observer in the middle of the century. In 1848 appeared one of Bartlett's most characteristic works, a little volume of eighty-four pages, entitled, "An Inquiry into the Degree of Certainty of Medicine, and into the Nature and Extent of its Power over Disease." The reception of the essay in certain quarters indicates how shocking its tone appeared to some of the staid old conservatives of the day. I came across a review of it in the "Medical Examiner," November, 1848, from which I give the following extract: "This is a curious production, the like of which we have seldom seen from the pen of anyone who has passed the age of a sophomore. What makes it the more remarkable is the circumstance that the writer is a gentleman of education and experience and the author of works which have given him a wide reputation." The last of Bartlett's strictly medical publications was a little monograph on the "History, Diagnosis and Treatment of Edematous Laryngitis," published in Louisville at the time he held the chair of practice at the University in 1850.

Bartlett was at his best in the occasional address. Perhaps the most characteristic is one entitled, "The Head and the Heart, or the Relative Importance of Intellectual and Moral Education," which is a stirring plea for a higher tone in social and political morality. In the same clear, ringing accent he speaks in his address on Spurzheim of the dangers of democracy. In a lecture on the "Sense of the Beautiful," delivered in 1843, Bartlett appears as an apostle of culture, pleading in glowing language for the education of this faculty.

One of the last of Bartlett's publications was "A Discourse on the Times, Character and Writings of Hippocrates," delivered as an introductory address before the trustees, faculty and medical class of the College of Physicians and Surgeons, at the opening of the session of 1852-53. The three pictures which he gives of Hippocrates as a young practitioner in the Isle of Thasos, at the death-bed of Pericles, and as a teacher in the Isle of Cos, are masterpieces worthy of Walter Savage Landor.

When at Louisville some obscure nervous trouble, the nature of which I have not been able to ascertain, attacked Dr. Bartlett. Against it in New York he fought bravely but in vain, and after the session of 1853-54 retired to Smithfield, his native place. The prolonged illness terminated in paralysis, but, fortunately, did not impair his mental faculties in the slightest degree. He died on the nineteenth of July, 1855. WILLIAM OSLER.

Bartlett, John Sherren (1790-1863), journalist, founder of the "Albion" newspaper in New York. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 66.

BARTLETT, Josiah (1729-1795), signer of the declaration of independence, was born in Amesbury, Massachusetts, November 21, 1729, the son of Stephen and Mary Webster Bartlett. At sixteen he began to study medicine with his relative, Dr. Ordway, of his native town. He soon exhausted his preceptor's scanty library and resorted to other physicians for a supply. In 1750, having completed his medical education, he began to practice at Kingston, New Hampshire. In 1733 and again in 1735 a "distemper" originated in Kingston, which eluded all the powers of the physicians. This was called the "Throat Distemper or Angina Maligna." The disease spread rapidly, and among children was universally fatal. The depleting and antiphlogistic course of practice was pursued, but when in 1754 the angina again appeared in Kingston, Dr. Bartlett gave up this method of treatment and used the then new remedy, Peruvian bark, and met with general success.

From his integrity and decision of character Josiah Bartlett was soon appointed a magistrate and in 1765 began his political career as a representative in the Legislature, an office he filled annually until the Revolution. In February, 1775, he was deprived of the commission he had held as justice of the peace, and the command of the militia by Gov. Wentworth. In the September following, he was appointed by the provincial congress, of which Dr. Matthew Thornton was president, to command a regiment and was chosen a delegate to the continental congress. He accepted both and attended the congress, and when that memorable vote for American Independence was taken the medi-

cal colonel's name was called first as representing the most easterly province, and he was the second signer of the Declaration.

In 1779 Col. Bartlett was appointed chief justice of the Court of Common Pleas and in 1782 justice of the Superior Court; in 1788 chief justice of the State. He was an active member of the convention for adopting the Confederation in 1788 and was chosen a senator in Congress in 1789, a position he declined. In 1790 he occupied the position of president of the State of New Hampshire and in 1793 was unanimously elected the first governor of the State under the new form of government.

Although Dr. Bartlett was actively engaged in politics during these memorable years, he always displayed a zealous interest in the welfare of his profession. He was not only the founder of the New Hampshire Medical Society in 1791, but attended its meetings, taking the time amid the onerous cares of public life. The first president of the medical society he was elected annually for three consecutive years, when he resigned.

He married Mary Bartlett, a distant relative, and had three sons, Levi, Josiah and Ezra.

On January 29, 1794, he resigned all public positions on account of increasing infirmities, and died quite suddenly of paralysis, on the nineteenth of May, 1795, in his sixty-sixth year.

BARTLETT, Josiah (1759-1820), soldier of the Revolution, promoter of good medical literature, orator and prominent physician, was the son of a sea captain, George Bartlett, who came from Slocum Regis in Devonshire. Josiah was born in Charlestown, Massachusetts, August 11, 1759, and during his childhood and early youth attended the local schools and when about fourteen was placed under Dr. Isaac Foster, a local physician. During the period immediately preceding the war of the Revolution young Bartlett studied under Dr. Foster and was with him when Foster was appointed to the medical department of the American Army at Cambridge, on April 20, 1775. Later on the tutor was appointed chief surgeon to the General Hospital at Cambridge, and procured the office of surgeon's mate for his pupil, then sixteen, who served until 1780, when he resigned from his pupilage and gave up his commission. During this year Dr. Bartlett attended one course of lectures on anatomy by Dr. John Warren, at Cambridge, and soon afterwards was engaged for two voyages as surgeon to ships of war.

After following a complete course of medical lectures at Cambridge in 1790, he received an honorary M. B. in 1791 and an honorary M. D. in 1809 from Harvard University. In 1789 he became a member of the Massachusetts Medical Society and was its recording secretary from 1792 to 1796. In 1810 he delivered the annual oration before this society on the progress of medical science in Massachusetts.

James Thacher states that "perhaps no man contributed more time and active exertion to improve the state of the Massachusetts Medical Society, and through it, the interests of medical literature, than Dr. Bartlett." He delivered two public discourses of a medical nature, one before the Middlesex District Medical Society and the other the annual discourse before the Massachusetts Medical Society.

He also published various papers on medical subjects in the communications of the Medical Society and in the "New England Journal of Medicine and Surgery."

Although engaged in extensive practice Dr. Bartlett found time for activity in civil offices and was at various times elected representative, senator and councillor in the state government. He was deeply interested in the early history of New England and especially in the development of its educational and literary institutions. He unearthed many of the known facts concerning the Rev. John Harvard, minister of the Congregational Church in Charlestown, and tried to find Harvard's grave. He corrected the mistake of Dudley, Mather, Holmes and other colonial writers regarding the year of arrival of Gov. Winthrop at Charlestown with fifteen hundred persons, which had been given as 1630, to the true date, 1629, as shown by the original town records of Charlestown.

Dr. Bartlett's character was remarkable for industry, activity and intelligence. He never declined any duty which was assigned him, and always executed it speedily and thoroughly.

Perhaps no individual in his time delivered so great a number of public orations on medical, political and literary topics. He possessed a physical constitution which promised a long as well as an active life, but he was stricken with apoplexy on March 3, 1820, and died two days later at the age of 60.

ALBERT N. BLODGETT.

BARTON, Amy Stokes (1841-1900), a pioneer woman ophthalmologist, was born in Camden County, New Jersey, October 1, 1841, daughter of Joseph Barton, a farmer, and Rachel B. Evans.

She was graduated at the Woman's Medical College of Pennsylvania in 1874, and after serving a term in the hospital connected with the college, began practicing in Philadelphia. She became interested in the eye, and after some difficulties, because of her sex, she was admitted to work in the Wills Eye Hospital, and assisted George Strawbridge for thirteen years, until his resignation in 1890.

She was lecturer on ophthalmology, 1885-1890, and clinical professor of ophthalmology, 1891-1897, in the Woman's Medical College.

Dr. Barton collected the money for and founded a dispensary in connection with the Woman's College in Philadelphia, feeling that too much stress was being put upon the teaching of obstetrics and gynecology to women, and wishing a place where clinics in all branches would be held; it was opened in 1895 at 1212 South Third Street, and was later situated at 333 and 335 Washington Avenue, being called the Amy S. Barton Dispensary.

Dr. Barton was an Orthodox Friend. She died in Philadelphia, March 19, 1900, from apoplexy.

BARTON, Benjamin Smith (1766-1815), one of America's foremost botanists, the son of the Rev. Thomas Barton, an Episcopal minister, was born on February 10, 1766, in Lancaster, Pennsylvania. According to E. F. Smith, Provost of the University of Pennsylvania, Benjamin Smith Barton was termed the father of American materia medica—an honor which no one has hesitated to accord him. The boy was only eight when his mother died and but fourteen when left an orphan. He went to live with an elder brother and was a student at the College of Philadelphia, beginning his study of Medicine under Dr. William Shippen, Jr. While still a pupil of his he journeyed with his maternal uncle, David Rittenhouse and the other commissioners appointed to survey the western boundary of Pennsylvania, and thus had his attention directed to the study of the Indian tribes, a subject which possessed the greatest interest for him throughout life. In 1786 he went abroad to pursue his medical and scientific studies, first in Edinburgh and London, afterwards going to Göttingen, where he received the M. D. degree in 1789.

His reasons for not taking the degree of M. D. to which he was entitled by his studies at Edinburgh University were set forth in a letter to his brother, written in London in 1789, in which he states that he preferred getting his diploma from Göttingen because he was dissatisfied with the discourteous manner in which two of the professors at the University of Edinburgh had treated him. He, however, when in Edinburgh received several honors, among them the membership of the Royal Society of Edinburgh and also from that society an honorary premium for his dissertation on "Hyoscyamus Niger." This was the Harveian prize, consisting of a superb quarto edition of the works of William Harvey.

While living in London he published a tract entitled "Observations on Some Parts of Natural History," to which is prefixed an account of some considerable vestiges of an ancient date which have been discovered in different parts of North America. This little book he afterwards characterized as "premature work" and regretted many deficiencies in it. Both Hunter and Lettsom were good friends to him and appear to have appreciated his scientific merits. Dr. Barton returned to Philadelphia and practiced medicine in 1789, being in the same year appointed professor of natural history and botany in the College of Philadelphia, a position held after the union of the college of Philadelphia with the University of the State of Pennsylvania in 1791. On the resignation of Dr. Griffith from the chair of materia medica in Pennsylvania University, Dr. Barton was appointed. When Benjamin Rush died he became professor of the theory and practice of medicine, continuing to hold also the chair of natural history.

His published works include: "The Elements of Zoology and Botany;" "Elements of Botany, or Outlines of the Natural History of Vegetables;" "Collections for an Essay towards the Materia Medica of the United States;" "Fragments of the Natural History of Pennsylvania;" "Essay on the Fascinating Power Ascribed to Serpents, etc.," "Views of the Origin of the Tribes and Nations of America."

In 1805 he started publishing the "Medical and Physical Journal" and also wrote many short articles on topics connected with medicine, history and archæology, much of his work appearing in the "Transactions of the American Philosophical Society."

He was a member of the Imperial Society of Naturalists of Moscow; the Danish Royal

Society of Sciences; the Linnaean Society of London; and of the Society of Antiquaries, Scotland.

Barton married, in 1797, a daughter of Edward Pennington of Philadelphia, and named his eldest son after Pennant, the English naturalist.

During his early years he was much afflicted with pulmonary hemorrhages and gout. He had given only two courses as the successor of Rush when he had to seek relief by a sea voyage. He sailed for France in 1815, returning by way of England disheartened. At New York he was afflicted with hydrothorax. Finally reaching home, very ill, he became rapidly worse and was found dead in bed on the morning of December 19, 1815. Feverishly anxious to work, three days before his death he wrote a paper concerning a genus of plants named in his honor by Nuttall, a young English botanist whom Barton had financed for a scientific tour in the Southern States. The plants were of the class "Icosandria monogynia," found in hilly districts between the Platte and the Andes and named "Bartonia polypetala" and "Bartonia superba."

FRANCIS R. PACKARD.

Barton, Edward H. (—— 1859), of New Orleans, writer on yellow fever and vital statistics, dean of the Medical College of Louisiana. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 69.

BARTON, John Rhea (1794-1871), the originator of resection of the joints for anchylosis, the son of Judge William Barton, was born in Lancaster, Pennsylvania, in April, 1794, and died in Philadelphia Jan. 1, 1871. He was a nephew of Benjamin Smith Barton, eminent botanist and professor of materia medica in the University of Pennsylvania. Before taking his degree he was appointed to an apprenticeship in the Pennsylvania hospital, according to the then custom of taking on young men beginning their studies for a five year period, and finding everything for them except their clothes; graduation took place as near as possible at the termination of the indenture. He took his medical degree in 1818, with Hugh L. Hodge (q.v.) and George B. Wood (q.v.). He worked under Physick, Dorsey and Hewson, and had as fellow internes Benjamin H. Coates, René La Roche, Isaac Hays, and John K. Mitchell (q.v. to all). He was made surgeon to the Philadelphia Almshouse in 1818.

In 1823 he was appointed to the surgical staff of the Pennsylvania Hospital. He had a high degree of mechanical dexterity and ingenuity which he directed towards the treatment of fractures. He devised the figure of eight bandage for the head, dispensing with the clumsy devices in vogue in dealing with fractures of the lower jaw. It was he who introduced bran dressings so extensively used in the treatment of compound fractures (and in the writer's experience a breeding place for myriads of bed bugs). We are indebted to him also for an admirable account of fracture of the inferior extremity of the radius, known as Barton's fracture (Gross).

He published a paper ("North American and Surgical Journal" 1827) "On the Treatment of Anchylosis by the Formation of Artificial Joints, a New Operation, devised and executed by J. Rhea Barton, M. D.;" in this he gives an account of a sailor who had a complete disorganization and anchylosis of the hip joint, following a fall, with a resultant position of the thigh at almost a right angle. Barton operated in public, assisted by Drs. Hewson and Parrish, making a crucial incision over the trochanter, and isolating and sawing through the neck of the femur to make the new joint. In the course of time the patient was able to walk freely with a cane, whereas he had previously gone about with crutches and a steel frame shoe, with the utmost difficulty. The operation was done in seven minutes! and "not one blood vessel had to be secured." See also the "American Journal of the Medical Sciences," 1838.

Barton's brother, W. P. C. Barton (q.v.), was at one time head of the United States Naval Bureau. His widow Susan R. gave the University $50,000 to endow the professorship of the principles and practice of surgery in the University, in his memory.

HOWARD A. KELLY.

BARTON, William Paul Crillon (1786-1856), a navy surgeon, was descended from a distinguished family of physicians of Philadelphia. He was born in Philadelphia, November 17, 1786, graduated A. B. at the College of New Jersey (Princeton) in 1805 and M. D. at the University of Pennsylvania in 1808 and entered the navy as assistant surgeon in the following year. While in college each member of the class assumed the name of some celebrated man. Barton took that of Count

Paul Crillon. A man of untiring energy, with a high sense of duty, the Medical Department of the Navy owes to him some most valuable reforms. He held the position of professor of botany in the University of Pennsylvania from 1816 to 1828, and professor of materia medica and botany in the Jefferson Medical College, Philadelphia, from 1828 to 1830. He was also a writer of ability and a noted botanist. Among his more valuable writings may be mentioned: "A Treatise containing a Plan for the Organization and Government of Marine Hospitals," 1814; "Vegetable Materia Medica of the United States," 1818; "Compendium Floræ Philadelphia," 1818; "A Flora of North America" (with colored plates), 1821.

In 1842 Barton was appointed the first chief of the Bureau of Medicine and Surgery of the Navy Department, a position he held until 1844 when he was retired. He died in Philadelphia, the city of his birth, March 27, 1856. His bust in life size is shown in the Army Medical Museum at Washington.

ALBERT ALLEMANN.

BARTRAM, John (1699-1777). In his own words John Bartram of Philadelphia shall tell how he was first led to study that science which made him in after years America's leading botanist. "One day," he says, "I was very busy in holding my plough (for thou seest that I am but a ploughman) and being weary I ran under a tree to repose myself. I cast my eyes on a daisy; I plucked it mechanically and viewed it with more curiosity than common country farmers are wont to do and observed therein very many distinct parts, some perpendicular, some horizontal. What a shame, said my mind, that thee shouldst have employed thy mind so many years in tilling the earth and destroying so many flowers and plants without being acquainted with their structures and their uses. . . . . I thought about it continually, at supper, in bed, and wherever I went, ... on the fourth day I hired a man to plough for me and went to Philadelphia. Though I knew not what book to call for, I ingenuously told the bookseller my errand, who provided me with such as he thought best and a Latin grammar. Next I applied to a neighboring schoolmaster who in three months taught me Latin enough to understand Linnaeus, which I purchased afterwards. Then I began to botanize all over my farm. In a little time I became acquainted with every vegetable that grew in the neighborhood. . . . By steady application of several years I acquired a pretty general knowledge of every plant and tree to be found on our continent. In process of time I was applied to from the old countries whither I every year send many collections."

So wrote America's earliest botanist and the founder of her first botanical garden, on the Schuylkill below Philadelphia. He was born March 23, 1699, in Derby, Delaware County, Pennsylvania, son of William and Elizabeth Hunt Bartram, the descendants of Richard Bartram of Derby, England, whose son, grandfather of our botanist, came over to Pennsylvania in 1682.

Left an orphan at the age of thirteen he was self-taught. The inheritance from an uncle of a farm in Derby placed him a little above those petty cares which fret the heart of a scientist. Haller in his "Bibliotheca Anatomica" speaks of him as a physician and certainly he devoted much of his time to physic and surgery, obtaining some celebrity in the latter. He prepared the notes and appendix to the American edition of Short's "Medicina Britannica," published by Benjamin Franklin in 1751. He bought for his botanical garden a piece of land about three miles from Philadelphia on the Schuylkill river and built a house with his own hands. He employed much of his time in specimen hunting and natural history research; no dangers deterring him; summits of mountains were explored; sources of rivers found, and all this at a time when to travel among the aborigines was a tremendous risk. In 1743 he visited the shores of Lake Ontario, and wrote observations on the inhabitants, climate, soil, rivers and productiveness.

The modern explorer with his air bed, camp furniture, collapsible tent, is a pigmy contrasted with this man setting out when sixty-six years old from Philadelphia to explore in east Florida. It was at this time he was appointed botanist to the king and received orders to discover the source of the great river St. John. Four hundred miles he travelled and in the course of this journey made an accurate survey of the river, its lakes and branches, the soil, animals and climate. The survey was published in London in 1766, entitled "Description of East Florida with a Journal kept by John Bartram, Botanist to the Floridas."

An enterprising merchant in Philadelphia, one Joseph Breitnall, had before this taken some of Bartram's collections to Peter Collin-

son, the London botanist, which led to a fifty years correspondence between Bartram and learned men, such as Linnaeus, Sir Hans Sloane and Fothergill and to his election as a member of the Royal Society in London and in Stockholm. Anyone desirous of some pleasant reading about this genial and learned Bartram should take an hour or two with "The Memorials of John Bartram and Humphry Marshall" by Dr. William Darlington, Philadelphia, 1849.

In January, 1723, Bartram married Mary, daughter of Richard Maris, of Chester, and had two sons, Richard and Isaac. Two years after her death in 1727 he married Ann Mendenhall and had nine children, James, Moses, Elizabeth, Mary, William and Elizabeth (twins), Ann, John, and Benjamin.

William Bartram, the son (1739-1823), removed to North Carolina and engaged in business. This he abandoned before reaching the age of thirty and, accompanying his father to Florida, settled on the banks of the St. John's River where he cultivated indigo. Subsequent to 1771 he returned to his father's botanical gardens and gave his attention to botany. He wrote on his travels in the Carolinas, Georgia and Florida. In 1782 he was elected professor of botany in the University of Pennsylvania but declined on account of his health. He drew the illustrations for Barton's "Elements of Botany" and published the most complete list of American birds previous to Alexander Wilson. He wrote the life of his father.

John Bartram's personal character is shown in all records to be that of a genial philanthropist with a capability for righteous wrath on occasion. He seems to have anticipated Tolstoy in the "Simple Life;" his slaves emancipated before the war, sitting at the lower end of the dining-table and the fare plentiful but plain. He loved his Bible too and read it to his boys and girls. Over the windows of his study was carved:

> Tis God alone, Almighty Lord
> The holy One by me adored.
> John Bartram, 1770.

"I want to die" were his last words as, nearly eighty years old, a short illness bore him, still keen-witted to the grave, September 22, 1777.

HOWARD A. KELLY.

BARUCH, Simon (1840-1921), pioneer scientific hydrotherapist, was born July 29, 1840, in Schwersenz, Germany, the son of Bernard and Teresa Baruch. He was educated in the Royal Gymnasium in Posen, and then brought to America. In 1862, he was graduated from the Medical College of Virginia and immediately joined the Confederate army, serving until 1865 as surgeon in the field under Lee. He was twice captured while caring for wounded Confederates,—once on the battlefield at Gettysburg and again at South Mountain, Maryland. From 1865 until 1881, he practiced in Camden, South Carolina—in 1880 acting as chairman of the South Carolina State Board of Health—then moved to New York where he specialized in chronic diseases, writing several papers on the specialty of treatment of chronic diseases by physiological remedies, such as diet, rest, exercise, baths, and restricted medication. He made the first plea here and in England for "bran baths" in typhoid fever (1889). Baruch diagnosed the first recorded case of perforating appendicitis successfully operated on (H. B. Sands [q.v.], New York Medical Journal, 1889). He came also to be recognized at home and abroad, as an expert in hydrotherapy and held this chair in the College of Physicians and Surgeons in New York; his writings on the subject being translated into French and German, notably: "Uses of Water in Modern Medicine," 1892, and "The Principles and Practice of Hydrotherapy" (3 eds.). Because of his advocacy of bathing in health and disease, he was called the "apostle of bathing." To him belongs the credit for introducing free municipal bathhouses, and the municipal baths in Chicago (1910) and in New York (1917) were named for him.

He was president of the South Carolina Medical Association in 1874; in 1913, a hospital was erected in his honor in Camden, South Carolina.

On November 27, 1867, he married Isabel Wolfe of Winnsboro, South Carolina; of their four sons, Bernard is the well known financier and Herman B. is established in medicine.

Dr. Baruch died from pulmonary lesions complicated by heart disease, June 3, 1921.

BASSETT, John Y. (1805-1851). When looking over the literature of malarial fevers in the South, chance threw in my way Fenner's "Southern Medical Reports," Volumes I and II, which were issued in 1849-50 and 1850-51. Among many articles of interest I was particularly impressed with two by Dr. John Y. Bassett, of Huntsville, Alabama. Letters

lent me by his daughter begin from Baltimore in the last week of December, 1835. He had lost his diploma, for he applied to Dr. James H. Miller, the president and professor of anatomy of the Washington Medical College, for a certificate, which is found among the papers, stating that he is a regular graduate of that institution, but not mentioning the year.

He took passage by the "Roscoe," Capt. Delano in command, bound for Liverpool. He sailed on January 6, and in an interesting letter an account is given of the voyage. They reached the English Channel on the twenty-sixth. The first long letter, descriptive of Manchester, York and Edinburgh, is illustrated by very neat little sketches. He was very enthusiastic about the museum of the College of Surgeons, and the Infirmary, where he witnessed in the presence of Mr. Syme, an operation by "Mr. Ferguson, a young surgeon." In Paris he attached himself at once to the clinic of Velpeau at La Charitê. On his first day he says he did not understand more than half he said, but he understood his operations. He says there was a gentleman from Mobile, Mr. Jewett, who had been there for three years. Americans were not scarce; there were four or five from New York, two from Baltimore, and several from Boston and Philadelphia. He does not mention their names, but it is pleasant to think he may have attended classes at La Pitiê with Bowditch, Holmes, Shattuck, Gerhard and Stillé. He began dissections at once; subjects were cheap—six francs apiece—and he secured a child on the first day for forty sous. He had evidently occupied his time to good advantage, as, early in July he received from Velpeau the appointment of externe at La Charitê. His last letter is from Paris, dated October 16, and he speaks in it of his approaching departure. I have no information as to the date of his return, but his intention was, he states frequently in his letters, to be back by the first of the year, so that after this date he probably resumed practice at Huntsville.

The two papers in Fenner's Southern Medical Reports are the only ones I see credited to him. They are charmingly written and display in every page the wise physician; wise not only with the wisdom of the schools, but with that deeper knowledge of the even-balanced soul "who saw life steadily and saw it whole." The report in volume i deals with the topography, climate, and diseases of Madison County. Dr. Fenner states that it was accompanied by a beautiful map drawn by the author, and a large number of valuable statistics. Very full accounts are given of epidemics of scarlet fever and of small-pox, and a discussion on the cold water treatment of the former disease. Dr. Bassett must have found a well-equipped library, and his references to authors both old and new are not very full, but most appropriate.

Bassett developed tuberculosis, and the last letter in the budget which was sent to me was dated April 16, 1851, from Florida, whither he had gone in search of health. He died November second of the same year, aged forty-six.

To a friend he writes on the date of April 5: "This world has never occupied a very large share of my attention or love. I have asked but little of it, and got but little of what I asked. It has for many years been growing less and less in my view, like a receding object in space; but no better land has appeared to my longing vision; what lies behind me has become insignificant, before me is a vast interminable void, but not a cheerless one, as it is full of pleasant dreams and visions and glorious hopes."

WILLIAM OSLER.

BATCHELDER, John Putnam (1784-1868), lecturer on anatomy and surgery was born in Wilton, New Hampshire, August 6, 1784. He was an only child and his devoted parents did everything in their power to further his ambition and bring out his latent powers. He was allowed to pursue the bent of his own inclination and even before he regularly entered anyone's office, or notified the community of his determination to study medicine, we find him prescribing for the various ailments of the family servants, and giving vegetable powders to his father's domestics. Finding that even when a boy he did not kill anybody, he soon moved one grade higher and sought to cure the afflicted and accordingly entered the office of Dr. Samuel Fitch and Dr. Matthias Spalding, of Greenfield, New Hampshire, obtained a license to practice in 1807, and was rewarded with a medical degree at the Harvard Medical School in 1815, after defending a thesis "On the disease of the heart, styled Aneurism." He practiced in Charlestown, New Hampshire, during which time he was a very active member of the New Hampshire Medical Society, and later practiced in Pittsfield, Massachusetts,

Utica, New York, and finally in New York City. Although Dr. Batchelder did not enter a classical college, his general education was liberal and so creditably did he avail himself of surrounding advantages that Middlebury College gave him an A. M. in 1821 and Berkshire Medical Institution an honorary M. D. in 1826.

He was a celebrated lecturer on anatomy and surgery in his era and was professor on both these topics in the Castleton, Vermont, Medical School as well as at the Berkshire Medical Institution in Massachusetts. He helped himself in his lectures with shorthand notes, but as time went on his memory failed him in the very system that he himself invented and at his death immense piles of his shorthand books had to be thrown into the fire, for nobody could decipher them. He wrote many papers on medical topics, such as:—"Cholera;" "Compressed Sponge;" "Tracheotomy;" "Fractures" and "Paralysis." He was also a remarkable operator for those early days of surgery, doing many lithotomies with great success, extracting cataracts most delicately and otherwise operating upon the eye, of which he made a sort of specialty; he became famous for a ligation of the carotid (1825) to cut off the blood supply from a large sarcoma of the jaw, which he later removed entirely. It is said that he was the first surgeon in America to remove successfully the head of the femur and he actually first performed in this country rhinoplastic, as well as plastic, operations for congenital defects of the lower lip (1828). Dr. Batchelder was exceedingly clever as an inventor and improver of surgical instruments and apparatus, and invented the first craniotome that could be worked with one hand. He died in New York City, April 8, 1868, aged 83 years.

JAMES A. SPALDING.

BATES, James (1789-1882), of Maine, son of Solomon and Mary Macomber Bates, was born in Greene, Maine, September 24, 1789. At the age of seven he moved with his parents to Fayette, Maine, and when twenty-one he studied medicine with a local physician, Dr. Charles Smith of Fayette, and with Dr. Ariel Mann of Hallowell. Towards the end of the War of 1812, he was appointed surgeon's mate in the army, and ordered to a hospital on the Canadian frontier, where he took care of the sick and wounded and spent nearly two years in moving them safely back into New England. The sufferings of the patients in the hospital being great, but those likely to be caused by their journey home seeming worse, it was considered wisest to keep them far from home for a while, rather than to see them die from the hardships of travel. Dr. Bates resigned from the army about 1815, went into partnership with Dr. Mann and married July 27, 1815, Miss Mary Jones of Fayette, with whom he lived happily sixty years and had a family of two sons and three daughters.

Dr. Bates removed to Norridgewock in 1819 and practiced there with great renown for twenty-six years, serving as a consultant and performing all of the surgical operations of the day. He was an early member of the Maine Medical Society, and wrote for its meetings a number of papers, amongst which may be mentioned, "On Encephaloid Tumors," "On the Use of Artificial Leeches for Phlebotomy," "On Opium Eating," and "On Division of Arteries to Arrest Aneurism and Hemorrhages." After some years of practice he was asked to enter politics which he did successfully and served two terms in Congress at Washington. The State of Maine having determined to establish an insane asylum, Dr. Bates was chosen the first superintendent, and in his term of service designed and finished the central pavilion of the Asylum, as it now stands. He wearied of so confining a life after a not very long term of office, resigned from the Asylum, practiced for a while at Fayette, his native town, and in 1858 at the urgent and written invitation of a large number of the inhabitants of Yarmouth, Maine, he settled there, and practiced until he was over ninety years of age.

Born to be a leader, he led the people toward things that were good, in every town in which he practiced. He spoke much both in public and in private, on temperance, medicine, and agriculture. Though never obstinate he uttered his views with persistence, yet with a keen sense of humor. Glancing over his long career he seems to have been one of the best all-round men in medicine and surgery that Maine had produced. He died rather suddenly at the last, from the effects of a slight fall, and after a short illness, on February 25, 1882, aged ninety-two years. He said on his death-bed: "My father lived to be ninety-three, his father before him reached the same age, and the only thing that I now regret is that I am afraid that I shall not reach that age myself."

JAMES A. SPALDING.

BATTEY, Robert (1828-1895), of Rome, Georgia, originator of the operation of oöphorectomy, son of Cephas and Mary Agnes Margruder Battey, was born November 26, 1828, in Augusta, Georgia. He was educated in Richmond Academy, Augusta, Phillips Academy, Andover, Massachusetts, and was graduated from the Philadelphia College of Pharmacy March 17, 1856. He began to study medicine in 1849, at Rome, Georgia, under Dr. George M. Battey (his brother), and later studied under Dr. Ellwood Wilson of Philadelphia; attending two courses of lectures at Jefferson Medical College and the University of Pennsylvania, graduating from the former March 7, 1857, and receiving her LL. D. in 1891. The year 1859-60 was spent in post-graduate studies in the hospitals of Paris. Dr. Battey commenced practice in May, 1857, at Rome, Georgia, and remained there continuously with the exception of the years 1872-75, when he was professor of obstetrics in Atlanta Medical College, and editor of the "Atlanta Medical and Surgical Journal," 1873-76. He was four years, July, 1861-65, in the Confederate service as surgeon of the Nineteenth Regiment of Georgia Volunteers; surgeon of Hampton's Brigade. He was surgeon-in-charge of the Gynecological Infirmary, Rome, and consulting surgeon, treasurer and business manager of the Martha Battey Hospital, Rome, Georgia, an institution incorporated under the laws of Georgia, the buildings and grounds the gift of Dr. Battey and named for his wife in recognition of her aid in his surgical work.

What is known as Battey's operation—oöphorectomy—was first done by him in Rome, Georgia, on August 27, 1872, and was reported in the "Atlanta Medical and Surgical Journal" for September of that same year. The patient was thirty years old and had been an invalid for sixteen years, having menstruated only twice. Both ovaries were removed by abdominal section and the woman cured. Battey afterwards tried vaginal section for removal of the ovaries but reverted to his first method. So far as Battey knew and so far as published cases enabled anyone else to know, his operation had no precedent. Battey's idea was to remove the ovaries whether diseased or not to do away with painful menstruation and neurotic conditions, whereas Lawson Tait's idea was to remove diseased uterine appendages, ovaries and Fallopian tubes, because they were diseased. In 1859 Battey devised an improved apparatus for vesico-vaginal fistula and was the originator of iodized phenol. His thorough anatomical knowledge gave him confidence so that he was a bold and prudent operator. It must have required courage of a high order to do his first oöphorectomies and he told me how a band of men, among them prominent physicians of his vicinity, awaited the results of his first case, intending, in case of the patient's death, to have him arrested and prosecuted for murder.

He is said to have been the friend of almost every inhabitant of the little town wherein his life was spent. For two years previous to his death, which occurred near Rome, November 8, 1895, his health was so broken that he was unable to work. He was president of the American Gynecological Society in 1888 and of the Medical Association of the State of Georgia, 1876, and honorary fellow of the Obstetrical Society of Edinburgh, fellow of the British Gynecological Society and of other medical societies.

Battey was not a prolific writer, but without circumscription reached the core of the matter in a few words and stated his views lucidly. He contributed to the Transactions of the American Gynecological Society: "Extirpation of the Functionally Active Ovaries for the Remedy of Otherwise Incurable Disease," vol. i.; "Is there a Proper Field for Battey's Operation?" vol. ii.; "Intrauterine Medication by Iodized Phenol," vol. iv.; "What is the Proper Field for Battey's Operation?" vol. v.; And to the "Transactions, Medical Association of Georgia," Atlanta, 1886: "Antisepsis in Ovariotomy and Battey's Operation; Seventy Consecutive Cases with Sixty-eight Recoveries;" "Normal Ovariotomy," "Atlanta Medical and Surgical Journal," 1873.

He married on December 20, 1849, Martha B. Smith of Rome, Georgia, and had fourteen children, eight of whom survived him. Henry Halsey Battey, a son, became a physician.

THADDEUS A. REAMY.

BAUDUY, Jerome Keating (1842-1914), neurologist and medico-legal expert of St. Louis, Mo., was born on the Island of Cuba, Aug. 10, 1842. He received his classical education at Georgetown College, D. C., and at the University of Louvain, Belgium. Returning to America, he proceeded to study medicine at the Jefferson Medical College, Philadelphia, graduating in 1863. For a time he was surgeon in the Federal army, being at-

tached to the personal staff of the commander of the Army of the Cumberland, serving in Tennessee and Georgia. At the close of the War, having married Miss Bankhead of Nashville, Tenn, he settled in St. Louis, Mo., and soon had a very large practice. At one time he was consulting physician to the St. Louis Hospital for the Insane. For twenty-five years he was physician and chief to St. Vincent's Asylum for the Insane, St. Louis, and professor of nervous and mental diseases and of medical jurisprudence in the Missouri Medical College and Washington University for nearly thirty years. He wrote a number of excellent books and articles on neurologic subjects, and, at the time of his death, was professor emeritus of psychologic medicine and diseases of the nervous system in Washington University.

He died at Buffalo, N. Y., Oct. 10, 1914.

Dr. Bauduy will long be remembered as a diagnostician. In this department of his work he had no superior. As a teacher he was fluent and rapid—perhaps too rapid—and certainly far too technical for the undergraduates to whom he spoke.

THOMAS HALL SHASTID.

BAUER, Louis (1814-1898), a founder of the Brooklyn German Dispensary, was born in Stettin, Prussia. After studying in Greifswald, Breslau, and Berlin, he secured his medical degree in 1837-38. A personal interest in the conditions of his people and government led him to his taking a prominent role on the democratic side as a member of the Prussian House of Representatives, and after the dissolution of this body he was imprisoned for high treason. When released word of another contemplated arrest reached him, and he left for London where he established practice chiefly among the Germans with whom he mingled, seeking to dissuade them from impractical plans. At this time he got the degree of M. R. C. S. and shortly afterwards became house surgeon of an orthopedic institution in Manchester. In 1854, he came to the United States and settled in Brooklyn and helped establish the German Dispensary which grew into the Long Island College Hospital he being a member of the surgical staff in 1858. He was also health officer of Brooklyn for two years, pathologist to the coroner of Brooklyn, and brigade surgeon of the New York Militia. In 1869, he migrated to St. Louis. Ten years later, he selected the location for and chartered the present College of Physicians and Surgeons which was so vitally a part of him that he appropriated money for it from his household.

He was the translator of Vandochen's "Treatise on Microscopic Diagnoses" and Bishop's book on deformities. In 1864, he delivered a course of lectures on orthopedic surgery which were first published in the "Philadelphia Medical and Surgical Reporter" and later in book form (2nd ed., 1868), also translated into German and Italian. In 1866, his lectures on the causes, pathology, and treatment of joint diseases were published in toto. Bauer was an indefatigable worker, rich in knowledge though poor in purse. He died in St. Louis, November 5, 1898.

BAXLEY, Henry Willis (1803-1876), a founder of the first dental college in the world, was born at Baltimore in June, 1803, and educated at St. Mary's College in the same city, afterwards attending medical lectures in the University of Maryland and receiving his M. D. from that institution in 1824. From 1826 to 1829 he was attending physician to the Baltimore General Dispensary and from 1831 to 1832 held the same post at the Maryland Penitentiary. He was appointed demonstrator of anatomy at the University of Maryland in 1834. In 1837 he became professor of anatomy and physiology in the University of Maryland (Trustees' School), succeeding Prof. Eli Geddings, who had resigned. In 1840 he held the same chair in the Baltimore College of Dental Surgery, then founded. From 1842 to 1847 he was professor of surgery in the Washington University of Baltimore; from 1849 to 1850 he was physician to the Baltimore Almshouse; in the latter year he moved to Cincinnati, having accepted the chair of anatomy in the medical College of Ohio; in 1852 he was transferred to the chair of surgery in the same institution; in 1865 he was government inspector of hospitals, and the following year went to Europe where he remained until 1875 when he removed to Baltimore, and on March 13 of the following year he died there.

Dr. Baxley was a thorough anatomist, and an able teacher and surgeon. Among his operations was entire removal of the lower jaw for osteosarcoma (reported 1839). Among his more important writings were two works written while he was abroad: "What I saw on the West Coast of North and South America and at the Hawaiian Islands," New York,

1865, 632 pages, illustrated; "Spain, Art Remains, Art Realities, Painters, Priests and Princes, being Notes of Things seen and Opinions formed during nearly Three Years Residence and Travel in that Country," two volumes, London, 1875.

Dr. Baxley incurred the enmity of the medical faculty of the University of Maryland, who thought that he sided with the trustees in the differences that arose between the two bodies, and it was his election to the chair of anatomy in that institution by the latter in 1837 that led to the disruption of the school, to the two medical faculties, to the famous suit of Regents vs. Trustees, and to the restoration of the institution to the regents by the Court of Appeals of Maryland in 1839. Baxley left one son, Claude, who followed his father's profession. EUGENE F. CORDELL.

BAXTER, Jedediah Hyde (1837-1890), born in Strafford, Orange county, Vermont, surgeon-general of the United States Army, received his education at the University of Vermont and graduated in medicine at the same institution in 1860. He began practice in New York and when the Civil War broke out at once offered his services to his country and was commissioned surgeon in the Twelfth Massachusetts Volunteers June 26, 1861. Appointed brigade surgeon of volunteers in 1862, he was shortly afterwards put in charge of Campbell General Hospital at Washington and in 1863 was made chief medical officer of the Provost Marshal General's Bureau. In this position he compiled the "Medical Statistics of the Provost Marshal General's Bureau." This work, which includes a valuable anthropometric treatise, contains the results of examinations of more than a million men enrolled in the Union Army during the great war and was published in two large volumes in 1875. In 1867 Baxter was appointed medical purveyor with the rank of lieutenant colonel and promoted to chief medical purveyor with the rank of colonel in 1874.

In 1876 he married Florence Tryon, daughter of Willian Tryon, of New York City. August 16, 1890, he was appointed surgeon-general of the army but his career was suddenly cut short four months later for he died of an attack of uremia on December 7 of the same year. ALBERT ALLEMANN.

BAYARD, William (1814-1907), was born in Kentville, Nova Scotia, on August 21, 1814, being of Huguenot ancestry, and directly connected with the family represented by the famous knight sans peur et sans reproche, whose coat of arms is carried by them to this day. His father, Robert Bayard, M. D., a graduate of the University of Edinburgh and professor of obstetrics in the University of the City of New York, stood at the head of his profession in Nova Scotia and was a fluent speaker and an able writer. His mother was Frances Catherine Robertson, daughter of Commissary Robertson who was killed in the Colonial war which began in 1775.

William Bayard, when twelve years of age, was sent to a popular educational institution, conducted by the Rev. William Powell, at Fordham, near New York City, where he remained five years. He then entered as a private student with Dr. Valentine Mott, (q.v.) the eminent New York surgeon, at the same time attending the medical lectures at the college. While in Dr. Mott's office he took high honors for proficiency in anatomy. The next year he matriculated in the University of Edinburgh, and received his M. D. there in 1837. He then walked the hospitals in Paris and visited many in Germany, and on returning to St. John, New Brunswick, practiced in company with his father. There was not a city or large town in the Province of New Brunswick, Nova Scotia or Prince Edward Island to which he had not been called upon professional business. The general public hospital in the city of St. John owed its existence to the energy of Dr. Bayard, who placed before the legislature an act to assess the community for the funds necessary to build it, and secured the passage of the bill by his personal endeavors. He was a man of intense energy and great decision of character, and occupied all the prominent positions of his profession. He was chairman of the hospital board for a long period, chairman for many years of the board of health, coroner, president of the New Brunswick Medical Society for four years in succession, president of the Medical Council of New Brunswick, of the St. John Medical Society, Maritime Medical Association and of the Canadian Medical Association. He was a writer and contributor for various medical journals; editor for New Brunswick at one time of the "Montreal Medical and Surgical Journal," in which many articles from his pen may be found.

Dr. Bayard married early in life Susan Maria Wilson (1844). His wife died in 1876, leaving no children. She was a woman of

ability and fine social qualities, giving much time to caring for the poor and unfortunate.

On August 1, 1907, his seventieth anniversary of graduation at Edinburgh, Dr. Bayard received from his Alma Mater, through professor Cunningham, Dean of the Faculty of Medicine, an address, in which it was mentioned that the aged physician was, as far as was known, the oldest living graduate of that seat of learning, and the combined Faculty conferred on him the honorary degree of LL. D. in absentia.

Dr. Bayard died on December 17, 1907, at the great age of ninety-four.

ALFRED B. ATHERTON.

BAYLIES, William (1743-1826), Massachusetts physician, was born at Uxbridge, in that state, December 5, 1743, the son of Nicholas Baylies, a native of Shropshire, England, who emigrated to Uxbridge and later moved to Taunton, a town which he represented several years in the General Court. William was graduated from Harvard College in 1760 and studied medicine with Dr. Elisha Tobey, of New Bedford, at the completion of his course marrying a daughter of the Hon. Samuel White, of Taunton, speaker of the House of Representatives, and settling as a physician in the town of Dighton.

Dr. Baylies' activities in life were many. He represented Dighton in the Legislature, and in three Provincial Congresses, was a member of the State Convention that adopted the Federal Constitution; a judge of the Court of Common Pleas, and for a long time register of probate, but chiefly he was a doctor, and he was much in demand as a consultant, being particularly noted for his acumen in prognosis. He read much and was prudent and cautious but not timid.

He was one of the original members of the Massachusetts Medical Society and of the Massachusetts Historical Society and a member of the American Academy of Arts and Sciences. In 1807 Harvard conferred upon him the honorary degree of M. D.

He died June 17, 1826. He was the author of "Ulcerated Sore Throat in Dighton, 1785-6," Communications Massachusetts Medical Society, vol. i, series 1.

WALTER L. BURRAGE.

BAYLY, Alexander Hamilton (1814-1892), was born in Cambridge, Maryland, on March 3, 1814, the son of the Hon. Josiah Bayly, at one time attorney-general of Maryland, and of Anne Hack Walters of Somerset County, in the same state. He received his early education at the High School, Cambridge, and at fourteen entered St. Mary's College, Baltimore, completing his education at Washington College (now Trinity), Hartford, Connecticut, in 1832. He then began to study medicine under Dr. Vans Murray Sullivane of Cambridge, Maryland, and in 1833 worked under Prof. Samuel Baker of Baltimore, graduating from the University of Maryland in 1835. He became a member of the Medical and Chirurgical Faculty and president of the State Board of Lunacy. During the Civil War, he was the surgeon-in-charge of the military hospital in Cambridge.

Dr. Bayly was especially efficient as a surgeon, and as early as 1839 did an excision of the tibia, and in 1846 was the first to employ the horse-shoe magnet to remove a piece of metal from the cornea.

For forty years or more, Dr. Bayly was mayor of Cambridge and he did much to beautify the town by planting trees. He was artistic in many directions, being a fine musician and especially fond of botany, the garden in the rear of his old home in Cambridge being one of the most beautiful to be found anywhere. His personal characteristics were lovely, he was charitable and kind, his affection and care for his children was almost womanly. Dr. Bayly's wife was Delia Byus Eccleston by whom he had eleven children. He loved his native town, the "Old Sleepy Hollow" as he called it, and it was there that he died on March 14, 1892, from rheumatic gout.

BRICE W. GOLDSBOROUGH.

BAYNHAM, William (1749-1814), anatomist and surgeon of Virginia, the son of Dr. John Baynham of Caroline County, Virginia, was born December 7, 1749. After serving a laborious apprenticeship of five years under Dr. Walker, a physician of Caroline County, he was sent to London to complete his medical education. In 1769 he entered St. Thomas' Hospital as a student and by his diligence soon attracted the attention of the professor of anatomy, Mr. Else. Between the two a mutual attachment arose which led Baynham to direct his attention specially to the study of anatomy and surgery. In the former he soon became so proficient that in 1772 he was engaged by the professor of anatomy at Cambridge as his prosector, a position he held for several years. During those months in which he was not occupied at Cam-

bridge, he practiced at Margate as a partner of Mr. Slater, a surgeon of that place. This he found to be a pleasant and profitable connection, but was induced by Mr. Else to return to London and become his assistant demonstrator. In this work he acquired that intimate knowledge of anatomy for which he was so justly celebrated. During the five years in which he held this position he prepared for the museum many valuable and beautiful specimens.

Mr. Else died suddenly without having made a promised arrangement that Baynham should be advanced to the professorship after his death and on the election before the governors Baynham, a stranger to them, lost the position to Mr. Cline, by only one vote. On June 7, 1781, he became a member of the Company of Surgeons of London and began to practice in that city. Membership in the Surgeons' Company gave him equal rank with the first English surgeons of the day, such men as Pott, Cooper, Abernethy and John Hunter.

After a residence of sixteen years in England he returned to Virginia in 1785 and settled in Essex County, where he continued to live until his death. He soon had an enormous practice which was largely surgical, and it was said that there was scarcely any known operation that he did not perform with success, and he particularly signalized himself by his operations for stone, cataract and extrauterine gestation. His biographer truthfully said of him that he probably had no superior as a surgeon, and certainly none as an anatomist; that Physick (q.v.) and Baynham were the only men he knew of in America who had done anything towards the improvement of their calling. He was an excellent physician as well. He was frequently called to large cities, sometimes to other states, to perform operations, and his advice was often sought by persons from a distance. He is known to anatomists as the discoverer and demonstrator of the vascularity of the rete mucosum.

He did two successful operations for ectopic pregnancy, one in 1790, the second in 1799. His account of these operations was published in the "New York Medical and Physical Journal and Review," vol. i. Several posthumous accounts of surgical cases were published in the "Philadelphia Journal of Medical and Physical Sciences."

He discharged his duties to society in a most exemplary manner, and while he had eccentricities of temper, and was somewhat gloomy and austere, he had a warm heart and was ever a friend and benefactor to the poor and needy. Virginia has furnished another remarkable instance of a similar successful career in a remote country district in the career of Dr. J. P. Mettauer, (q.v.). Dr. Baynham married a daughter of the Rev. John Mathews of Essex County. He died on the eighth of December, 1814, on the day after he had completed the sixty-fifth year of a useful and laborious life.

ROBERT M. SLAUGHTER.

BEACH, Wooster (1794-1859), the founder of "Eclecticism" in the United States, a reformer of medical practice, was born at Trumbull, Connecticut, in 1794. He had little education beyond that received in the country schools. His ambition to study medicine was gratified by being taken as a pupil by Dr. Jacob Tidd, a German herb doctor who had practiced in Amwell, Hunterdon County, New Jersey, for forty years, and with Tidd he stayed until the latter's death. Being called to New York to take care of several cases, Beach was urged to settle there and was said to have become a student at the medical college of the University, graduating in due form, and becoming a member of the New York County Medical Society.

In 1825 Beach started teaching and writing as an empiric. He opposed the prevailing heroic practice of blood-letting and purging with mercurials, holding that the student should keep an open mind, observe, avoid a routine system and treat disease with nature's remedies,—herbs and roots. Two years later he opened the United States Infirmary in Eldridge Street, New York, where he treated several thousand patients, and in 1837 he started the New York Medical Academy which later became the Reformed Medical College of New York, the parent school of "Reformed Medicine." It had a short life as many of its supporters moved to Worthington, Ohio, to establish a medical department in a new university there. Beach was opposed to Thompsonianism and its doctrine of "Heat is life, and cold is death." He believed in founding the practice of medicine on pathology, in that respect anticipating William Osler. He disowned the so-called new advance in regard to the matter of sexual relations, made by the lay preacher, Theophilus R. Gates of Philadelphia, with whom he had been associated. In 1832, on the first visitation of

Asiatic cholera to New York, he was appointed by one of the aldermen to take charge of the poor who were afflicted with the disease and treated nearly a thousand cases, avoiding the use of calomel and all heroic treatment, with good results.

Dr. Beach was the author of at least a dozen medical works. He appreciated early in his career the importance of the press in spreading information about his views and for many years he published "The Telescope," and in 1837, a sheet entitled "The Ishmaelite." In 1833 appeared his "American Practice of Medicine," in three volumes. Copies were sent to the crowned heads of Europe and the author received many commendatory letters. Other text-books followed and were finally condensed into one volume: "The Reformed Practice of Medicine."

He was as strenuous in demanding reform in religion as he was in medicine. He held that current notions and practices were almost diametrically opposed to the teachings of the Bible. He had little regard for the conventionalities of society, and his peculiarities were in evidence wherever he went. He was an enthusiast and a persistent worker; many called him a fanatic. Once during a controversy with a Dr. Sperry of Connecticut, the latter remarked half disdainfully: "You are an eclectic." Dr. Beach replied quickly: "You have given me the term; I am an eclectic." It is likely that those who embraced his views did not realize that later they were to be enrolled under such a title.

After the closing of the Reformed Medical School at Worthington, Ohio, in 1848, a call was issued for a convention to meet at Cincinnati to take measures for the establishment of a national organization of eclectics, and Wooster Beach's name headed the list of signers. In 1855 he became president of the National Eclectic Medical Association. His last years were spent in penury, as he had no business ability and did not believe in accepting money for his services.

In 1823 he married Eliza de Grove. They had a happy married life, and a son, Wooster Beach, succeeded his father in practice. He was much broken by the drowning of his second son in Hell Gate channel, and died in New York City, January 28, 1859.

WALTER L. BURRAGE.

BEAN, Tarleton Hoffman (1846-1916), ichthyologist, was born in Bainbridge, Pennsylvania, October 8, 1846, the son of George Bean and Mary Smith. He was educated at the State Normal School, Millersville, Pennsylvania, then studied medicine and graduated at Columbian (now George Washington) University in 1876.

From 1878 to 1886 he was editor of the "Proceedings and Bulletins of the United States National Museum." Bean represented the United States Fish Commission at the Chicago Exposition in 1893; at the Atlanta Exposition in 1895; was director of Forestry and Fisheries at the Paris Exposition in 1900; and chief of the Departments of Fish and Game and Forestry at the St. Louis Exposition, 1902-1905.

He was curator of the Department of Fisheries, United States National Museum, from 1880 to 1895; director of the New York Aquarium from 1895 to 1898; and state fish culturist from 1906 until his death. He was assistant in charge of the division of fish culture, United States Fish Commission, 1892-1895; and acting curator of fishes, American Museum of Natural History, New York, 1897.

From 1906 until his death in 1916, Bean was head of the fish cultural work in New York State, and by his energy and expert knowledge he put New York at the head of all the states of the union in the propagation and preservation of its fishes. It was the first state to attempt the preservation of fish through the "green house" methods of propagation.

Dr. Bean was a prolific writer, the published bibliography of his books and articles containing 275 titles, to which must be added 47 published in collaboration, making a total of 322. His chief books are: "The Fishes of Pennsylvania" (1893), "The Fishes of Long Island" (1901), "Fishes of New York" (1903), "The Fishes of Bermuda" (1906). In collaboration with W. C. Harris he published in 1905 "The Basses, Fresh-Water and Marine," and in collaboration with George Brown Goode he published 39 articles dealing largely with fishes of the deep sea. Undoubtedly the work which will longest perpetuate Dr. Bean's reputation as a profound student of fishes is "Oceanic Ichthyology" (1896) of which he was joint author with Goode. This great work consists of a volume of text of 529 pages and another of 124 plates.

He was Chevalier Legion of Honor and Officer of Mérite Agricole, France; Knight Imperial Royal Order of Red Eagle, Germany; Order of the Rising Sun, Japan; an

honorary member of the Danish Fisheries Societies; a member of the American Forestry Association; and the American Fisheries Society—its president in 1908-1909.

In 1878 he married Laurette H. van Hook of Washington.

Dr. Bean was injured in an automobile accident in October, 1916, from the results of which he died at Albany, New York, December 28, 1916.

E. W. GUDGER.

BEARD, Charles Heady (1855-1906), Chicago ophthalmologist, was born in Louisville, Ky., Jan. 27, 1855, received the medical degree at the University of Louisville in 1877, and practiced general medicine for six years at Cannelton, Ind. In 1883 he studied ophthalmology under Hermann Knapp (q.v.) and C. R. Agnew (q.v.) at the Manhattan Eye and Ear Hospital, N. Y., and later in London and Vienna. Settling as ophthalmologist at Chicago in 1886, he soon was widely known as operator and writer. He was one of the surgeons at the Illinois Charitable Eye and Ear Infirmary, oculist to the Passavant Memorial Hospital, president of the Chicago Ophthalmological Society, a member of the American Academy of Ophthalmology and Oto-Laryngology and of the American Ophthalmological Society, and a fellow of the American College of Surgeons. In 1908 he was awarded a special diploma by the American Medical Association for his excellent drawings of the fundus oculi.

Dr. Beard died at his home, 1019 East 48th St., Chicago, on Jan. 3, 1916, after a long illness.

Among his more important writings are: "Ophthalmic Surgery" (Chicago, 1910); "Ophthalmic Semiology and Diagnosis" (Phila., 1913. A vol. in Pyle's "International System of Ophthalmic Practice"); "Varieties of Blepharoplasty" (chap. xiii of Wood's "System of Ophthalmic Operations," Chicago, 1911); "Blepharoplasty" (69 pp., in vol. ii "American Encyclopedia and Dictionary of Ophthalmology").

THOMAS HALL SHASTID.

BEARD, George Miller (1839-1883), New York neurologist, the son of the Rev. S. F. Beard, Congregational minister, was born at Montville, Connecticut, May 8, 1839 and prepared for college at Andover, Massachusetts. He entered Yale, graduating in 1862. As an undergraduate he was prominent as a scholar, writer and debater and received the Townsend premium. He was graduated at the College of Physicians and Surgeons, New York, in 1866. Between his first and second course of lectures he served for eighteen months as assistant surgeon in the United States Navy. In 1866 he became associated with Dr. A. D. Rockwell, for the study of nervous diseases, and especially for the development of electricity in its relations to medicine and surgery. At the time when Dr. Beard and Dr. Rockwell began their researches in electrotherapeutics, electricity had not been used to any extent by physicians in this country, and very little abroad, except among a few specialists, and only by local methods. Their first systematic contribution to the subject was a series of five articles "On the Medical Use of Electricity," with special reference to general electrization in which the constitutional tonic effects of electricity were first enunciated and demonstrated. These articles were not only quoted, but reprinted in full in various journals both in England and Germany. In 1872 he published with Dr. Rockwell the first edition of their large work on "The Medical and Surgical Uses of Electricity," which was translated into German, and had there a very large circulation. The methods of "general faradization" and "central galvanization," to the consideration of which the book is in part devoted, have been introduced into Germany through its translation, and have long been incorporated into the scientific literature. The study of medical electricity led naturally and inevitably to the study of psychology, and in 1867 Dr. Beard published a paper on "The Longevity of Brain Workers," which demonstrated that those who work with the brain live longer than those who use only their muscles; that great men live longer than ordinary men. Following this came papers on: "Cosmic Law of Intemperance;" "A Plea for Scientific Reform"; "Atmospheric Electricity and Ozone, Their Relations to Health and Disease"; "The Relation of the Medical Profession to the Popular Delusions of Animal Magnetism, Clairvoyance, Spiritualism, and Mind Reading"; "The Physiology of Mind Reading"; "Trance and Transoidal States in Lower Animals"; "How to Use the Bromides"; "Current Delusions Relating to Hypnotism"; "The Study of Trance and Muscle Reading, and Allied Nervous Phenomena in Europe and America, with a Letter upon the Moral Character of Trance Subjects." He founded the "Archives of Electrology and Neurology," a

semi-annual journal, which was continued two years (1874-6).

Beard gave much attention for many years to the reconstruction of the principles of evidence on the basis of psychology, and his outlines appeared in various papers in the "Popular Science Monthly." This reconstruction applies especially to the phenomena of living human beings, and to the sources of error in our reasoning, and the misapprehensions that come from those errors. He maintained that it was a most important defect in the Baconian philosophy that these sources of error were not formulated. This he attempted to do, maintaining that human testimony as such is, in matters of science, of no worth; that neither honesty nor a quantity of non-experts in the special matter in hand can establish any scientific fact. He affirmed, therefore, that in science the rejection of average human testimony is the beginning of all wisdom. In his work on "American Nervousness," he treated of the causes of nervous disorders, and of nervousness in general, and of their greater prevalence in America, demonstrating that the chief cause of nervous diseases is civilization, other accredited causes being secondary and stationary, and that the cause of the great prevalence of nervous diseases in America is dryness of the air and extremes of heat and cold. Mr. Herbert Spencer, in his visit to America in 1882, made a speech substantially repeating many of the thoughts and some of the language of Dr. Beard's writings on this latter subject. In Beard's work on "Neurasthenia", he brought the professional attention to a large number of symptoms of nervous and functional diseases, which he contended were of immense importance scientifically and practically.

Beard's writings were essentially philosophical in character. He accepted the principle of evolution. All of his writings on the nervous system were based upon the development theory. He contended that it was impossible to obtain sound and philosophical ideas of the nervous system in health and disease, except on the basis of that theory. He therefore carried the evolution theory into the study of insanity and all functional diseases of the nervous system and of trance and allied states, and aimed at a radical reconstruction of insanity on that basis. He was the first who clearly and prominently demonstrated that the facts of the phenomena of delusions belong to psychology instead of to physics or physiology, and should, therefore, be brought into science exclusively by psychologists. It was in this field that Dr. Beard was laboring when the summons came on January 23, 1883.

He married in 1866, Elizabeth Ann Alden, of Westville, Connecticut.

Among other appointments he was lecturer on nervous diseases in the University of New York; physician of nervous disorders to the Demilt Dispensary; fellow of the New York Academy of Medicine; member of the New York County Medical Society, of the New York Society of Neurology. A full list of his writings can be seen in the "Surgeon-general's Catalogue," Washington, D. C.

BEARDSLEE, Henry Curtis (1807-1884), botanist of Ohio, was born at Monroe, Connecticut, July 7, 1807. He graduated in arts from Yale in 1826 and in medicine in 1829. With other Connecticut men, he removed to Painesville, Ohio, on the Western Reserve, in April, 1845. Together with his New England friends, he took great interest in his new home and assisted in bettering the community. He was president of the board of education of Painesville for more than twenty five years and helped establish schools of unusual excellence. He was active in his profession and skilful as a surgeon. Botany was his diversion. Like many in his day, he drove long distances through the country and so came to know its flora well. A characteristic anecdote relates to a call in consultation out in the country. While waiting for his colleague, he went to a piece of woodland to explore and there on a clay bank found the tiny moss he had long been looking for,—"Fissidens hyalinus"—found but once by Lea and then lost for a generation. This delayed the consultation, and the consultant later described his long wait and Beardslee's final appearance "with some confounded lumps of clay which he tried to tell me had something rare on them." He was appointed state botanist to prepare a catalogue of the flowering plants of Ohio. A preliminary check-list was published, but the completed work was crowded out of the volume entitled "Zoology and Botany of Ohio," minus the botany! The manuscript reported lost, eventually came back from an unknown source and is deposited at Oberlin College.

Dr. Beardslee married Harriet Hawley at Monroe, Connecticut, in 1833, and Clementine Currier at Enfield, New Hampshire, in 1861; three daughters and one son were the

issue of the first marriage and three sons of the second. Two of the latter, James C. and Henry C. survive. No son studied medicine, but Professor Henry C. is one of our most eminent mycologists who contributes constantly to our knowledge of the basidiomycetes, especially the agaricaceae.

The father died December 20, 1884.

HOWARD A. KELLY.

BEARDSLEY, Hezekiah (1748-1790), The first to describe congenital hypertrophic stenosis of the pylorus in infants, Hezekiah Beardsley deserves a short note, although the known facts of his life are scanty. He was born in Stratford, Connecticut, in 1748, and became a druggist and physician, and practiced in Southington, Connecticut, as early as 1778, so far as health would permit. Two years later he appears to have removed to Hartford. An advertisement of his firm, "Beardsley and Hopkins," is to be found in the "Connecticut Courant" for June 26, 1781. In it we learn his drug store was situated "a few rods east of the Court House." In 1782 he removed to New Haven, where he had a similar store on Chapel street, between Church and Orange streets. At the time of his death, in 1790, from consumption, he had taken his brother-in-law into partnership with him.

He was one of the original members of the New Haven County Medical Association, and served on the committees of correspondence and examination. In April, 1788, he reported a case of "scirrhus in the pylorus of an infant," which was the first case on record of congenital hypertrophy of the pylorus in an infant. It was printed with the papers of the society, which appeared in their transactions entitled: "Cases and Observations." In this paper Beardsley noted practically every feature of the disease we now know. He had attended the patient for three years at Southington, and when her death, at the age of five years, "closed the painful melancholy scene" he performed the autopsy. He speaks of the "constant puking," which was first noted during the first week of life. Everything in the shape of food the child took was almost instantaneously rejected and very little changed. The feces were small in quantity. He comments upon the leanness and wizened old look of the child, and states he had "pronounced a scirrhosity in the pylorus months before the child's death," although he first attributed the condition to a deficiency of bile and gastric juices joined with a morbid relaxation of the stomach. Unfortunately Beardsley did not know of the child's death "until the second day after it took place. This late period, the almost intolerable stench, and the impatience of the people who had collected for the funeral, prevented so thorough an examination of the body as might otherwise have been made." At the autopsy Beardsley noted that the stomach was unusually large and distended. "The pylorus was invested with a hard compact substance or scirrhosity, which so completely obstructed the passage into the duodenum as to admit with the greatest difficulty the finest fluid."

WALTER R. STEINER.

BEAUMONT, William (1785-1853), army surgeon and pioneer physiologist, was born at Lebanon, Connecticut, November 21, 1785, son of Samuel Beaumont, a Puritan New England farmer. He was the first to study the gastric juice obtained through a permanent fistula. His early education was such as to qualify him on attaining his majority for teaching school at Champlain, Clinton County, New York. At the same time he began to study medicine with Dr. Seth Pomeroy of Champlain, New York, and continued it with Dr. Benjamin Chandler of St. Albans, Vermont. He secured a license to practice from the Third Medical Society of Vermont, but on December 2, 1812, enlisted as surgeon's mate in the Sixteenth Regiment of Infantry, United States Army. During April and May, 1813, he saw something of war surgery at the taking of York (now Toronto) where the retreating English exploded hundreds of barrels of powder under the feet of the advancing Americans, at the storming of Fort George May 27, 1813, and at the battle of Plattsburg, New York, September 11, 1813. During the last the physicians in dressing the wounds of the injured, were compelled to pass and repass from fort to fort and block houses, exposed to a cross fire of round and grape shot but none failed to exhibit a soldier-like bravery. Dr. Beaumont stood the actual test of facing death in caring for the injured. In 1815 he resigned and engaged in general practice at Ogdensburg, New York. On November 4, 1819, he re-entered the army as post surgeon and was assigned to Mackinac Island, Michigan, reporting to Gen. Macomb, June, 1820. While surgeon's mate he won the confidence of Dr. Joseph Lovell (q.v.), the first surgeon-general, and was offered but refused a thous-

and dollar clerkship in his consulting-room at Washington. Many favors were given him during his army service helpful in his investigations of stomach digestion.

On June 6, 1822, occurred the accident to Alexis St. Martin, which left the walls of the stomach open by a valve, permitting a complete study of the processes of stomach digestion in both normal and abnormal conditions. In a memorial to the United States Senate, Beaumont described the wound as "being under the left breast made by the accidental discharge of a shot gun at about two feet. A large portion of the side was blown off, ribs fractured and openings made into the pleural cavity and the abdomen, through which protruded portions of the lungs and stomach, much lacerated and burnt. The diaphragm was lacerated and a perforation made directly into the cavity of the stomach through which food was escaping when first seen." At the end of ten months the wound was partially healed, but St. Martin was altogether helpless. It was alleged that Beaumont purposely kept St. Martin's stomach open with a view to conducting experiments but Beaumont's manuscripts prove conclusively, according to Dr. Jesse S. Myer, that he made every possible effort to close the orifice. During the four years that St. Martin was lost to view the opening did not close and was in exactly the same condition when experiments were resumed in 1829. The civil authorities refused longer to provide for his needs and proposed to send him to his home in lower Canada more than fifteen hundred miles distant.

Beaumont was now thirty-seven years old with a wife and three children at a frontier army post, as assistant surgeon in the army, with a salary of $40 a month and four rations. Knowing that such a journey would be fatal to St. Martin, Beaumont took him into his own home, and for two years clothed, fed, nursed, doctored, and sheltered the helpless, suffering, and destitute invalid. In May, 1825, St. Martin was able to walk and help himself a little though unable to provide for his necessities. Now Beaumont kept him for the purpose of making observations and experiments. Two years later (1827) Beaumont communicated his studies to the Michigan Medical Society, of which he had been an honorary member since June 4, 1825. In 1900 the Michigan Medical Society erected a monument of stone, hard by the spot where these immortal studies were begun, and in a memorial meeting expressed its appreciation of Beaumont's contribution to the world's progress. In June, 1825, Beaumont was ordered to Fort Niagara, New York, taking St. Martin with him and continuing his studies. In August they visited Plattsburg, New York, and Burlington, Vermont, where St. Martin took "Dutch leave" of Beaumont.

In May, 1826, Beaumont was transferred to Fort Howard on Green Bay, and in 1828 to Fort Crawford, on the upper Mississippi. After nearly two years of constant search, Beaumont finally found St. Martin in lower Canada, two thousand miles from Fort Crawford. He had married, was the father of two children and had supported himself by service as a voyageur. At great expense Beaumont secured his return and continued the experiments on him from August, 1829, to 1831, when he was allowed to take his family and return home. St. Martin's condition may be inferred when it is considered that this journey was made in an open canoe and traversed the Mississippi to the mouth of the Ohio, up the Ohio, across the (now) state of Ohio, down Lakes Erie and Ontario and the River St. Lawrence, the trip taking six weeks. In August, 1832, Beaumont was granted leave of absence and met St. Martin at Plattsburg, New York. From November, 1832, to March, 1834, they were in Washington conducting experiments.

In the fall of 1833 was issued the first edition of "Experiments and Observations on the Gastric Juice and the Physiology of Digestion." In all there were about two hundred and forty experiments, besides the microscopic examinations and observations. Early in 1834 Beaumont was ordered to Jefferson Barracks, a military post now fourteen miles below St. Louis, Missouri. Scarcely had he started for this new post when Lewis Cass, the secretary of war, received through Edward Everett, a petition signed by two hundred members of Congress, asking that Beaumont and St. Martin be sent to Boston, for study by Dr. Charles Jackson. The secretary of war replied that under existing arrangements it was impossible for Dr. Beaumont to visit Boston. Mr. Everett now sought to have Congress appropriate $10,000 to send Beaumont and St. Martin to Europe for study of human gastric digestion by the best physiologists and chemists. The appropriation failed. On July 1, Dr. Beaumont reached Jefferson Barracks, but one month later he was sent to Fort Crawford. In 1835 he was made purveyor of medical supplies for the western

district and surgeon to the St. Louis Arsenal. The light duties of these positions permitted him to engage in private practice in which he promptly took a conspicuous position. In 1839 he was ordered to proceed at once to Florida for duty. This order being maintained in spite of his protests, he resigned and continued practice in St. Louis. During the cholera epidemic of 1849, though sixty-four years old, Dr. Beaumont labored day and night in caring for the sick. In 1844, in conjunction with Dr. S. W. Adreon, he was sued for $10,000 damages by a Mrs. Mary Dugan. The claim was that the doctors had treated an inguinal hernia as an appendicitis. The verdict was for the defendants, though a pamphlet war lasted many months with great virulence.

Of Beaumont's apt perception of strangers, Dr. Reyburn says: "You might introduce him to twenty strangers daily, and he would give an accurate estimate of each; his peculiar traits, disposition, etc., and not a few would receive some fitting sobriquet." His daughter, Mrs. Keim, says he once cured a hypochondriacal army officer by horsewhipping him. Not the least of Beaumont's trials with St. Martin was the settling of his fights with the teasing crowds who called him "the man with a lid on his stomach." Later St. Martin separated himself from Beaumont and became debauched and unreliable. He would promise to return for experimentation and on the receipt of money for his expenses would spend it on whiskey, the only article that he always insisted on taking by the natural channel.

It is difficult to realize the dense ignorance of the medical profession of stomach digestion in 1832, the date of Beaumont's publication. Dunglison's "Human Physiology" quotes five theories: concoction, putrefaction, trituration, fermentation and maceration. He also quotes with approval William Hunter's remark, "some physiologists will have it that the stomach is a mill; others that it is a fermenting vat, but in my view of the matter it is neither a mill, a fermenting vat, or a stew pan, but a stomach, gentlemen, a stomach." Dr. V. C. Vaughan ("Transactions of Michigan State Medical Society," 1896, p. 1) says that, considering the conditions under which he labored and the results he left behind, Beaumont is one of the great historic characters of the world. In the nearly three-fourths of a century that have passed his discoveries are still approved by both chemists and physiologists. So exact was his study of the physical and chemical nature of gastric juice that excepting pepsin, the closest investigation of modern times with modern physics and chemistry has added little to Beaumont's work. Practical physicians during all these years have utilized Beaumont's studies in prescribing the diet of their patients. In 1833 the Columbian University of Washington, District of Columbia, gave Dr. William Beaumont the degree of M. D. "honoris causa." In 1837 he was appointed professor of surgery in the medical department of St. Louis University. In 1838 he was vice president of Missouri Medical Society and in 1841 its president. Many medical societies elected him an honorary member.

In 1821 Dr. William Beaumont married Debora, daughter of "Friend Israel Green, innholder in Plattsburgh, N. Y." She was a strong woman full of sympathy with her husband's work. When a young girl she voluntarily went to the "pest house" and took smallpox that she might be able to nurse smallpox patients during the war of 1812.

Beaumont's life was a stormy one from beginning to end, full of encounters, which he seemed to enjoy, and in which he usually came out victorious. He remained active and energetic to the last and died at his home in St. Louis, Missouri, April 25, 1853, as the result of an accident.

The first published account of St. Martin's case appeared in the "Philadelphia Medical Recorder," January 1825. The unpublished records of the Michigan Medical Society, 1819-1848, show that in August, 1827, a report of the case of Alexis St. Martin was made to this society. The report was accompanied by a statement of observations on the behavior of the stomach during digestion and experiments on its digestive powers. Dr. C. G. Jennings of Detroit possesses these records, to whom the writer is indebted.

Beaumont's paper of 1825 was published in German at Hamburg, in 1826; also in Paris in 1828 in the "Archives Generales de Medecine." In 1833 was published in Plattsburg, New York, by F. P. Allen, a book entitled: "Experiments and Observations on Gastric Juice and the Physiology of Digestion," by William Beaumont, M. D., surgeon in the United States Army. In 1834 copies of the Plattsburg edition of the above were issued by Lilly, Wait & Company, of Boston, Massachusetts In 1834 a German edition was brought out and in 1837 a second edition was issued from Burlington, Vermont, minor defects being corrected by Dr. Samuel Beaumont, a cousin

of William. Finally in 1838 an edition was printed in Scotland by Dr. Andrew Combe.

LEARTUS CONNER.

BECK, Carl (1856-1911), professor of surgery at the New York Post-Graduate School of Medicine and visiting surgeon to St. Mark's Hospital, was born in Neckargemünd, Germany, April 4, 1856. After graduating at the gynasium of Heidelberg in 1874 he studied medicine at the universities of Heidelberg, Berlin and Jena and obtained the degree of Doctor of Medicine from the last named university in 1878. For a few years he practiced medicine in his native town but emigrated to America in 1882 and settled in New York. He soon gained a name as a skilful surgeon. When Roentgen discovered the X-rays Beck was one of the first to introduce their use in surgery. He wrote numerous articles on this subject in English and German. For the last twenty years of his life Beck was professor of surgery at the New York Post-Graduate School of Medicine. He was also president of the German Medical Society of New York and of the American Therapeutic Society.

Beck was a prolific writer and published numerous articles in American and German medical journals. He was the author of the following books: "Fractures, with an Appendix on the Use of the Roentgen Rays" (1900), "Roentgent Ray Diagnosis and Therapy" (1904), "Principles of Surgical Pathology for the Use of Students" (1905) and "Surgical Diseases of the Chest" (1907).

Beck was a highly cultured man, possessed of a wide knowledge, urbane and pleasing in his manners. He was of an idealistic turn of mind. He spurned the chase after money and in his leisure hours found pleasure in the arts and in literature. He himself wrote "Der Schwabenkonrad," a novel in German, in which he described the vicissitudes of one of his ancestors during the Thirty Years' War.

Dr. Beck married Miss Hedwig Loeser in 1881 and they had two children.

He died in Pelham Heights, N. Y., June 9, 1911.

A. ALLEMANN.

BECK, John Brodhead (1794-1851), New York medico-legal expert, was born at Schenectady, New York, September 18, 1794. His father was Caleb Beck, his mother, Catherine, only daughter of Theodric Romeyn, D. D., one of the founders of Union College. He was a brother of Lewis C. Beck (q.v.), professor of chemistry at the Albany Medical College, and Theodric Romeyn Beck (q.v.), perhaps one of the greatest experts in legal medicine America has produced. At the age of seven, John went to live with his uncle, the Rev. John B. Romeyn, at Rhinebeck, New York, and under his personal guidance entered upon a study of the liberal arts and sciences. In 1804 the uncle removed to New York City, taking the young man with him. In 1813 young Beck was graduated from Columbia College, with the highest honors of his class, going soon after to London, where he took up the study of Hebrew, with the firm intention of eventually entering the ministry. Shortly afterwards, however, he forsook theology for medicine, as better suited to his tastes and abilities. Returning to New York, he studied the medical sciences for a time with Dr. David Hosack (q.v.), then matriculated at the College of Physicians and Surgeons in the same city. At this institution he received his degree in 1817. His graduation thesis, entitled, "On Infanticide," was a most remarkable production for one of Dr. Beck's years and experience. In the words of R. A. Witthaus (q.v.), "It may be truly said that, in this treatise, the subject was so thoroughly presented that subsequent writers have done little more than reproduce copies, more or less imperfect, and that it is still the standard work on infanticide in the English language." The little work was subsequently incorporated by its author's brother, the famous Theodric Romeyn Beck, into the latter's monumental and enduring "Elements of Medical Jurisprudence." Dr. John B. Beck was the author of other noteworthy books and papers, among which were "Infant Therapeutics" (1849), and "History of American Medicine Before the Revolution," (1842).

In 1826 he became professor of materia medica and botany in the College of Physicians and Surgeons and later was appointed professor of medical jurisprudence in the same institution, holding these two professorships for many years. He was one of the founders of the "New York Medical and Physical Journal" (1822) and of the New York Academy of Medicine, also president of the New York Medical Society, and for ten years one of the physicians to the New York Hospital. A man of great energy and enthusiasm, he communicated these two qualities to his students to a very remarkable degree. He was also a very courteous man, and would spend long hours with some of his dullest students, resolving their individual perplexi-

ties, and at the close of the interview insisting that they should come to him again whenever they found themselves confronted by matters which they did not understand. He enjoyed occasionally a bit of quiet fun. To him one day in the hospital surrounded by a number of students, came a mother and her eight-year-old son. The fond parent was complaining loudly that she feared that her son was about to be sick. "His skin is just the color of ashes, doctor," she declared. "It is ashes," responded the doctor. Calling for a sponge and a basin of soap-suds, he removed the ashen-gray "complexion," revealing the ruddiest of boyish faces. Beck was an earnest and consistent Christian, keeping to his faith through his later years, which were troubled by sickness and unremitting pain. Often urged by his friends and attendants to relieve his suffering by means of opiates and anesthetics, he would very seldom permit this. "I do not wish to die," he would almost invariably answer those about him, "either stupified or insane." When finally the grim and dread messenger came to summon him, the doctor passed away "not like the galley-slave," but calmly and smilingly, as one reliant upon his glorious faith and supremely confident of a better life hereafter.

He died at Rhinebeck, New York, April 9, 1851. THOMAS HALL SHASTID.

BECK, Lewis Caleb (1798-1853), naturalist, was born in Schenectady, N. Y., October 4, 1798, the son of Caleb and Catherine Romeyn Beck. After attending the Schenectady grammar school, he graduated A. M. from Union College in 1815 and took up the study of medicine. He was licensed to practice medicine by the State Regents at Schenectady in 1818. His interest in botany was soon evident, and he discovered a new species of flowering plant near Schenectady, described by Torrey as "Bidens Beckii."

In 1820 he moved to St. Louis where he resided until 1822. He made an extensive collection of the plants in the vicinity of St. Louis and later published a list of his collections there (Amer. Jour. Sci. & Arts, 1826, vol. x: 257-264; 1827, vol. xi: 167-182; 1828, vol. xiv: 112-121). Among the several new species he found was the Dwarf Bluet (Houstonia minima. Beck). In 1822 Dr. Beck moved to New York state, settling in Albany, and residing there during most of the remainder of his life. He held positions as professor of botany, chemistry or natural history, up to the time of his death, in the Rensselaer Polytechnic Institute at Troy, N. Y.; Vermont Academy of Medicine; Rutgers College at New Brunswick, N. J., and the Albany Medical College. Near New Brunswick he discovered "Lathyrus glaucifolius (now known as L. ochroleucus).

His first publication was an "Illinois and Missouri Gazeteer," that appeared in 1823. His principal medical work was his report to the government, on cholera, N. Y. (1832). He was well known in botanical circles and was the author of a "Manual of Botany of the United States North of Virginia" (1848), of which two editions were issued. He also published a number of botanical papers and a "Manual of Chemistry" (1831), which passed through four editions. A full list of his writings may be found in a memoir by Alden March in S. D. Gross' "American Medical Biography."

Soon after returning to Albany he married Hannah Maria, daughter of Israel Smith of that city and they had seven children. During the year 1836 he was a member of the geological survey of New York State, embodying the results of his explorations in a book on the mineralogy of New York, published in 1842.

In Albany he seems to have been well acquainted with Capt. James Eights (q.v.), who accompanied the Fanning "Voyage of Discovery" to the South Sea Islands in 1829, because the herbarium of Dr. Beck, acquired by the state and now in the state herbarium, contains a number of plants collected by Dr. Eights on Staten Island, South Shetland and in other South Sea places. He was also a friend and correspondent of Asa Gray and his herbarium contains numerous specimens contributed by Dr. Gray.

He died at Albany, April 20, 1853.

H. D. HOUSE.

BECK, Theodric Romeyn (1791-1855), alienist and medico-legal expert, was born at Schenectady, New York, April 11, 1791. His mother, a daughter of the Rev. Dr. Derick Romeyn, principal of the Academy of Schenectady, was a lady of rare attainments and great force of character.

Beck entered Union College in 1803, was graduated in 1807 at the age of sixteen, and at Albany began the study of medicine under Dr. Low and Dr. McClelland. Shortly afterwards he entered the New York College of Physicians, receiving there his medical de-

gree in 1811 and thence returning to Albany to practice. He was, however (by reason of too great sympathy with the sick), not so highly successful in practice as he was in authorship, hence at the end of six years he gave up practice entirely.

In 1815 he was appointed professor of the institutes of medicine and lecturer on medical jurisprudence in the College of Physicians and Surgeons for the Western District, at Fairfield, New York, and in 1817 became principal of the Albany Academy, afterwards, in 1826, lecturer on medical jurisprudence, occasionally holding both the chair of practice and that of materia medica in the same institution. The year 1829 saw him president of the New York State Medical Society—an honor held for three successive years, and in 1840 he held the professorship of materia medica in the Albany Medical College. In 1842 he became one of the managers of the New York State Lunatic Asylum, at Utica and in 1854, its president. The "American Journal of Insanity" was edited by him for several years and he was also a copious contributor to medical journals, chiefly on insanity.

His most celebrated book was his "Elements of Medical Jurisprudence," a monumental work which appeared in 1823. At once it attracted the attention of the medico-legal world and has not ceased to be an authority both at home and in Europe. An English edition appeared in 1825—two years after the first American edition, and by the time of the author's decease, four English, one German and five American editions had been issued. Since the author's death, another American, and even a Swedish edition, have been brought forth. At the present moment, copies of Beck's "Medical Jurisprudence," when they appear on the bookseller's shelves, which they do but seldom, are snapped up eagerly. Traill, the great Scotch legal physician, called this treatise, "the best work on the general subject which has appeared in the English language." The famous Guy acknowledges his obligation in a special manner to Beck's learned and elaborate "Elements of Medical Jurisprudence;" and at a later day, Prof. Rudolph A. Witthaus (q.v.) declared this scientific classic "facile princeps" among English works on legal medicine . . . as admirable for scholarly elegance of diction as for profound scientific research."

In 1814 he married Harriet Caldwell. Dr. Beck was a man of massive build, dark skinned, dark haired, dark eyed and possessed of an extremely gentle and sympathetic manner. He was a voluminous reader, not only of scientific publications, but also of history, poetry, fiction, and, in fact, of every sort and variety of literature that seemed to him to be sound, sensible, and interesting. He delighted, when at work, to surround himself with great piles of books, whether he happened to need those particular volumes at the time or not, merely from the joy of having his darlings stacked about him. He was an earnest and active Christian, nor did his ardent faith forsake him when, after a long and painful illness, he died on the nineteenth of November, 1855, at the age of sixty-four.

THOMAS HALL SHASTID.

BEDFORD, Gunning S. (1806-1870), pioneer obstetrician, born in Baltimore, Maryland in 1806, was the great nephew of the famous Gunning Bedford, of Delaware, of revolutionary distinction. Dr. Bedford was graduated in 1825 at Mount St. Mary's College, Emmetsburg, Maryland, and after taking his A. B. his first idea was to study law. With that resolve he left Baltimore with letters of introduction to Daniel Webster, intending to study with him. However, he met an enthusiastic acquaintance who had just begun the study of medicine. This acquaintance persuaded him before going to visit Mr. Webster to go with him and hear Dr. John D. Godman (q.v.) lecture. They went. Bedford was charmed and carried away with the eloquence of Godman and determined at once to become his pupil.

He took an M. D. at Rutgers Medical College in his twenty-third year. Shortly after (1829) he married and made an extended visit to Europe, where he remained two years, visiting the hospitals, and shortly after his return to America was appointed, in 1833, professor to the Charleston Medical College, South Carolina, and subsequently professor at the Medical College in Albany. Remaining there but a short time, he determined to visit New York City and make that place the field of his future exertions. He assisted Dr. Martyn Paine (q.v.) in founding the University Medical College, and was aided in this by one of his former preceptors—afterwards his colleague—Valentine Mott (q.v.). The faculty consisted of Pattison, Paine, Draper, Revere, Mott and Bedford. He was professor of obstetrics and diseases of women from 1841 to 1864, when he was compelled, on ac-

count of ill health, to resign. He was the first professor who ever held an obstetric clinic in the United States.

His works, which were among the most popular of the day, were "Clinical Lectures on Diseases of Women and Children" (1855) (ten editions), and the "Principles and Practice of Obstetrics" (1861) (five editions). Both editions were translated into French and German and were adopted generally as textbooks throughout the United States and Europe. His earliest effort was the translation of Baudelocque's "Treatise on Puerperal Peritonitis" into English (1831), and in 1844 Chaillé's "Treatise on Midwifery."

He died of cerebral hemorrhage in New York City November 5, 1870, leaving a widow and three sons, two of whom followed the profession of their father.

WALTER L. BURRAGE.

BEECH, John Henry (1819-1878), army surgeon of Coldwater, Michigan, was born September 24, 1819, at Gaines, Orleans County, New York, where his father, Dr. Jesse Beech, had practiced many years. John Henry had his early education at Gaines' Academy, New York, afterwards attending lectures at Albany Medical College, and receiving his M. D. April, 1841, immediately afterwards beginning practice in Gaines, but in 1850 removing to Coldwater where he stayed till his death, except for the period spent in the army during the Civil War. He aided in resurrecting the Orleans County Medical Society, New York; was active in reviving the Michigan State Medical Society in 1856 and its president in 1866. At once, on hearing of the disastrous battles of Shiloh Church, Pittsburgh Landing, Tennessee, Dr. Beech took the first train for the field of battle. He was made acting assistant surgeon under medical director Surgeon Murray, and assigned to the care of the Michigan and Ohio batteries of artillery. Though in feeble health he was made surgeon of the twenty-fourth regiment of Michigan Volunteer Infantry. In 1862 he was appointed one of the operating surgeons of the first brigade, first division, first army corps. In 1863 he acted as surgeon pro tem. for the same brigade, the appointment being made permanent at the opening of 1864. At the battle of Gettysburg, Dr. Beech continued work in the express office building, while the tide of battle swept through the town, leaving him and his fellow surgeons prisoners. As the enemy did not molest them, they continued operating for three days with an occasional meal. After this battle Surgeon Chamberlain, chief of the division, requested the operating surgeons to submit cases of injuries at or near the shoulder joint to Dr. Beech because of his skill and good judgment in their management. Dr. Beech was opposed to amputating in such cases because of the excellent results following resection. In February, 1865, the twenty-fourth Michigan Volunteers were sent to Camp Butler, near Springfield, Illinois. Surgeon Beech remained behind to transfer brigade supplies to his successor. On reaching Camp Butler, he found his regiment quartered in filthy barracks with no hospital accommodations, and the survivors of twenty battles rapidly sinking under the bad conditions of living. An hour later he had the ridge boards torn from the roofs and the banking boards removed from the foundations. In a few days the commandant directed Dr. Beech to inspect the entire camp and supervise making the needed improvements. This completed, Dr. Beech resumed private practice though limiting it to consultations and surgery. He was below the average size, never of robust health. He led a most strenuous life, had refined tastes, never wavered in what he regarded as duty, but was ever courteous and strong in attachment to his friends.

Dr. Beech married three times, but left no children, first, in January, 1842, Eliza C. Crownse who died in 1859; in January, 1861, Mary Jane Parry, who died June 24, 1872; and on August 26, 1875, Mrs. Sarah E. Skeels of Coldwater.

He died of acute pneumonia at his home in Coldwater, October 17, 1878.

LEARTUS CONNOR.

BELL, Agrippa Nelson (1820-1911), general practitioner and a pioneer in public health matters, was born in Northampton County, Virginia, August 3, 1820. His father was George Bell and his mother, Elizabeth Scott; he was the youngest of five sons. His ancestors, among the earliest Virginia colonists, were English and Scotch. His early education was in his native state; his father died when he was fourteen and finding work on his mother's farm distasteful, he became a clerk in a country store. Later he went to an academic school in Newtown, Connecticut, but in his second year turned his thoughts to medicine and became the private pupil of George C. Blackman (q.v.), afterwards pro-

fessor of surgery in the Medical College of Ohio. He entered the Tremont Street Medical School, Boston, under Jacob Bigelow, Oliver Wendell Holmes, Edward Reynolds and David Humphreys Storer. He took his first course of medical lectures at Harvard University, a second at Jefferson Medical College, where he graduated in 1842.

He settled in Franktown, Virginia, and in 1844 passed the examination of the naval board in Philadelphia, but did not receive his commission as assistant surgeon until 1847; in the meantime he practiced at Waterbury, Connecticut. His first naval service was on the "Saratoga," commanded by Farragut, under orders to the Gulf Squadron in the Mexican War. He was on duty throughout the war, on several vessels and in the yellow-fever hospital on Salmadina Island, near Vera Cruz. He contracted yellow-fever on board the frigate "Mississippi," and was ill for six weeks. His last sea-service was on the west coast of Africa, on board the flagship "Germantown," beginning December, 1850, lasting two years and four months. He had a brief leave, then served on the receiving ship at the Brooklyn Navy Yard; in 1854 he was promoted passed assistant surgeon. On October 30, 1855, he resigned from the Navy.

Being already a resident of Brooklyn, he began there the successful practice of medicine. The next year yellow-fever prevailed at Bay Ridge and Fort Hamilton; he worked with Elisha Harris (q.v.), physician-in-chief of the Marine Hospital, Staten Island, to aid the poor who were sick with the disease and to prevent its spread. Bell discovered the effect of steam as a disinfectant and used it on the vessels "Vixen" and "Mahones" off Tuxpan, Mexico, in 1848.

He was a member of the National Quarantine and Sanitary Conventions, 1857-1860, being chairman of the committee that formulated the report on national and international quarantine regulations, adopted by the convention in Boston, 1860. During the first year of the Civil War he was medical superintendent of the floating hospital for the care of yellow-fever in the lower bay, New York, and he drafted the law for the New York quarantine establishment and designated the site. In 1870-1873, he was supervising commissioner of quarantine, appointed by Governor Hoffman. In 1879 he was made one of the inspectors of quarantine and was assigned to the Atlantic Coast from Brunswick, Georgia, to Norfolk, Virginia; later to New Orleans and Memphis. Bell was an active member of the American Public Health Association from its beginning, and was a large contributor to its proceedings; he discussed school hygiene, sanitary inspection, epidemic diseases, disinfection, quarantine, and allied subjects. In 1872 he established "The Sanitarian," a journal in the interest of public health.

His writings include two books, "Knowledge of Little Things" (1860) and "Climatology and Mineral Waters of the United States" (1885), as well as many articles, chiefly on sanitary subjects, contributed to periodical literature. In 1864 he won the "Merrit H. Cash prize" of the New York State Medical Society; another prize essay was "The Physiological Conditions and Sanitary Requirements of School-Houses and School Life" (1887).

In 1842 Bell married Julia Ann, daughter of Arcillus and Jerusha Hamlin, of Newtown, Connecticut. They had three daughters and three sons; one son was a physician, Harry Kent Bell, of New York.

Bell died at his home in Brooklyn October 16, 1911.

BELL, John (1796-1872), Philadelphia surgeon, was born in Ireland in 1796, and died on August 19, 1872. He graduated M. D. from the University of Pennsylvania in 1817 There are not many details of his life available, but he was elected to the College of Physicians of Philadelphia in 1827; was a member of the Philadelphia Medical Society; lecturer on the institutes of medicine, Philadelphia Medical Institute; professor of the same in the Medical College of Ohio, and physician to the City Hospital.

He did some good work as a writer and editor, his first book being "A Treatise on Baths and Mineral Waters" (1831) which J. S. Billings said was the only comprehensive and respectable treatise on this subject published in this country at the time; "A History of the Chemical Composition and Medicinal Properties of the Chief Medical Springs of the United States and Canada" (1855); "A Practical Directory of Materia Medica"; "Dietetical and Medical Hydrology" and, with Dr. David Francis Condie, "A Report of the College of Physicians to the Board of Health," which contained all the material facts in the

history of epidemic cholera. He also edited "Stokes' Lectures on the Theory and Practice of Physic" and Dr. Andrew Combe's "Treatise on Children."

BELL, Luther Vose (1806-1862), Massachusetts alienist and army surgeon, was born at Francestown, N. H., December 20, 1806, a son of Samuel Bell, who filled the offices of chief justice of New Hampshire, governor, and United States senator; also he was a descendant of Scotch-Irish stock who settled the town of Londonderry, N. H.

Luther V. Bell was a great citizen in his generation. He practiced extensively as physician and surgeon in New Hampshire, becoming a pioneer in introducing a better era for the insane, as well as establishing a better legal procedure for their care and treatment in New England. He stood on a pedestal in the community in a day of great men.

When twelve years of age he entered Bowdoin College and was graduated in 1823, receiving his medical degree at Dartmouth College in 1826 and afterwards pursuing his medical studies in Europe. The degree of LL. D. was conferred upon him by Kings College, Nova Scotia, in 1844, and by Amherst College in 1855. His middle name Vose was arbitrarily acquired. He started life without even the letter V, which stood for nothing and first appeared in his name when he was at Bowdoin. The name Vose was assumed after he went to Dartmouth. He first practiced in the towns of Brunswick and Derry, New Hampshire, and in 1834 gained the Boylston prize medal for a dissertation on "The Dietetic Regimen best fitted for the Inhabitants of New England." In the following year he published an essay on the "External Exploration of Diseases" ("Library of Practical Medicine," vol. ix). He subsequently issued a small volume entitled "An Attempt to Investigate some Obscure and Undecided Doctrines in Relation to Small-pox and Varioliform Diseases." About this time, influenced by the success that had attended the establishment of the State Lunatic Hospital at Worcester, Massachusetts, he sought to ameliorate the condition of the insane in New Hampshire, and to that end entered political life as a member of the general court, placing himself at the head of a propaganda which led eventually to the establishment of the New Hampshire Asylum for the Insane. While attending his second session of the Legislature and still pressing that object, he was appointed, late in 1836, physician and superintendent of the McLean Asylum for the Insane, at Somerville, near Boston. In 1845, yielding to the solicitation of the trustees of the Butler Hospital for the Insane at Providence, Rhode Island, an institution then in contemplation, the trustees of the Asylum gave him leave of absence to visit hospitals and asylums in Europe that he might devise a plan which should embody the best-known construction of that period. The Butler Hospital stands to-day as a monument to his taste and judgment. He was especially interested in ventilation of institutions and houses and in everything relating to public health.

He was one of the founders, in 1844, of the Association of Medical Superintendents of American Institutions for the Insane, now the American Medico-Psychological Association. At a meeting of this association held in May, 1849, he read a paper "On a form of disease resembling some advanced stages of mania and fever, but so contradistinguished from any ordinarily observed or described combination of symptoms as to render it probable that it may be an overlooked and hitherto unrecorded malady." This is the malady to which his own name has been given as "Bell's Disease," which others have called typhomania, and upon the description and study of which much of his fame as an alienist rests.

He was frequently called in the courts as an expert in insanity. In 1850 he became a member of the Executive Council of Governor Briggs, serving for one year. While acting in this capacity he passed upon the famous case of Professor Webster (q.v.) of Harvard University, who was executed for the murder of Dr. George Parkman.

He experimented with the electric telegraph and it is claimed by Mr. Columbus Taylor that he was the first person to pass a communication over the wire. He was also interested in an invention for the manufacture of flax; he made a waterproof camp bed by sewing two rubber sheets together with blankets between them, "leaving one end open like a great bag, so that the sleeper could enter and repose dry and warm however damp the ground or atmosphere might be."

In 1856 he resigned the superintendency of the McLean Asylum on account of ill health, to retire to private life in Charlestown, Massachusetts; from 1857 to 1859 he served as president of the Massachusetts Medical Society; at the outbreak of the Civil War he en-

listed as surgeon of the Eleventh Regiment of Massachusetts Volunteers, and went south. He was made acting brigade surgeon, August 1861, under Hooker, who became a close friend. Later Bell was medical director of the division on the Potomac of over twenty-two medical officers and fifteen thousand men.

He died suddenly in camp at Budd's Ferry, Maryland, from pulmonary disease, February 11, 1862. His first slight hemorrhage occurred in 1855. Less than a month before his death he wrote to a friend: "'Sudley Church,' with its hundred wounded victims, will form a picture in my sick dreams so long as I live. I never have spent one night out of camp since I came into it, and a bed and myself have been practically strangers these seven months. Yet I never have had one beginning of a regret at my decision to devote what may be left of life and ability to the great cause. I have, as you know, four young motherless children. Painful as it is to leave such a charge, even in the worthiest hands, I have forced myself into reconciliation by the reflection that the great issue under the stern arbitrament of arms is, whether or not our children are to have a country. My own health and strength have amazed me. I have recalled a hundred times your remark that 'a man's lungs were the strongest part of him.' It has so proved with me. Had I another page, I would run on with a narrative of my exploits on horseback, excursions, reviews, etc., which sometimes make me question whether, in the language of our 'spiritualistic' friends, I have not left the form; and certainly I have entered on another sphere."

It has been said of Luther Bell that nature was lavish to him in physical as well as in mental gifts. He was much above the common stature, and the grace of his carriage was perhaps heightened by a certain negligence in his dress. G. Alder Blumer.

Bell, Robert (1841-1917), geologist-in-chief of the Geological Survey of Canada. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 92-93.

BELL, Theodore Stout (1807-1884), Kentucky medical editor and professor of medicine, was born of obscure parentage in Lexington, Kentucky, beginning life as a newsboy and later, after a six years apprenticeship, working as a tailor. While so doing he studied medicine and in 1832 graduated at the Transylvania University, the same year he moved to Louisville and began practice. He was largely instrumental in the creation of the Medical Institute in 1837, which afterwards became the University of Louisville. He wrote voluminously in behalf of the development of the city, and especially public improvements. He was a liberal contributor to the editorial and correspondence department of the "Louisville Journal," made famous throughout the Union by the gifted George D. Prentice. In 1838, in connection with Dr. L. P. Yandell, Sr. (q.v.), he launched the "Louisville Medical Journal," and later, 1840-41, the "Western Medical Journal." In 1857 he was made professor of the science and art of medicine and public hygiene, a position held until death.

Bell was a voracious reader on almost all subjects and his memory was phenomenal. He was accustomed to insist that for a student four hours of sleep was enough to meet the requirements of nature. In his later years, after the death of his wife, he was accustomed to keep even his bed piled with books and to read in bed late at night. He was extremely positive in his views. When once he had reached a conclusion, his convictions were so intense that it was well nigh impossible for him to find anything in a new fact that did not have to bend to his formed opinion.

In medicine he set great store by a theory he held that malaria owed its origin to vegetable decomposition with heat and moisture, and it embraced all forms of ague, bilious fever, dysentery, cholera and yellow fever. A certain definite measure of heat with vegetable decomposition produced progressively quartan, tertian and quotidian agues, then followed in order, bilious fever, dysentery, cholera and yellow fever. So plausibly did he urge this theory, that in 1852 a committee of the British Medical Association under the chairmanship of Lord Shaftesbury, sought his views on the probable date of the appearance of cholera in that year. In the yellow-fever epidemic of 1873, Bell persuaded the people of Louisville that it was impossible for yellow fever to exist in the city, and induced them to invite there all of the Southern refugees. Grateful for being led to a move so generous and popular, the citizens voted him a medal of honor, but scarcely had it been conferred, when a virulent epidemic of yellow fever broke out in the city, and only an early frost prevented disaster. Despite the assertion of his theories and his profuse invectives

in controversy, Dr. Bell was most kindly in his personal relations and full of charity and benevolence. He was passionately concerned for the welfare of the state institutions for the blind, and it was through his influence and labor as president of its board of visitors from 1871-80 that it was made one of the foremost institutions of its kind in America.

In 1861 he was made president of the Kentucky branch of the United States Sanitary Commission. It was while assisting this work at Shiloh, caring for the sick and wounded, that his wife, who was Susanne Hewitt, a woman of many charms whom he had married in 1833, contracted a sickness from which she never recovered. They had only one son, Hewitt, who died a year before his father.

Dr. Bell was strongly antagonistic to calomel. At first he was a follower of his teacher, Prof. John Esten Cooke (q.v.), the originator of the famous Cooke's pills, but having lost some of his patients in a horrible condition of salivation, he turned against mercury with all his ardent nature and afterwards sent out many a class of students sharing his aversion.

His writings included:

"On E. S. Gaillard, M. D., editor of the "Richmond and Louisville Medical Journal," professor of general pathology and pathological anatomy in the Kentucky School of Medicine"; a lecture upon the "Pre-historic Ages of Scandinavia and of the Lacustrine Dwellers of Switzerland, in Connection with the Progress of Mankind under Divine Guidance," Louisville, 1869; "A Pseudo-critic Unmasked," in a review of the writings of E. S. Gaillard, Louisville, 1869, reprinted from "Nashville Journal of Medicine and Surgery," 1869; memorial address upon "The Life and Service of Lunsford Pitts Yandell, M. D." Louisville, Kentucky, 1878.

D. T. Smith.

Bellinger, John (1804-1860), of Charleston, S. C., who did a hysteromyomectomy in 1846. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 94.

BELLISLE, Henry (1675-1717), was the first physician at Detroit Post under the French flag. Nothing is known of his ancestry or exact date of birth except that he was born in France and received such general and professional education as would induce the French government to place him in Cadillac's expedition to found Detroit. In the records of St. Anne's Church in Detroit he first appears as godfather at the baptism of a daughter of Margaret Roy, a Huron Indian, April 27, 1704. From that date till April 4, 1711, he is occasionally recorded as godfather at baptisms or witness at marriages and then he disappears from the records. It is quite likely that in 1715 he was transferred to another French military post, for his successor appears first in the church records of that year. While we have no definite information of his equipment for practice he must have ranked above the average of the profession in France.

Dr. Bellisle was married three times, once before coming to Detroit, once in Detroit, and once at Pointe aux Trembles, Quebec. His second wife died in Detroit. Three children were born after leaving Detroit.

Leartus Connor.

BELT, Edward Oliver (1861-1906), ophthalmologist of Washington, D. C., was born May 19, 1861, at Rock Hall, near Dickerson, Frederick County, Maryland, the son of John Lloyd and Sarah Elenora McGill Belt. His father was a farmer. The Hon. William Burgess, an ancester, had brought a colony to Maryland and founded the town of South River. He attended public schools and Frederick College, Maryland, and studied medicine with his brother, Dr. Alfred M. Belt, of Baltimore, attending three sessions at the University of Maryland School of Medicine, Baltimore, taking his M. D. there in 1886. He practiced medicine a few months in Frederick County, then for two years was resident physician, Presbyterian Eye, Ear and Throat Hospital, Baltimore. Afterwards he studied ophthalmology and otology at the University of Vienna and in hospitals of Paris, Berlin and London, next taking a post-graduate course in histology and pathology at Johns Hopkins University, Baltimore, and acting as visiting surgeon. In October, 1889, he removed to Washington and practiced his specialty and married, on May 18, 1899, Miss Emily Walker Norvel.

Belt was the originator and one of the organizers of the Episcopal Eye, Ear and Throat Hospital, Washington, and was surgeon and executive officer there; also ophthalmologist and otologist, Freedmen's Hospital, District of Columbia, and consulting ophthalmologist to the City and Emergency Hospital at Frederick, Maryland. He was professor of ophthalmology and otology at Howard Medical School, District of Columbia. He was presi-

dent of the Society of Ophthalmology and Otology, Washington; surgeon, Episcopal Eye, Ear and Throat Hospital, Washington, and published in the medical journals many papers upon his specialty.

Dr. Belt, with his two sons, aged six and seven years, lost their lives in the railroad wreck at Terra Cotta, District of Columbia, December 30, 1906. DANIEL SMITH LAMB.

Bennett, Sanford Fillmore (1836-1898), editor, song writer, author of "The Sweet Bye and Bye." See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 95.

Benneville, George de (1703-1793), of Oley, Berks County, Pennsylvania. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 95.

BERNAYS, Augustus Charles (1854-1907), was born at Highland, Ill., October 13, 1854. He was graduated at McKendree College in 1872 and took his M. D. at Heidelberg, Germany in 1876. After visiting European hospitals for two years he settled in St. Louis in 1878 and was appointed professor of anatomy in the St. Louis College of Physicians and surgeons (1883).

It was his original investigations on the anatomy of the knee-joint and of the heart which first made his name familiar. Bernays was a pioneer in the United States in antiseptic surgery. He held membership in the Western Surgical and Gynecological Association, Mississippi Valley Medical Association, a life member of the German Society for Surgery. He was chief surgeon of the Lutheran Hospital and consulting surgeon of the Frisco System. His papers included: "Ideal Cholecystotomy, a successful case; with critical remarks on the pathology and the different operative procedures practiced on the system of gall vessels," 1885; "Kolpohysterectomy; successful cases of total extirpation of the uterus through the vagina," 1885; "A Case of Cystic Tumor of the Jaw in a Negro, and some new observations on the pathological histology of this disease," 1885; "The Complete Method of Operation in Cases of Cancer of the Breast," 1885.

He died May 22, 1907, at the age of fifty-two, from the rupture of a cardiac aneurysm. He was endowed with an intuitive diagnostic ability which was at times termed by those near him almost a gift of second sight.

Best, Robert (1790-1830), curator of the Western Museum of Cincinnati and an early practitioner of Lexington, Ky. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 96.

BETTMAN, Boerne (1856-1906), ophthalmologist of Chicago, known specially as an operator, was born at Cincinnati, Ohio, Sept. 6, 1856, of Bavarian parents. His father, a general practitioner, was a graduate of the University of Munich, in 1836. Dr. Boerne Bettman, after a three-year course of study, under the preceptorship of his father, in the Miami Medical College, received his medical degree in 1877. He was then assistant, for a short time, to Dr. Elkanah Williams (q.v.), the first professor of ophthalmology in the United States. Proceeding to New York, he studied for a time in the laboratory of Dr. Heitzman, and then for a year and a half was assistant to Dr. Herman Knapp (q.v.). For the next three years he studied in Europe. In Vienna, his teachers were Arlt, Stellwag, Jaeger, Mauthner, Fuchs, Politzer, Gruber and Storch. At Heidelberg, in 1879, he became the second assistant to Dr. Otto Becker. Later, he was made Becker's first assistant.

In 1887 he returned to America, and, settling in Chicago, was almost immediately successful. He was the first lecturer in ophthalmology and otology in the College of Physicians and Surgeons of Chicago. This position he resigned, however, in 1883. He founded the Chicago Society of Ophthalmology and Otology, and assisted at the organization of the Chicago Medico-Legal Society. In 1892 he was made professor of ophthalmology and otology in the Chicago College of Physicians and Surgeons—a position which he held till nearly the time of his death. He was also, for a while, professor of ophthalmology and otology in the Chicago Post-Graduate Medical School. He served, moreover, as oculist and aurist to many of the Chicago hospitals.

Among his publications are the following: "The Operative Treatment of Episcleritis," "Weekly Med. Rev.," Mar. 17, 1883; "Aural and Nasal Surgery," "Jour. Amer. Med. Asso.", Nov. 10, 1884; "Ocular Troubles of Nasal Origin," "Jour. Amer. Med. Asso.", Jan. 17, 1887; "Traumatic Iridodyalyses," "No. Amer. Practitioner," Dec. 1890; "Dislocation of Lens into Anterior Chamber," "Chicago Med. Record," June, 1891.

Dr. Bettman was a brilliant operator, and many are the stories of his skill and dexterity.

Thus, having introduced his cataract knife with the edge turned downward, instead of up, he quickly "flopped" his blade, without withdrawing (as Knapp himself once did) nor lost a drop of aqueous. He was quick and active in his manner, sometimes abrupt, but really kind at heart. Like all true Jews, he was a patriot, and he loved to talk about the history of his country. He served as assistant surgeon, with the rank of captain, in the second regiment of the Illinois National Guard. He died a lingering and very painful death, but bore his sufferings bravely.

He passed away, May 25, 1906, at Chicago, aged only 50 years. Into that brief period, however, he had crowded the work of a century.

THOMAS HALL SHASTID.

BEYER, Henry Bustav (1850-1918). Rear Admiral Henry Gustav Beyer, Medical Director, U. S. Navy retired, aged 68, died at his home in Washington, December 10, 1918. Dr. Beyer was born in Saxony, Germany, October 28, 1850, received his preliminary education and took a course in pharmacy in Germany and then entered Bellevue Hospital Medical College, from which he was graduated in 1876. He received the M. R. C. S. degree in London in 1881 and was given the degree of Ph.D. by Johns Hopkins University in 1887. He entered the Navy as assistant surgeon, immediately on graduation, was made passed assistant surgeon in 1880, surgeon in 1893, medical inspector in 1905 and medical director in 1910 and rear admiral, February 27, 1911, and was retired on attaining the age of 62 years, October 28, 1912.

Dr. Beyer was married in 1880 to Harriet W. Wescott, of Portland, Maine. They had two sons. She died in 1891.

During his 36 years of service in the Navy he had twelve years and ten months of sea service, and three years on special duty at the Smithsonian Institution, Washington, and was on special duty in Washington for two years. He was professor of hygiene in the Naval Medical School, Washington, from 1904 to 1912 and was also lecturer on naval hygiene in the War College, Newport, Rhode Island. He was a member of the Association of Military Surgeons of the United States, National Society for the Study and Prevention of Tuberculosis, American Public Health Association and American Association of Pathologists and Bacteriologists, and was a prolific contributor to medicomilitary literature.

Dr. Beyer wrote frequently for the "Military Surgeon" and the "U. S. Naval Medical Bulletin." His linguistic ability lead to his being called upon often by these publications for reviews and translations of foreign scientific publications. He contributed the chapter on Food in the "Handbook of Hygiene for Men of War" edited by Verth, Bentmann, Dirksen and Ruge and published at Jena, 1914.

Dr. Beyer was a man of very marked and striking personality. His German birth and training predisposed him to the accurate and painstaking methods essential for scientific research and he had in addition an enormous capacity for work and a vitalizing enthusiasm for the subjects in which he was most interested—hygiene and sanitation. Beneath a natural stiff formal manner, accentuated by military life, there was a heart of infinite kindness which responded to every appeal.

The last four years of his life were saddened by the conflict raging between his native land and the land of his adoption and he became more and more reserved, shrinking into himself like one overpowered by emotions too complex and stirring to be put into words. One cannot help feeling that his marked depression of spirits contributed in a measure to his death which may be reckoned as one more of those indirect misfortunes attributable to the attack of Germany on the world.

WILLIAM C. BRAISTED.

BIDDLE, John Barclay (1815-1879), eminent practitioner and author of a widely used treatise on materia medica, was born in Philadelphia, January 3, 1815. He was the eldest son of Colonel Clement C. Biddle, in the military and naval service of the United States, and Mary, daughter of John Barclay. His ancestor, William Biddle, emigrated to America before William Penn. When fourteen years old, Biddle went to St. Mary's College, Baltimore, remaining there four years, becoming proficient in French and Spanish. After graduating he began to study law but soon gave it up for medicine, entering the office of Nathaniel Chapman (q.v.), a connection by marriage. He was in the University of Pennsylvania when the professors there were Chapman, Dorsey, Wood, Physick and Jackson; he graduated in 1836, after which he studied in Paris. Returning home, his first work was to start, with Meredith Clymer, the publication of "The Medical Examiner," the initial number of which appear-

ed January 3, 1838; this journal continued until 1844, when it was merged in the "North American Medico-Chirurgical Review." Biddle was successful as editor and made a feature of reporting the clinical lectures of the attending physicians and surgeons in the Philadelphia hospitals. In the autumn of 1838 W. W. Gerhard (q.v.) and, later, Francis Gurney Smith (q.v.) joined the editorial staff.

In 1846 Biddle was associated with Joseph Leidy and other young physicians in establishing the Franklin Medical College of Philadelphia; situated on Locust Street, near Twelfth, which did not exist long, although many of its faculty became eminent physicians. He held the chair of materia medica in the Pennsylvania Medical College, a branch of Gettysburg College, and in 1865 was elected to the chair of materia medica and general therapeutics in Jefferson Medical College, to succeed Thomas D. Mitchell (q.v.), a position he held until his death.

He was dean of the faculty and in this office was asked by a young woman from the West for enrollment as a student. Her request was refused, and he gave the incident publicity in his introductory lecture to his class in 1873. He declared that women entering medicine "must be willing to subordinate love and marriage to the stern requirements of the most exacting of avocations; . . . if they come into the arena, they must come as equals. . . . We would spare them the contest . . . . because we know, that, whatever their talent, ... the inferiority of a feebler and more delicate physical organization is insurmountable. . . . . The cry for new rights is loud, but it comes from the few— . . . The clatter of all the female men in the world cannot alter the laws of nature."

Biddle's work, "Review of the Materia Medica for the Use of Students," appeared in 1852, a volume of 300 pages; a second edition was published in 1865, "revised and enlarged and adapted to the last edition of the U. S. Pharmacopoeia;" the title was now "Materia Medica for the Use of Students;" and thus it remained; the eighth edition, of 462 pages, appeared in 1878.

In 1850 he married Caroline, the youngest of six daughters of William Phillips, of Philadelphia. They had four daughters and two sons, one, Clement, became a surgeon in the United States Army, the other, William Phillips, major general U. S. M. C.

Biddle went abroad in the summer of 1878, returning to take up his work in Jefferson, but was in ill health and so continued until his death, January 19, 1879, caused by an unrecognized appendicitis, as evidenced by autopsy.

HOWARD A. KELLY.

BIGELOW, Henry Jacob (1818-1890), the leading surgeon of New England during his lifetime, known chiefly for his demonstration of the Y ligament of the capsule of the hip joint and for devising a method of crushing stone in the bladder and evacuating the fragments at one operation, (litholapaxy,) was born in Boston, March 11, 1818, the son of the eminent Dr. Jacob Bigelow (q.v.), first professor of materia medica in Harvard Medical School, and of Mary Scollay Bigelow. From his father he inherited great physical and mental vigor and from his mother strength of character and capacity for work. At an early age he showed remarkable ingenuity in mechanics and a fertility in inventiveness which remained with him throughout life. He took an A. B. at Harvard college in 1837 and soon made up his mind to study medicine and to be a surgeon, the decision showing a characteristic self-willed trait, for when remonstrated with because he was not following in the footsteps of his father he said: "I'll be damned if I won't be a surgeon." After studying with his father and attending the lectures of Oliver Wendell Holmes (q.v.) at Dartmouth he was appointed house officer at the Massachusetts General Hospital, an institution he was destined to dominate as surgeon for most of his lifetime. Developing pulmonary symptoms Bigelow was sent to Cuba and to Paris, where he pursued his medical studies, finally taking his M. D. from Harvard in 1841 and finishing his medical training in Paris and London. Returning to his native city he soon became a marked man in medical circles, with his dashing French cabriolet, his horses in gaily monogrammed harness, his handsome and fashionable personal appearance, and his private clinic called a "Charitable Surgical Institution." By offering service to the poor by means of signboards and circulars distributed among country practitioners, he challenged attention besides exciting jealousy and criticism. He had purchased several thousand dollars worth of instruments while abroad and was constantly adding to his collection; always inventing and adapting older models to new uses.

Bigelow was one of the pioneers in the

study of surgical pathology, being one of the earliest microscopists in the country; his treatise on orthopedic surgery, published in 1844, won for him the Boylston prize for that year. He was appointed an instructor in the short-lived Tremont Street Medical School in 1845 and the next year became visiting surgeon to the Massachusetts General Hospital, then recently enlarged. Here on October 16, 1846 he witnessed the first use of ether in surgical anesthesia, Dr. J. C. Warren operating. Bigelow was a strong advocate of the anesthetic from that time; he studied the drug with W. T. G. Morton, administered it himself and procured opportunities for Morton to give it, besides sending out the first written account of the discovery to the medical profession here and abroad.

He was elected professor of surgery in Harvard in 1849, holding the position until 1882 when he was made professor emeritus. An especially good teacher he was terse, epigrammatic and clear, avoiding unessentials, and being an accomplished draughtsman he held the attention of his students. In the amphitheater of the hospital buttoned into the regulation frock coat, an impressive figure, he was a brilliant operator, fearless, full of expedients, ingenious, dexterous, cool, alert. His dramatic style impressed all observers.

In 1852 Bigelow excised the hip joint for the first time in America ("American Journal of the Medical Sciences." Phila. 1852 xxxiv, p. 90). This operation called his attention especially to the hip joint. The previous year W. W. Reid (q.v.) of Rochester, N. Y., had published in the "Boston Medical and Surgical Journal" a method of reducing dorsal dislocations of the hip joint without the aid of traction and pulleys, the English plan which was then in vogue, and had made a partial explanation why flexion of the leg on the thigh and flexion of the thigh on the abdomen with adduction and rotation of the limb was the proper way to replace the head of the femur in its socket. Bigelow completed the explanation in 1861, when he demonstrated the accessory Y-ligament of the capsular ligament of the hip joint, in a paper read before the Boston Society for Medical Improvement, supplementing it by papers presented to the Massachusetts Medical Society and to the American Medical Association a few years later. Finally he published in 1869 a volume entitled: "Mechanism of Dislocations and Fractures of the Hip, with the Reduction of the Dislocation by the Flexion Method." Bigelow and his pupils and assistants had furnished the profession with a classic treatise.

Investigating the operation of crushing stone in the bladder, as practised in England and on the Continent, he became convinced that the urethra could be dilated sufficiently, without damage, to employ "an evacuator which would evacuate", as he expressed it, thereby emptying the bladder of the fragments of stone at the same sitting when the stone had been crushed, and not, as formerly, leaving them to produce severe cystitis, and to be washed out one at a time. For three years he labored in experimenting, devising instruments, improving them and finally perfecting them until he had a proper lithotrite and an evacuator. His results were set forth in an article with the title: "Rapid Lithotrity with Evacuation", published in the "American Journal of the Medical Sciences" for January, 1878, and also in an essay printed in the same year, called: "Lithotrity by a Single Operation." He demonstrated his method of performing "litholapaxy", as he named the operation, before the International Medical Congress in London, in 1881 by means of an artificial bladder, carrying conviction to all that the operation was a sound one.

Bigelow's writings and teachings on reduction of hip dislocation and on litholapaxy were widely known and quoted, helping to popularize in the profession these valuable surgical procedures. They marked the zenith of his fame.

Charles W. Eliot became president of Harvard University in 1869. He took an active interest in the medical school and proposed to introduce certain changes and progressive policies, acting by virtue of his office, as head of the faculty of medicine, as well as of the other parts of the university. Bigelow, who had been the Czar of medicine in Boston for twenty years and was chairman of the medical faculty, fought bitterly. "His character showed a union of extraordinary versatility and inventiveness with dogmatism, intolerance, and lack of both progressiveness and breadth of view." President Eliot, in his annual report for the University in 1882, commented thus on Bigelow, who had resigned as professor in that year: "a clear and forcible lecturer, a keen debater, and a natural leader of men, by force of activity, ingenuity and originality". We find Bigelow opposed

to allowing the visiting staff of his hospital treating their private patients in the hospital and accepting fees, thus laying the foundations for the future abuse of medical charity in Boston; also he was opposed to coeducation in the medical school, and also to vivisection.

In personal appearance he was tall and erect, his elastic step betraying a nervous organization. He had well-moulded features which were unobscured even by a full beard and his agreeable voice and manner always attracted attention. He was interested in music and art, and was one of the first trustees of the Boston Museum of Fine Arts. Having gradually retired from practice his last two years were spent at his country place, Oak Hill, Newton, where while driving, he was thrown from his carriage, receiving a blow on the head that was followed by a long illness. There he died, October 30, 1890, from a non-malignant stenosis of the pyloric orifice of the stomach, as verified by autopsy.

Dr. Bigelow was married in 1847 to Susan, daughter of the Hon. William Sturgis. She died on June 9, 1853. One son, Dr. William Sturgis Bigelow, of Boston, survived his parents. He died in 1926, unmarried, a patron of the medical profession and especially of Japanese art, of which he left an unusual collection to the Boston Art Museum.

WALTER L. BURRAGE.

BIGELOW, Jacob (1787-1879), of Boston, was a great educational reformer, and one of America's most learned botanists. He was of New England ancestry, his people coming over about 1640 and settling in Watertown, Massachusetts. Jacob was the son of Jacob Bigelow, congregational minister, and graduate of Harvard, who married a daughter of one Gershom Flagg. Jacob the younger was born on the twenty-seventh of February, 1787, in that part of Watertown which is now Waltham and his childhood was passed in the country at farm-work, with scanty schooling. His father managed to send him to Harvard where he graduated in 1806, and in 1808 attended the medical lectures there while acting as pupil under Dr. John Gorham (q.v.) and teaching in the Boston Latin School. Then he went to Philadelphia for the lectures of Rush, Wistar, Barton, and Coxe and the doctor's degree from the University of Pennsylvania in 1810. To bring himself early before the professional public he took to writing and secured the Boylston prize during four successive years. So promising seemed his career that the elder James Jackson (q.v.) chose him as associate in practice. He was a born artist, craftsman, and inventor. When occasion came for illustrating his "Medical Botany" (1817-20) with engravings, before photography or lithographing were invented, he devised a means of illustration which proved both practical and beautiful and furnished sixty plates and 6,000 colored engravings for this monumental and now rare work. He speaks laughingly of his first lesson in botany given when as a little boy he asked a learned gentleman the name of the plant "Star of Bethlehem." "That? Why that's grass, you little fool." When he wished for drawings and models for his lectures as Rumford professor he knew how to make them. In 1812 his interest in the study of botany led him to give a course of public lectures in Boston.

Botany was his great hobby, and "Florula Bostoniensis" (1814) was a charming book well known at the time. In 1815 he was appointed lecturer on materia medica and botany at Harvard and two years later when he was thirty they changed his title to professor. Then, too, as first Rumford professor, it is pleasant to believe that Rumford left behind him in his native state a young disciple who fulfilled all his desires. The work which brought Bigelow into closest contact with European savants and gave him honor in his own country was the elaborate series published under the title "American Medical Botany," which, for finish and beauty and avoidance of technical terms, makes it desirable to-day. In 1820, when thirty-three, he was associated with Spalding, Hewson, Ives and Butts in editing the "United States Pharmacopœia." He followed up this labor by adding "Bigelow's Sequel," a perspicuous commentary on current remedies.

When the great cholera epidemic of 1832 in New York carried off some 3,000 victims, Boston's death roll numbered only one hundred owing to the authorities being wise enough to adopt the stringent sanitary precautions urged by Bigelow, who, with Ware and Flint, (q.v.) offered his services as investigator of the conditions in New York.

Bigelow at middle age was visiting physician to the Massachusetts General Hospital, professor of materia medica at Harvard, had an enormous consulting practice, and wrote frequently for the press and keenly worked for reform in the practice of medicine. Bige-

low had a clear vision and for many years, in season and out of season, demonstrated the self-limited character of disease. In 1835, when he read the annual discourse entitled "Self-limited Diseases" before the Massachusetts Medical Society, the effect it produced was profound. Dr. O. W. Holmes said, "this remarkable essay had more influence on medical practice in America than any other similar brief treatise." This paper was published separately in 1834 and is bound up in a little volume entitled "Nature in Disease and Other Writings," 1854.

His educational pamphlets caused widespread discussion at home and abroad. Lecky wrote a strong letter of dissent, but Lyell, Huxley and Spencer were vigorous in commendation. The Massachusetts Institute of Technology with its splendid curriculum and strong staff is a monument, in part at least, to his untiring energy.

In 1817 he married Mary, daughter of Col. William Scollay of Boston and they had five children, one son, Henry J. (q.v.), becoming the noted surgeon in Boston. He was blind at the last for nearly five years; bed-ridden, but with mind undimmed at ninety-two. "His religion, not for speech, discussion or profession, was that of a serious man living very near the realities of life!" Unforgotten to the end, though long inactive, he died January 10, 1879, and was buried in the beautiful Mount Auburn Cemetery, which he himself had originated.

BIGGS, Herman Michael (1859-1923), of New York, well-known administrator of public health, was born at Trumansburg, New York, September 29, 1859, the son of Joseph Hunt and Melissa Pratt Biggs. He was graduated in arts from Cornell in 1882 and in medicine from the Bellevue Hospital Medical College in 1883, and after serving as interne in the Bellevue Hospital during 1883-84, continued his studies at the University of Berlin and at Greifswald. The LL. D. was given him for distinguished merit by the New York University in 1910, by Rochester University in 1917, and by Harvard in 1920. Upon returning to New York, Biggs became the first director of the Carnegie Laboratories and was subsequently sent to Paris to study the treatment of rabies in the Pasteur Institute. He occupied successively the posts of assistant pathologist and pathologist in Bellevue Hospital (1886-99), lecturer and professor of pathological anatomy, (1885-94), professor of therapeutics and clinical medicine, (1897-1907), associate professor of medicine, (1907-1914), and professor of medicine from 1914 In 1892, he established the first municipal bacteriological laboratory in the New York City Health Department, in which through his efforts was begun the manufacture of diphtheria anti-toxin. Free distribution was established in 1895. One of his greatest achievements was the fruition of plans for the prevention of tuberculosis in New York City, which included compulsory notification, free examination of sputum, visiting of cases by nurses, and compulsory segregation of refractory cases. In 1904, he was appointed general medical officer and in 1914, state commissioner of health. It was mainly through his work that New York became the greatest administrative health center in the world. In 1913, he became chairman of the New York Public Health Commission for the revision of the public health laws of New York state.

He was a fellow of the New York Academy of Medicine and the New York Pathological Society, and honorary fellow of the Sanitary Institute of Great Britain. In 1906-07, he was president of the National Association for prevention of tuberculosis and in 1919-23, of the American Social Hygiene Association. He also served as director on the boards of national and state organizations for the promotion of public health. During the World War, he acted on several medical commissions. He was medical director of the General League of Red Cross Societies, Geneva, 1920. The king of Spain knighted him for distinguished service in preventive medicine.

Dr. Biggs possessed wonderful constructive vision for public health achievements. His thorough knowledge of the science of medicine and bacteriology enabled him quickly to recognize the value of scientific discoveries and to provide for their immediate practical application. Fully realizing the difficulties of creating laws in advance of public opinion, he sought rather to foster favorable public sentiment than to jeopardize principles by forcing issues. Adverse criticism never disturbed him, unless it threatened to frustrate plans. His obvious sincerity of purpose and cogent logic often converted his opponents. His trusted subordinates enjoyed great liberty of action and were unhampered by instructions in details; constructive ideas and results were what he demanded. His personal dignity and high purpose characterized his whole staff, and he ever taught

us that the true disciple of public health must seek his supreme reward in satisfaction in work well done and results accomplished.

Dr. Biggs married Frances M. Richardson, August 18, 1898. He died of pneumonia June 28, 1923. As a memorial to her husband Mrs. Biggs has given to the New York Tuberculosis Association funds to establish an annual lectureship on tuberculosis.

FREDERICK W. SEARS.

BILLINGS, John Shaw (1838-1913). The family of John Shaw Billings is of Scandinavian origin and came from England to Massachusetts in the first half of the 17th century. About 1835 James Billings, his father, removed from Massachusetts to Switzerland County, Indiana, which was at that time still a sparsely settled pioneer region. Here John Shaw Billings was born April 12, 1838. He spent his early life on the farm and attended the country schools of those rugged pioneer days. He very early showed an uncommonly active and intelligent mind; he had an exceptional memory and was an omnivorous reader. When he grew older he studied Latin, Greek and geometry under a clergyman, Mr. Bonham, who was struck by the extraordinary brightness of the boy and who, much later says of him: "He recited lessons in Latin and Greek, so long that no average pupil could have learned them. He had a marvelous memory. I never met his equal!" Young Billings was soon so proficient that, in 1852, he could pass the entrance examination to Miami University. Here he spent five years of hard study. From the testimony of his teachers we know that he was a student of exceptional ability. One of them, Charles Elliot, Professor of Greek, describes him as "a young man of very superior talents and extensive acquirements," and he adds: "I have observed, moreover, that he possesses great facility in communicating what he knows." Yet Billings' college life was one great struggle with privations for he had to rely entirely on himself for his means of subsistence. But this hard school steeled his naturally strong mind for the arduous course of his later life. Billings graduated from this school with the degree of A. B. in 1857 and in the following year commenced the study of medicine at the Medical College of Ohio at Cincinnati. This school, founded by the celebrated Daniel Drake in 1819, enjoyed a well-merited reputation throughout the West. It laid great stress on practical teaching, and the hospital experience Billings received here served him in good stead in his subsequent career. He says himself: "I practically lived in the dissecting-room and in the clinics, and the very first lecture I ever heard was a clinical lecture." Billings graduated as doctor of medicine in 1860. The subject of his thesis was "The Surgical Treatment of Epilepsy," published in the "Cincinnati Lancet and Observer" of 1861. Already this early treatise bears the marks of his independent and original mind. His teachers held such a high opinion of him that, after his brilliant graduation, he was at once appointed demonstrator of anatomy in the institution. But soon after the Civil War broke out and young Billings did not hesitate a moment in offering his services to the Union cause. He passed first on the list of candidates before the Medical Examining Board of the Army and was duly commissioned first lieutenant and assistant surgeon. For more than a year he served in the military hospitals of Washington and for some months at the United States General Hospital at West Philadelphia.

On March 31, 1863, Billings was transferred to the field service and assigned to the 5th Corps of the Army of the Potomac. A month later the disastrous battle of Chancellorsville was fought, where he showed his superior qualities as surgeon and executive officer. He then followed the army to the north and was present at the bloody battle of Gettysburg. Billings was a very skilful surgeon and the most difficult operations were turned over to him. He was the first surgeon in America to perform the rare operation of excision of the ankle joint. But the work was so arduous and the strain so great that even an iron nature like Billings' felt its effects. In September, 1863, he was transferred to McDougall General Hospital at Fort Schuyler, New York Harbor, and soon after to the Convalescent Hospital on Bedloe's Island. In March, 1864, he was again assigned to the Army of the Potomac, then under General Grant. He was present at all the sanguinary battles that preceded the siege of Richmond. His note book, published for the most part in Dr. Garrison's Biography, gives a vivid picture of those stirring days.

On August 22, 1864, Billings was assigned to the office of the Medical Director of the Army of the Potomac at Washington, where he drew up the field reports which now form a part of the "Medical and Surgical History

of the War." In December of the same year he was transferred to the Surgeon General's Office, where he was to remain for more than thirty years. It was in this position that he accomplished the most important work of his life. "Billings," says his biographer, Dr. Garrison, "achieved excellence and gained distinction in no less than six different fields, in military and public hygiene, in hospital construction and sanitary engineering, in vital and medical statistics, in medical bibliography and history, in the advancement of medical education and the condition of medicine in the United States and as civil administrator of unique ability."

In 1869, Billings was detailed by the Secretary of the Treasury to inspect the Marine Hospital Service which was then in a deplorable condition. It was due to his efforts that this branch of governmental activity which, under the new name of Public Health Service, is now doing such splendid work, was completely reorganized. Of far-reaching importance were the reports which Billings made on the military hospitals of the United States. These reports, known as Circular No. 4 and Circular No. 8, expose with unsparing criticism the deficiencies and the wretched condition of these establishments and are full of new and advanced ideas on hospital construction and management.

During his stay in the Surgeon General's Office Billings was the leading authority on public hygiene in this country. He wrote numerous articles on this subject and his advice was sought and valued everywhere. Billings was among the five men who in 1876, were invited by the Board of the Johns Hopkins Hospital Foundation to submit plans for the new hospital, and his plan was selected as the best one. It marked a new departure in hospital construction and when the hospital was completed it was the most perfect and best equipped institution of its time. Billings also planned the Barnes Hospital at the Soldiers' Home and the Army Medical Museum in Washington, D. C. (1887), the Laboratory of Hygiene (1892), the William Pepper Laboratory of Clinical Medicine in Philadelphia (1911), and the Peter Bent Brigham Hospital in Boston (1913).

Of inestimable value is Billings' work as a statistician. He may be called the father of medical and vital statistics in this country. It was on his advice that medical statistics were included in the United States Census of 1880. He himself took an active part in drawing up the vital statistics for the tenth, eleventh and twelfth Census.

Billings' most important work, one which will perpetuate his name in the history of medicine, is the creation of the Surgeon General's Library and the publication of the great Medical Index Catalogue. Being a man who delved deep in medical literature, he very early felt the want of a great reference work which would guide writers on medical subjects in the literature of the past. His position in the Surgeon General's Office enabled him to carry out this favorite wish of his student days. But in order to publish a medical catalogue he had first to establish a library. The small stock of books which was on hand in the Surgeon General's office at the close of the Civil War was gradually enlarged. Billings worked with such earnestness that already in 1876 he had collected 40,000 volumes and a like number of pamphlets. In 1880 he obtained the necessary appropriation from Congress and commenced the publication of the first series of the catalogue. It was completed in 16 volumes in 1895, the year of his retirement from the army. The work was continued under Dr. Robert Fletcher (q.v.) and later under Dr. F. H. Garrison. The second series, in 21 volumes, was completed in 1916.

With this work Billings takes easily the first place in medical bibliography; he is "the prince of medical bibliographers," as Sir Thomas Barlow called him at the International Congress of London. The catalogue was Billings' life work, his love and his pride. Its successful accomplishment was due to him alone. He laid out the general plan and supervised every detail, and after he left the Surgeon General's Office his interest in this great work never ceased, and during all his later life he remained in constant touch with it. Simultaneously with the catalogue Billings published the "Index Medicus," a monthly bibliography of medical literature. This publication was taken over, in 1902, by the Carnegie Institution and has appeared under the able editorship of Dr. Garrison.

During his arduous work in the Library at Washington Billings found time to write numerous articles and treatises, and whatever he wrote bears the marks of his originality and shows the brilliancy of his strong and versatile mind. With fondness he delved in the past of American medicine, and his writings on the history of medicine in the United

States belong to the best that have appeared in this field. No man knew better than he the shortcomings of medical education in this country. In lectures and writings he unceasingly advocated higher standards in medical education, and the great advances in this field are in no small part due to his caustic criticisms. Billings made a number of trips to Europe in the interest of the library. He met most of the noted medical men of England, France and Germany and gained their lasting friendship. In 1881 he made a notable address before the International Medical Congress at London on "Our Medical Literature." The witty humor and the caustic criticism with which he surveyed the medical literary activity of the time attracted general attention.

When Billings was retired from the army at his own request in 1895, he, for a short time, filled the chair of hygiene at the University of Pennsylvania. But a greater field of activity was soon to open for him. In 1896 he was appointed Director of the New York Public Library. In this position, which he held until his death, he performed the difficult task of consolidating the three great libraries of the Astor, Lenox and Tilden Foundations. Billings, with his unsurpassed executive ability, brought order out of chaos, and today the New York Public Library, with its more than two million volumes and fifty branch libraries, is without its equal anywhere. Billings also laid out the plan for the new building of the great library, which is now one of the ornaments of the American metropolis.

The cares of this work and the ceaseless toil gradually began to wear down his iron constitution. After a brief illness he died in New York March 11, 1913. His body was buried at Arlington, near Washington, in the presence of innumerable friends and admirers.

Besides a great number of articles and treatises published in the various medical journals, Billings wrote the following books: "The Principles of Ventilation and Heating and Their Practical Application" (1884); "Report on the Mortality and Vital Statistics of the United States as Returned by the Tenth Census" (1885); "Description of the Johns Hopkins Hospital" (1890); "The National Medical Dictionary" (1890); "Ventilation and Heating" (1893); "The History of Surgery" (1895); "Report on the Local Statistics of the Eleventh Census" (1895), and "Vital Statistics of Boston and Philadelphia" (1895).

Billings was married to Miss Kate M. Stevens in 1862, who was to him a loving and faithful helpmate in his laborious life. He left one son, Dr. John S. Billings, and four daughters.

In personal appearance Dr. Billings was tall and commanding. His handsome features bore the marks of a strong mind with unlimited will power. He was kind and sympathetic in personal intercourse, always disposed to bantering jokes. His was a frank and open nature, a true and honest Westerner who hated shams and empty pretensions. During his long and toilsome career numerous honors were showered upon him. He received honorary degrees from the universities of Edinburgh, Oxford, Dublin, Munich, Budapest, Harvard, Yale and Johns Hopkins, and was a member of numerous medical and scientific societies.

A full account of the life and work of Dr. Billings is given in a memorial volume by Dr. F. H. Garrison, who was his friend and assistant in the Surgeon General's Library for many years. Dr. Garrison's book, the fruit of laborious research, is an able and well-merited tribute to the great man. The present sketch is largely based on this work.

A. ALLEMANN.

Bird, Robert Montgomery (1803-1854), novelist and editor of Philadelphia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 104.

Bishop, Galen E. (——1899), of St. Joseph, Mo. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912. I. page 83.

BISSELL, Joseph Bidlemann (1859-1918), was born in Lakeville, Connecticut, September 3, 1859. He was graduated from Yale in 1879 and took his M. D. at the College of Physicians and Surgeons, New York, in 1883, and after an internship in the Charity Hospital on Blackwell's Island, studied in Vienna and Munich. Returning to New York, he engaged in surgical practice, associated with L. Bolton Bangs (q.v.) He held the position of visiting surgeon to Bellevue Hospital for twenty years and at the time of his death was surgical director of its fourth division. He was also visiting physician at St. Vincent's Hospital for twenty-one years prior to his death and professor of clinical surgery in the Bellevue Hospital Medical College of the New York University. In 1889, he was in-

structor in surgery in the New York Polyclinic School and Hospital. During the World War, he went to England to cooperate in the study of the effect of radium on infected wounds; upon his return he volunteered and was made major. On December 21, 1918, he died from blood poisoning contracted in the course of duty at Fort McHenry.

Dr. Bissell began writing upon Talipes equino-varus in 1888. From that time to 1917 he published some twenty-five papers on a variety of surgical topics, including genito-urinary affections, cancer, fractures, tumors of the breast. His work tying him more closely to the next generation was an early active interest in radium which he used at the Bellevue Hospital for some eight years before his death. He wrote on cancer and radium (Intern. Jour. of Surgery, 1914), on bone sarcoma treated by radium (N. Y. Med. Jour., 1916), and on the medico-legal aspect of radium therapy (Med. Rec., 1888). He was president of the American Radium Society in 1918. He left a well-equipped sanatorium in New York City for radium treatments.

Black, Green Vardiman (1836-1914), dean of the dental department of the Northwestern University, inventor of the cord transmission dental engine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 104.

BLACK, John Janvier (1837-1909), army surgeon and general practitioner of Delaware, was born in Delaware City on November 6, 1837, the son of Charles H. and Anne Janvier Black, the mother coming of an old Huguenot family. He studied at Princeton, New Jersey, and was given its honorary A. M. in 1907 and spent two years in the United States Marine hospital at San Francisco. His M. D. was from the University of Pennsylvania, in 1862.

During the war he was resident physician at the Blockley Hospital, Philadelphia, for a year, and at its close settled in practice in New Castle, Delaware, and was especially interested in the anti-tuberculosis crusade and the care of the insane and was president of the Delaware Insane Asylum, being energetic in instituting the Delaware State Hospital. As a surgeon he eagerly studied all that was new, yet on his long country rounds of thirty to forty miles he did successful operations with the poorest accessories, a scrupulous cleanliness being the only available antiseptic in those days. His skill as an obstetrician was well known in the country round. One day I hurried with him to a case which demanded Cesarean section for the patient, a deformed, rachitic negro dwarf; he devised an operating table out of some chairs and boards, the cooking stove furnished us boiling water, and a piece of fishing line, sterilized, served for ligatures when he found a complication in the shape of subperitoneal fibroid tumors which obliged him to remove the uterus "en masse." The mother did not long survive but the child grew up.

Interesting writings were: "Forty Years in the Medical Profession" also "Consumption in Delaware" and "Snakes in Delaware."

Black was a member of the College of Physicians, Philadelphia, and the Delaware State Medical Society, once its president. In 1872 he married Jeanie Groome and had two children, Elizabeth Groome and Armytage Middleton. He died of uremia at New Castle on September 27, 1909. RICHARD R. TYBOUT.

BLACK, Rufus Smith (1812-1893), was born in Halifax, Nova Scotia, in 1812, and died in California in 1893. He practised in Halifax for nearly half a century, but, his health failing in 1887, he removed to California where he lived the remainder of his days. He took his regular medical course at Edinburgh University, Scotland, from which he was graduated M. D. in 1836. He also won the degree L. R. C. S. (Edin.). Taking a post-graduate course in Paris, under distinguished professors, he became acquainted with the teaching of Laennec, and subsequently became the first practitioner in Nova Scotia who regularly used the stethoscope as and aid to diagnosis. After leaving Paris he spent about a year in Spain, and thus to a good classical education added an intimate knowledge of French and Spanish.

Returning to Halifax, he soon secured a large practice. Dr. Black was for many years one of the physicians of the Victoria General Hospital. He was a member of the Medical Society of Nova Scotia, five times its president, and president of the Halifax Medical College from 1875 to his retirement in 1887. His addresses and papers on various subjects before local societies were marked by much literary skill, but they are not known to have been printed. One, "Value of Tartar Emetic in Rigid Cervix," appeared in the

"Edinburgh Medical Journal" for 1865, and for a time he made translations from Spanish medical periodicals, which were published in the "Maritime Medical News," Halifax.

He married Miss Ferguson, of Halifax, and had five daughters and one son, John F. Black, who studied medicine in New York and graduated from the College of Physicians and Surgeons in 1882. DONALD A. CAMPBELL.

BLACKBURN, Isaac Wright (1851-1911), of Washington, D. C., pathologist of the brain, was born in Bedford County, Pa., May 27, 1851. His father was Abraham Moore Blackburn, and his mother's maiden name was Barbara Harris Wright. The families were of English descent originally, but emigrated to this country during the 17th century, and are, therefore, American. The families were among the early settlers of Pennsylvania, and were of Quaker stock, and many of their descendants yet continue in the faith of the Society of Friends. I. W. Blackburn received his early education in the public schools, supplemented by private instruction. In 1872 he took up the study of painting, hoping to become a portrait painter, and with this in view, became a pupil of Prof. C. Schussele, principal of the Pennsylvania Academy of Fine Arts, Philadelphia, in his private art school. Subsequently he became a student at the academy under Schussele, Eakins, and Bailey. While pursuing his art studies at the academy he attended the lectures and demonstrations of Prof. W. W. Keen, on artistic anatomy, and becoming deeply interested in the study of anatomy, decided to study medicine. As a preparation for this study he entered the office of a preceptor, S. F. Lytle, M. D., of Philadelphia, Pa., and remained under his instruction while preparing to enter the University of Pennsylvania. This course of study and a course in the Auxiliary Department of Medicine in the University of Pennsylvania prepared him to enter the Medical School of the University in 1879. In 1882 he graduated with honors and received the Morbid Anatomy Prize offered by Prof. Tyson, for his thesis on the "Microscopic Diagnosis of Lymphoid Structures." Deciding to adopt pathology as his life work he remained two years for a post-graduate course in pathology under Dr. Henry F. Formad, demonstrator of pathology in the University of Pennsylvania.

On July 1, 1884, he was appointed special pathologist to the Government Hospital for the Insane, Washington, D. C. In 1885 he was appointed to the position of lecturer in the Medical School of Georgetown University, and in 1886 was given the chair of pathology. In 1889 the laboratory work and lectures on histology were placed in charge of Dr. Blackburn, together with the chair of pathology. In 1898, owing to increased work, the chair was divided, and Dr. Blackburn was elected professor of morbid anatomy and special pathology, a position he occupied at the time of his death. In 1906 he was given the chair of morbid anatomy in the Medical Department of the George Washington University, of Washington, D. C.

Dr. Blackburn was a member of the American Medico-Psychological Association; American Association for the Advancement of Science; Philadelphia Pathological Society; and other medical and scientific societies.

A list of Dr. Blackburn's publications includes "Intracranial Tumors Among the Insane," 1902, Govt. Print. Office, 95 pp. and "Gross Morbid Anatomy of the Brain, 1908. Govt. Print. Office, 156 pp". Although the list comprises twenty-two captions, in which are included three books, it gives but a very faint idea of the amount of work and the activity displayed by the author during his life. At the time of his death he had performed considerably over two thousand autopsies, each one of which had been recorded with scrupulous care, and furnished material always valuable for reference. He had accumulated an immense amount of this material, a great deal of which he had studied over and had made extensive notes on, so that it might have been published had he lived. In this position, however, the Doctor was so modest and retiring that a great deal of his most excellent work never saw the press for that very reason.

Although Dr. Blackburn specialized in the gross pathology of the brain, he was unusually well-grounded in general pathology. He died June 18, 1911, in the Government Hospital for the Insane, which he had served so long, of pancreatic disease, his health having been undermined by a severe autopsy wound received sometime previous. W. A. WHITE.

BLACKBURN, Luke Pryor (1816-1887), sanitarian, governor of Kentucky, was born in Fayette County, Kentucky, June 16, 1816, and graduated from Transylvania University, Lexington, Kentucky, in 1834, the following year beginning practice in that city, but on

the outbreak of cholera in Versailles he offered his services gratuitously to the sufferers and afterwards made that place his home.

In 1846 he removed to Natchez, Mississippi, which he effectually quarantined against the yellow-fever epidemic which occurred in New Orleans in 1848, and at his own expense built a hospital for the marines who were suffering from the fever, an act that aroused Congress to establish ten similar institutions. In 1854 he again protected Natchez from yellow fever by rigid quarantine. He visited the hospitals of England, Scotland, France and Germany in 1857, and on his return resumed practice in New Orleans.

At the outbreak of the Civil War he was made surgeon on the staff of the Confederate general, Sterling Price, and was commissioned by the governor of Mississippi to proceed to Canada to superintend the furnishing of supplies by blockade runners, and in 1864, at the request of the governor-general of Canada, he visited the Bermuda Islands to look after the suffering citizens and soldiers. In 1867 he returned to the United States and became a planter in Arkansas, later, in 1873, returning to Kentucky and resuming practice in Louisville, doing good service in the epidemics of 1875 and 1878 as an organizer of physicians and nurses. In 1879 he was elected governor of Kentucky.

Prior to his election as governor, the penitentiary became crowded to double its capacity. This he promised to relieve if elected and this he did by pardoning the lesser criminals until the number was reduced in keeping with the capacity of the penitentiary, a practice that forced his state to build another prison to accommodate its criminals.

His first wife was Ella Guest Boswell, by whom he had one son, Cary Blackburn, who afterwards became a practitioner in Louisville. His second wife was Julia M. Churchill, whom he married in 1857.

He died September 14, 1887.

AUGUST SCHACHNER.

BLACKFORD, Benjamin (1834-1905), army surgeon, the son of Dr. Thomas T. Blackford, of Luray and, later, of Lynchburg, Virginia, was born in Shenandoah County on September 8, 1834. His father removing to Lynchburg while he was a youth, he attended a private school in that town conducted by his uncle, William M. Blackford, then editor of the "Lynchburg Virginian." Afterwards he obtained a clerkship in the post-office, and by hard work and close economy, saved enough money to go to the University of Virginia, and later to the Jefferson Medical College in Philadelphia, from which he was graduated in 1855. After serving a term as an interne in Blockley Hospital, he began to practice in Lynchburg.

He was a member of the American Association of Superintendents of Hospitals for the Insane, and the Medical Society of Virginia. Of this latter society he was several times a vice-president, president in 1887, and was elected an honorary member in 1888. He was also an ex-president of the Lynchburg Medical Association.

At the outbreak of the Civil War he was elected surgeon of the Lynchburg Home Guard, Company G., Eleventh Virginia Infantry, and went to the front with that command. He was soon put in charge of the hospital at Culpeper, and later was placed in command of the military hospital at Liberty (now Bedford City), where he remained until the end of the war, when he resumed practice in Lynchburg. He gave considerable attention to eye affections, without, however, becoming a specialist. He was one of the ninety-two charter members who founded the State Society in 1870. In 1890 he was elected superintendent of the Western State Hospital for the Insane at Staunton, and filled this position until his death.

Dr. Blackford was a Virginia gentleman of the true type, polite, gentlemanly, courteous, mindful of the feelings of others. As superintendent of the hospital, he filled the position with marked ability and success, adding many improvements to the institution, and ever looking after most carefully the well-being of his unfortunate charges.

He married, in 1871, Mrs. Emily Neilson Byrd, and was survived by six sons.

He died of pneumonia at his home in Staunton on December 13, 1905, just two weeks after the death of his wife from the same disease.

ROBERT M. SLAUGHTER.

BLACKIE, George Stodart (1834-1881). This professor of botany and chemistry came, like many another of his kind, from Scotland, a land which sent over many of America's earliest botanists.

Alexander Blackie, banker, of Aberdeen was the father, and the eccentric, erudite John Stuart Blackie the brother of John Stodart, who was born in Aberdeen on the

tenth of April, 1834. After a capital general education at Aberdeen University and a course in medicine at Edinburgh he went to Germany and France, taking his A. M., and M. D. in Edinburgh. He seems to have moved about a great deal at first; to the Mowcroft Private Asylum, London, as physician, then north again to Kelso, as a local practitioner, finally coming over to Nashville, Tennessee, in 1857 and remaining there for the rest of his life.

Besides being co-editor for twelve years of the "Nashville Medical Journal," he contributed largely to the "London Botanical Gazette" and the "North American Surgical Review." Three of his publications were "Cretins and Cretinism," 1885; "The Medical Flora of Tennessee," 1857, and "History of the Military Monkish Orders of the Middle Ages."

He held many appointments: professor of botany in the University of Nashville; professor of botany, Tennessee College of Pharmacy; professor of chemistry, Nashville Medical College; member of the Medico-Chirurgical Society, Edinburgh, and fellow of the Botanical Society of Edinburgh.

DAVINA WATERSON.

BLACKMAN, George Curtis (1819-1871), professor of surgery in the Medical College of Ohio, the second child of Judge Thomas Blackman, of the Surrogate Court of Newtown, Connecticut, was born April 21, 1819. He had his preliminary education at Newtown and Bridgeport, Connecticut, and at Newburg, New York, afterwards entering Yale College and graduating in medicine at the College of Physicians and Surgeons, New York in 1841 and immediately after practising in the dispensaries in that city. Devotion to work so impaired his health that, at the suggestion of his friends, he went to Europe, acting as ship's surgeon, in which capacity he made many trips across the ocean and spent much time in London and Paris. In 1845 he passed some months in the London hospitals, and was well acquainted with Liston, Astley Cooper, Sir Benjamin Brodie, Sir William Fergusson, and other eminent London physicians.

By invitation he read a paper before the Royal Medico-Chirurgical Society of London which so impressed the members that he was elected a member. On his return to America he practised some time in Newburgh, New York, and in 1854 went to Cincinnati, where he was appointed professor of surgery in the Medical College of Ohio, a position he held at the time of his death.

Although a brilliant and fascinating lecturer at all times, it was in the hospital amphitheatre he was in his native element. Outside of his own field he was a timid speaker and it is told of him that at a large gathering of medical men he refused to speak, although urged, until one of those present referred to a certain operation, giving the credit for its invention to an English surgeon. Blackman was on his feet in an instant and for ten minutes he blazed forth like a meteor. The roar of applause that greeted him when he sat down showed how neatly he had been entrapped.

In October, 1861, he was appointed brigade surgeon on Gen. Mitchell's staff, being present at the battles of Shiloh and Pittsburg Landing. He was for a short time on the Ohio State Medical Board for the army and was present at the battle of the Wilderness.

Dr. Blackman was a large contributor to medical literature. At one time he was editor of the "Western Lancet," and afterwards one of the editors of the "Cincinnati Journal of Medicine." He translated and edited "Vidal on Venereal Diseases" and "Velpeau's Operative Surgery." He was author, in conjunction with Dr. C. A. Tripler, army surgeon, of a "Hand-book on Military Surgery." He did not leave any original work of great importance, although for several years he was engaged on a work on the "Principles and Practice of Surgery." At the time of his death he was occupied with the Hon. Stanley Mathews on a work entitled "Legal Liability in Surgical Malpractice." For many years he was on the staffs of the Commercial (later Cincinnati) and the Good Samaritan Hospitals. In the spring of 1856 Dr. Blackman did an ovariotomy at my father's house, in Covington, Kentucky, removing a twenty-two pound cyst which had previously been repeatedly tapped. Forty years later the lady was still sounding his praises as the greatest of surgeons. In the season of 1886-7 he did twice Amussat's operation—artificial anus—for cancer of the rectum.

In 1855 he married Agnes Addington of New York and had two sons and a daughter. He died at Avondale, Cincinnati, July 17, 1871.

ALEXANDER G. DRURY.

BLACKWELL, Elizabeth (1821-1910), the first woman to receive a medical degree, was born in Bristol, England, Feb. 3, 1821,

the daughter of Samuel Blackwell, a sugar refiner of progressive ideas and prepossessed in favor of American institutions. In 1832 he settled in New York with his family, and being the only man in America who then understood the process of refining sugar by the use of vacuum pans, he was in a fair way to make a fortune. But his refinery was burned, and in 1838 he moved to Cincinnati, partly with the hope of introducing the cultivation of beet sugar, and thereby dealing a severe blow at slavery by making the slave-cane growing sugar unprofitable. But he died soon after, leaving his family dependent upon their own exertions. The mother and the three oldest daughters opened a school and Elizabeth's uncommon strength of character showed itself in her good discipline. The family continued their anti-slavery work and threw themselves ardently into the movement for the higher education of women.

When the brothers were old enough to go into business the school was given up, and Elizabeth went to Henderson, Kentucky, to teach a district school. She astonished the southern ladies by her courage in taking long walks through the woods when they were afraid of negroes and the savage dogs which abounded.

She was led to turn her attention to medicine through the severe illness of a woman friend. Medicine in itself was not attractive, but she believed there was need of women physicians. She wrote to several physicians about her plan and their replies were that the idea was good, but impossible. In 1845 she went to teach at Asheville, Nova Scotia, in the school kept by the Rev. John Dickson, who had previously been a doctor. Here she studied medicine privately, earning money by teaching. In 1847 she went to Philadelphia, studied anatomy under Dr. Allen, and applied for admission to each of the four medical colleges of that city, but in vain.

Applications to the large medical schools of New York also proving unsuccessful, she sent requests to twelve of the country colleges. Geneva consented. The medical class there of 150 students was composed of a riotous, boisterous, and unmanageable set, who had given the faculty and town much trouble. The letter was referred to the students for decision, and the announcement was received with most uproarious demonstrations of favor and extravagant speeches. The faculty received the unanimous vote of approval with evident disfavor, but admitted the woman student. On Miss Blackwell's appearance in the lecture-room some weeks later the class was transformed by magic into an orderly body of students, and this continued throughout the term. Professors and students showed her every courtesy, and she was never molested after a few unsuccessful practical jokes. The outside public, however, greatly disapproved of her, and she was considered by them to be either a bad woman or insane.

She was graduated in 1849. The event caused a considerable stir in England as well as in America, and "Punch" gave her some complimentary verses. In London and Paris where she next studied Dr. Blackwell made many valued friends including Lady Byron and Florence Nightingale. While a resident at La maternité in Paris, Dr. Blackwell had the misfortune to contract a purulent ophthalmia, which cost her six months illness and the sight of one eye. In 1851 she returned to America and began practice in New York with her sister Emily (q.v.) who had gained her medical diploma in 1854 at the Cleveland Medical College. But it was still considered highly scandalous for a woman to be a doctor. Patients came slowly and socially she was ostracised. She even had difficulty in renting a respectable consulting-room. One landlady who sympathized with her lost all her other lodgers by taking her in and Elizabeth finally had to buy a house with borrowed money. The first time she called in consultation a man physician—a man eminent in the profession—he walked about the room exclaiming it was an extraordinary case, that he was in great difficulty; at first she was puzzled, for though the case of illness was severe, it was not unusual. At last she comprehended that he referred not to the patient but to the situation: could he without loss of professional dignity act as consultant to a woman physician. He finally decided he could and became a firm friend of woman physicians. Not being allowed to practice in the existing dispensaries, she started a little one of her own and with her sister, Emily, and Dr. Marie Zakrzewska founded in 1857, the New York Infirmary and College for Women and Children. This was the first hospital conducted wholly by women, and met with strong opposition.

When the Civil War broke out Dr. Blackwell called a meeting to discuss the providing of trained nurses, and from this meeting grew the National Sanitary Aid Association. She also anticipated modern developments by or-

ganizing the services of sanitary visitors in Woman's Medical College of the New York the slums of New York. In 1865 when the Infirmary was founded, Dr. Blackwell occupied the chair of hygiene. When Cornell opened its medical department, the college was merged with that at Cornell.

After having established the New York Infirmary and College, feeling that perhaps she could do more for the cause in England she returned there in 1869. She took a house and began practice in London where she identified herself with the Medical Woman Movement, with Woman's Suffrage and with Mrs. Josephine E. Butler in her seventeen years' war against state regulation of vice. She accepted the chair of gynecology in a London school of medicine for women, in 1875, then just established and continued there until an accident in Scotland which enfeebled her health in 1907. She traveled on the continent for a year or two and then bought a house at Hastings, living there until her death May 31, 1910, at the age of eighty-nine.

During her life at Hastings she kept up her London connections and interests and by her pen aided the movements in which she was interested. Her most important book was "Counsel to Parents on the Moral Education of Children," 1876, which has been translated into French and German. Other important writings were: "The Laws of Life," 1852; "Medicine as a Profession for Women," 1860; "The Religion of Health," 1869; "Wrong and Right Methods of Dealing with the Social Evil," 1883; "The Human Element in Sex,' 1884; "Pioneer Work in Opening the Medical Profession to Women," 1895.

ALFREDA B. WITHINGTON.

BLACKWELL, Emily (1826-1910), a pioneer woman physician and dean of the Woman's Medical College of the New York Infirmary, a younger sister of Dr. Elizabeth Blackwell (q.v.), was born in Bristol, England, in 1826. In 1848 Emily began a course of medical reading with Dr. Davis, demonstrator of anatomy in the Cincinnati College. Like Elizabeth she brought perfect health and indomitable energy to her work. Earning as teacher the required funds she worked hard in both capacities and in 1851 applied for admission to the Medical School at Geneva, New York, where her sister had graduated in 1849. To her surprise she was rejected. The same faculty which had testified the presence of her sister "had exercised a beneficial influence upon her fellow students in all respects and the average attainments and general conduct of the students during the period she had passed among them were of a higher character than those of any class which had been assembled in the college since the connection of the president with the institution, they were not prepared to consider the case of Elizabeth as a precedent." She applied in vain to several other colleges, but the Rush Medical College at Chicago accepted her as a student for a year; for this permission the college was censured by the State Medical Society and the second term was refused her. She was, however, received by the Medical College of Cleveland, Ohio, Medical Branch of Western Reserve University, and graduated there in 1854. During one summer vacation she was allowed to visit Bellevue Hospital, New York, when Dr. James Wood was just initiating the system of regular clinical lectures. After graduating Emily went to Europe and became the private pupil and assistant of the celebrated Dr. (afterward Sir) James Simpson of Edinburgh. His testimonial to her would be worth quoting at length. Many such complimentary letters Dr. Blackwell received from great physicians in London and Paris in whose hospital wards she studied faithfully. Thus equipped she returned to New York in 1856 to join her sister, Dr. Elizabeth, who had secured her charter to open the New York Infirmary for Women and Children—the first women's hospital in America—with the double object of furnishing free aid by women physicians and of giving women medical students a chance for study and practice. The Legislature gave $1,000 a year to each dispensary in New York, and Dr. Emily obtained it for their dispensary without opposition. She was identified with her sister in the Sanitary Aid Association and in the establishment of the college of the New York Infirmary for Women and Children, of which she was dean for many years, and after Elizabeth Blackwell's return to England in 1869, the burden of the hospital fell upon her shoulders.

She was for years an officer of the New York Committee formed to oppose the state regulation of vice. She wrote and read papers on the medical aspect of the question and in every way helped to defeat the bill. She had a large practice in New York City until 1900, when she retired, removing to Montclair, New Jersey.

Dr. Emily Blackwell was a woman of high character, of wide reading and information,

and delighted in everything beautiful. She had a warm heart, though a reserved manner made her rather awe-inspiring to strangers. She lived to see her views, which had been scouted half a century earlier, accepted as commonplaces and the reforms for which her youth had been given, growing and flourishing.

She died of an enterocolitis, September 8, 1910, at her summer home at York Cliffs, Maine. ALFREDA B. WITHINGTON.

BLACKWOOD, Alexander Leslie (1862-1924), of Chicago, was born July 28, 1862, in Huntingdon County, Quebec, Canada, the son of John and Ann Steell Blackwood. In 1888, he was graduated from the Hahnemann Medical College of Chicago and studied in the New York Post Graduate Medical School the following year and at the Johns Hopkins Medical School in 1902. He was senior professor of materia medica and clinical medicine at his alma mater, 1899-1922, and vice-president of the Chicago Board of Education

He married Helen A. Winslow of Hammond, Indiana, August 16, 1891.

Blackwood contributed to the literature: "Diseases of the Heart," 1900, "A Manual of Materia Medica, Therapeutics, and Pharmacology," 1906, "The Pancreas and Ductless Glands," 1907, "Diseases of the Food Tract," and "Diseases of the Kidneys and Nervous System," 1913.

On December 30, 1924, he died at the South Chicago Hospital from a carbuncle and diabetes mellitus.

BLAKE, Clarence John (1843-1919), Boston pioneer otologist, was born in that city February 23, 1843, the son of John Harrison and Sarah Anna Howe Blake. After graduating in medicine from Harvard in 1865, he studied otology under Politzer in Vienna, receiving the O. M. in 1868.

In his alma mater, he was first lecturer in otology (1870-75), then instructor (1875-88), and finally professor (1888-1913), resigning as emeritus professor. As a teacher, he was inspiring. He was also aural surgeon to the Massachusetts Charitable Eye and Ear Infirmary, president of the Infants Hospital, and manager of the Children's Hospital. Like C. H. Burnett (q.v.) of Philadelphia, he took hold of otology when it was one of the neglected step-children of general medicine and made it a boon to humanity. When weary with routine, he found solace in translating and writing Italian sonnets and in composing music. He was noted for geniality and told Scotch stories inimitably being peculiarly happy as an after dinner speaker. A great friendship was that with Dr. Wilfred T. Grenfell, "the apostle" of Labrador. Dr. Blake died January 29, 1919, at his home in Boston.

A fundamentally important paper was that written with T. M. Rotch on reflex aural symptoms without aural disease, 1886. Dr. Blake was the author of "Operative Otology." His contributions from 1870, when he reported to the Massachusetts Medical Society on the progress in otology, usually appeared in the Transactions of the American Otological Society or in the Archives of Ophthalmology and Otology. From 1879 to 1882, he edited the "American Journal of Otology." He was president of the American Otological Society in 1876-77 and of the 9th International Otological Congress.

Dr. Blake was twice married: to Miss Hughes in 1874, by whom he had two children, and to Mary A. Houghton in 1907.

BLAKE, James (1815-1893), medical teacher, editor, of California, was born in Gosport, near Portsmouth, England, in 1815, and died in Middletown, California, in 1893. Notwithstanding his pioneer work of importance in physiological chemistry, there is nothing known of his ancestry and early life and little of his student days. He is said to have graduated from the University College of Medicine, London, where he was a student under Sharpey and Anthony Todd Thompson; later he studied in Paris under Magendie.

In 1838, Blake laid the foundation of our present knowledge of the relations existing between the atomic weight of metals and their physiological action and later demonstrated the efficiency of metals belonging to the same group of isomers as proportionate to their atomic weight, with the exception of the salts of potassium and ammonium. He arranged the elements into isomorphous groups according to their atomic weight and poisonous qualities and evolved a law covering the definite relations between reacting salts of chemicals and their significance when injected into the circulation. His work along this line stimulated much study and roused much criticism by scientists such as Stewart Cooper, Rabuteau, Binet, Buchardel, and Richet, but his work and law have received credit in later scientific works such as

Fränkel's "Arzneimittel-Synthese." His first paper, "Observations on the Physiological Effects of Various Agents introduced into the Circulation as indicated by the Haemodynamometer," was read before the Students' Medical Society at the University College. In 1838, he read a similar paper before the British Association for the Advancement of Science, (Edinburgh Medical Journal, 1839); in the same year, another address on this subject before the Academy of Sciences of Paris was published in the "Archives Generales de Medicine." In 1840, "Poisons as studied by the Haemodynamometer," delivered at the Royal Society, London, appeared in the "Edinburgh Medical Journal." In 1846, he addressed the British Medical Association on the "Physiological Action of Medicine," the latter in the "Edinburgh Medical Journal" being signed "James Blake, Esq., M. R. C. S. L. and F. R. M. C. S."

About this time, he left London and came to America, settling in 1847 in St. Louis, probably because of its large French population where he felt at home. Here, in the "St. Louis Medical and Surgical Journal," he published a paper on "The Physiological Action of Medicines." This year he was made professor of anatomy in the St. Louis Medical College; after an introductory lecture, he was assigned the chair of surgery, but later resumed anatomy. In 1848, when cholera almost depopulated the city, he moved to Sacramento, California,—his home for twelve years. In 1862, he settled in San Francisco and practiced until 1876. When the Toland Medical College was established, in 1864, he became its first professor of obstetrics and diseases of women and children, and during the next ten years contributed freely to the "Pacific Medical Journal" on these subjects. He was a founder of the California Academy of Science, before which he read an essay on the "Actions of Medicines" in 1871.

In 1872, Blake retired from teaching and four years later from the practice of medicine and moved from the city to Middletown, "a quiet nook," where he could devote time to research. He now contributed to the "Journal of Physiology of London" and in several papers claimed priority for the discovery of the action of digitalis on the capillaries. During 1886-87 he attended the meetings of the Physiological Society of London. In California again, in 1887, he began the preparation of manuscript for a book on his original work; this manuscript is lost although it was almost completed. A fracture of the thigh sustained soon after his return from England did not unite and eventually ended his life.

C. F. Buckley, intimately associated with Dr. Blake in the faculty of Toland Medical College, writes: "Dr. James Blake was tall, thin, and over six feet in height, with a scholarly stoop. His features were those of the classical type of the student and resembled much those of Huxley with less severity of expression. He was a man of broad culture, education, and of distinctively scholarly appearance, who always dressed in the British fashion. He was highly esteemed by his patients and associates, was a delightful conversationalist, fond of young people, and a bachelor. Both as a teacher and clinician, he was always seeking new discoveries. If tiring of one branch of science, he would turn to another. He was very learned and especially interested in geology, and this is probably one of the reasons why he moved to Middletown where he could be much out of doors in the woods near Nature. With his books and favorite studies he cheerfully, notwithstanding he was badly crippled by the ununited fracture of his thigh, spent the evening of his most eventful life."

JOSEPH LYON MILLER.

BLAKE, John George (1837-1918), clinical teacher, of Boston, was born in West Meath, Ireland, August 1, 1837. When ten years old he left the land which he always remembered so affectionately, and came with his mother to America. The trip was made on a sailing vessel, the barque "Robert," which after a voyage of six weeks arrived at Boston, Massachusetts, in 1849. In this city Dr. Blake passed all the rest of his life.

Having chosen medicine as his profession he began to prepare himself with great enthusiasm and as thoroughly as possible, studying at night when the day's task was done, and working in an apothecary shop. The wide and unusually thorough knowledge of drugs which he possessed was doubtless to a large extent acquired at this time.

It was in 1858 that he entered the Harvard Medical School, where his intelligence and unusual application singled him out among his fellows. Dr. Oliver Wendell Holmes took a special interest in "that bright-eyed Irish boy;" and Dr. Blake used laughingly to tell of Dr. Henry J. Bigelow's having referred once to a patient as "an Irishman, an ordinary man." The boys in the class naturally looked

with amusement at their Irish mate, but Dr. Bigelow added: "I know what you are smiling at, but I don't consider Mr. Blake an ordinary Irishman,—I consider him an extraordinary Irishman!" The contact he had had with the great medical men of his day, and the opportunity to study their personalities, their methods, were sources of interest and pleasure to him all his life. His M. D. degree was received in 1861.

During the Civil War, though kept at home by the necessity of caring for his mother, he nevertheless served for a period as contract-surgeon, and was one of a group of Boston doctors who were sent to Washington after the second Battle of Bull Run, to care for the wounded. At the conclusion of his hospital service, Dr. Blake soon built up a very large practice. His energy and activity were astonishing. He has told of attending five labor cases in a day, of rising four different times during the course of one night, of never being able to eat his dinner uninterrupted.

Through all the span of his professional life he never neglected other duties as a citizen, serving for sixteen years on the Boston School Committee (a large part of the time as chairman of the Textbook Committee); also on the Metropolitan Water Board; as Trustee of the State Hospital for the Insane at Gardner; and as director of several banks in the city. He was a pioneer in the introduction of military drill in the Boston schools, as well as being a strong advocate of the adoption of manual training.

Of his hospital connections the list is varied. Appointed visiting physician on the staff of the Boston City Hospital in 1864 at its opening, he made the first visit on the medical side with his house officer, Clarence J. Blake, (q. v.). On the formation of the gynecological department in 1892, he was made visiting physician for diseases of women; and was still on the staff as senior physician at the time of his death, a service of fifty-four years. A friend of Matthew Carney, he was influential in the founding of the Carney Hospital, and served for many years on its staff as consulting physician. He was also a member of the staff of St. Elizabeth's Hospital for more than two decades and had much to do with the upbuilding of the institution; he was deeply interested in the Channing Home in its early days, and found constant interest during the latter part of his life in his service as trustee for the State Hospital for the Insane at Gardner, Massachusetts.

As a clinical teacher Dr. Blake was unrivalled. His extraordinary, almost uncanny gift of diagnosis was a constant stimulation to his pupils. It was jokingly said that he could tell what the matter was with a patient by looking at him from the dorway of the ward and he often commented himself on his ability to smell certain diseases such as measles, small-pox and rheumatism. His ward visits were immensely popular, combining interest and instruction in such manner that the memory of them never faded from his students' minds. The gratitude of his old pupils, their enthusiastic and cordial greetings, mingled with reminiscences of former years, were in his later life sources of deepest satisfaction. Nothing pleased him more than to meet a colleague, or to be called to a patient whom he had attended years before.

Blessed with a remarkably strong constitution, Dr. Blake was fond of outdoor exercise. As a boy he loved sailing and rowing, and he found pleasure in the latter pastime even after he had passed the age of seventy years. He could often be seen pulling up the stretches of the Charles River with some friend who found a like pleasure in the sport. Mountain climbing was another form of exercise very dear to his heart; and he was a constant attendant of the winter classes at the Gymnasium of the Boston Athletic Association, of which organization he was one of the charter members. He was seldom absent from the meetings of the Obstetrical Society of Boston (1861) and served it acceptably as president.

Belonging to but few clubs, his genial temperament, nevertheless, made him on all occasions a most welcome guest. He was especially happy as an after-dinner speaker, and it is typical of his youthfulness of heart that the younger men were as much drawn to him as those of his own generation. His wit was sparkling; as a story-teller he was unrivalled.

Dr. Blake was a Roman Catholic, and the devoted friend of the many religious and charitable institutions of the city.

In 1865 he married Mary Elizabeth McGrath, whose poetic and intellectual gifts added so much to the literary life of Boston in later years. Eleven children were born to them, of whom six survived him, two of the five sons being members of their father's profession, John Bapst and Gerald.

He died at his home after a long illness, March 4, 1918. JOHN BAPST BLAKE.

BLALOCK, Nelson Gales (1836-1913), pioneer physician of Washington State, was born in Mitchell County, North Carolina, February 17, 1836, the son of Jesse Blalock. He was of Quaker ancestry and of such rearing and under such influences during boyhood as to develop the characteristics of patience, simplicity, honesty, and industry, which, sustained as they were, by natural power of mind, a devout religious spirit, and constant philanthropy, made him one of the conspicuous leaders both in his chosen profession and in the general activities of his adopted State of Washington.

A summary of his achievements and activities may well be an incentive to the younger members of the profession, as well as to all young men of ambition to attain their highest possibilities in human service. An army surgeon in an Illinois regiment during the Civil War, a physician and surgeon of ability and success in the states of Illinois and Washington, for many years a leading member of the board of trustees of Whitman College as well as of the board of directors of the public schools of Walla Walla, his home city in Washington State, mayor a number of terms, the first to develop wheat land on a large scale and to inaugurate irrigating, fruit raising and gardening in a scientific way, leader in the medical associations of his State, a framer of its constitution, a steadfast and efficient advocate of the development of water transportation throughout the country, gaining through all these manifold services the deep affection and reverent esteem of the thousands of people whom his life touched:—Dr. Blalock was justly deemed at the time of his death in 1913 the foremost citizen of the State of Washington.

Endowed with brains and character, but not with money, Dr. Blalock made his way with his own hands through academy and college in his native state, and then removing to Philadelphia, he completed his medical education at Jefferson Medical College in that city, in March, 1861. He established himself with his wife and infant son in Illinois, but decided within a year to join the Illinois Volunteers as surgeon. Returning with impaired health, he entered upon the practice of his profession at Decatur, Illinois, and there he made his home and gained success in his profession during the period of twelve years. In 1873 he went west with a wagon train, settling at Walla Walla, Washington, and there he lived during the remainder of his life. He made many journeys during his active life, professional and business, and during the whole of his busy career maintained an interest in political, social, philanthropic, and religious activities. He maintained an extensive and eminently successful medical and surgical practice, often averaging one important surgical case a day throughout the year. He was said to have assisted at the arrival of over five thousand babies. While he had a large and what would have normally been a lucrative practice, his kind heart prompted him so often to forego payment for his services that in his last years he had over forty thousand dollars in outstanding bills unpaid. One marked characteristic of Dr. Blalock was that, even in advanced years he kept abreast of the times with all the latest surgical appliances. He was the first practitioner in Walla Walla and vicinity to install in his office modern electrical equipment, with x-ray appliances.

Deeply interested in education he was for thirty years a trustee of Whitman College and for half that time president of the board. In 1877 he began a career of business activity, though never diminishing his assiduous attention to his professional labors. He inaugurated the fluming of lumber from the mountains, raising wheat on the uplands, and developing the raising of fruit and vegetables on a large scale at what is still known as the Blalock Orchard. In connection with these business enterprises, he became interested in large irrigation enterprises, and from these it was an easy transition to water-way improvements, and years of effort, successful in the end, were devoted to securing the proper improvement of the Columbia and Snake Rivers, as well as of other water-ways.

The many services of Dr. Blalock to the public, and his acquaintance with the needs of the State, as well as his patriotic and philanthropic aims made him a natural delegate to the Constitutional Convention of 1889, and the traces of his wisdom and political sagacity are visible in the organic law of the State of Washington.

Dr. Blalock was twice married, first in 1858 to Panthea A. Durham, who died in 1864, leaving two infant children, one of whom was Dr. Y. C. Blalock, a physician at Walla Walla, Washington. The second wife was Marie E. Greenfield, and of this union there were two daughters.

Dr. Blalock maintained his professional and

other activities to the close of his life, which occurred at the age of 77, March 14, 1913.

W. D. LYMAN.

Blanc, Henry (1859-1896), lecturer in dermatology at Tulane University, New Orleans. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912. I. page 90.

BLANEY, James Van Zandt (1820-1874), physician and chemist, the son of Cornelius Dushane Blaney and Susan Cannon, his wife, was born at Newcastle, Delaware, May 1, 1820. He was graduated at Princeton University in 1838, but remained after graduation to study chemistry with Professor Joseph Henry (later of the Smithsonian Institution) and received an A. M. in 1841. Being entitled to a diploma in medicine at the University of Pennsylvania before he was of age he "walked the hospitals" until his majority was reached; he is numbered with the class of 1842 with a thesis entitled "The Investigation of the Vegetable Materia Medica." The same year he went west and was associated with Daniel Brainard (q.v.) in founding Rush College where he was professor of chemistry and materia medica from 1842 to 1866. From 1866 to 1874 he was president of this college.

He was widely known as an analytical chemist; in 1846 he "organized a successful mineral exploration of the south shore of Lake Superior" (Browning). His skill as a chemist convicted George W. Green, the banker, tried in 1854 for murdering his wife. Blaney detected strychnine in the stomach of the victim and convincingly explained his method in court; the analysis was much talked of, as it alone was proof of the murderer's guilt.

In 1855 Blaney accepted the chair of chemistry and natural philosophy at Northwestern University, and moved to Evanston where he had a beautiful home and a celebrated garden. In 1861 he became surgeon of volunteers, then medical director; later he was surgeon-in-chief on General Sheridan's staff, and until the end of the war was medical director and purveyor. When the war closed he had the duty of disbursing over $600,000 in pay to medical officers. In 1865 he was mustered out as brevet lieutenant-colonel.

In 1847 he married Clarissa, daughter of Walter Butler and niece of Benjamin F. Butler; they had four children, James R., Charles D., Bessie and Cassie.

He died in Chicago, December 11, 1874.

BLATCHFORD, Thomas Windeatt (1794-1866), prominent practitioner of Troy, N. Y., was born in Topsham, Devonshire, England, July 20, 1794. His father, the Rev. Samuel Blatchford, removed to this country in the year 1795, when Thomas was an infant, and first settled in Bedford, New York. Blatchford's early studies were prosecuted under the direction of his father, in Lansingburgh Academy, of which his father was the principal. In October, 1810, he began to study medicine in the office of Dr. John Taylor, of Lansingburgh, and in November, 1813, matriculated at the College of Physicians and Surgeons, New York City. In August, 1814, he was appointed resident physician, for one year, of the New York State Prison, in Greenwich Street, then a suburb of New York. At the end of the year he received an offer to travel in Europe as physician to a gentleman, a purser in the United States Navy, who during the War of 1812 had become suddenly wealthy and thereby lost his mind. The patient attempted to kill Blatchford, so upon landing at Liverpool the engagement was concluded, and he went to London, where he attended two courses of lectures at the united schools of Guy's and St. Thomas' Hospitals, given by Sir Astley Cooper and Prof. Cline. In the spring of 1816 he returned to New York, and after attending another full course of lectures at the college at which he had previously matriculated, he was graduated in 1817. Immediately after receiving his degree he practiced at No. 85 Fulton Street, New York, for one year. At this time he was induced to remove to Jamaica, Long Island, and in February, 1819, married Harriet, the daughter of Thomas Wickes, a descendant of one of the original patentees of the town of Huntington in 1666.

After nine years in Jamaica he had a severe fever; on recovering he moved to Troy in 1828.

Dr. Blatchford was favorably known by his published papers and essays, which are as follows: "Inaugural Dissertation on Feigned Diseases," 1817; "Letters on Corsets," 1823; a work entitled "Letters to Married Ladies," about 1825; "Homeopathy Illustrated," 1842; "Report on Hydrophobia," 1856, read before the American Medical Association and published in their transactions; "Report on Rest and the Abolition of Pain, as Curative Remedies," 1856, besides many papers contributed to medical journals.

He kept a meteorological journal from the

year 1824 and the testimony of his record on these subjects was regarded as conclusive in the community. Once someone in the West had forwarded in the winter a quantity of apples in barrels. Upon their arrival in New York they were found to have been frozen. The owner sued the forwarding company for damages alleging that the apples had been left out, and exposed to injury by freezing, on a certain night. The doctor's register, produced in court, proved that it did not freeze on that night, and the amount was saved to the company.

Dr. Blatchford was connected with the Marshall Infirmary of Troy from its foundation. The Lunatic Asylum connected with the infirmary was projected by him, and will remain as a monument of his tender regard for the unhappy ones who shall be its occupants in the long future. He left his valuable medical library of over six hundred volumes to the institution.

His reputation as a man of science was recognized in the degree of A. M. by Union College in 1815; in his election as fellow of the Albany Medical College in 1834; president of the Rensselaer County Medical Society 1842-3; president of the Medical Society of the State of New York, 1847; corresponding fellow of New York Academy of Medicine, 1847; vice-president of the American Medical Association, 1856; honorary member of the Medical Society of New Jersey, 1861, and of the Medical Society of Connecticut, 1862.

The doctor's labors in relieving the wants of those who suffered by the great fires of 1862 were so severe that his health was thereby seriously impaired. His last illness was an attack of "typhoid pneumonia" which continued for fifteen days, when, having finished his work, he fell asleep on the seventh of January, 1866.

BLEYER, Julius Mount (1859-1915), New York specialist in electro-therapeutics and diseases of the nose, throat and lungs, was born at Pilsen, Austria, March 16, 1859, son of Samuel and Sophia Bleyer; with his parents he came to the United States in 1868. He was a student at the University of Prague two years and received his medical degree at Bellevue Hospital Medical College, New York, in 1883. The Central University of Indiana gave him an LL. D. in 1896. He began to practice in New York in 1883 and remained there all his life.

He was a member of the New York Medico-Legal Society and used his influence to secure the adoption of a new method to end the lives of criminals, assisting in devising the death chair for electrocution. He was Fellow of the Royal Society of Medicine and Surgery, Naples, Italy; Anthropological Society of Italy; Laryngological Society and Electrical Society (Paris); National Academy of Medicine (Mexico). He was consulting specialist for the Metropolitan Opera Company.

In 1884 he married Rose Floersheim of New York. Dr. Bleyer died at his home in New York, April 3, 1915.

BLISS, Arthur Ames (1859-1913), laryngologist and otologist, son of Theodore Bliss, publisher and bookseller of Philadelphia, and Mary Wright, was born in Northampton, Mass., July 13, 1859. He received his early education at a private school in Philadelphia and entered Princeton University where he graduated A. B. in 1880 and later took his A. M. He graduated in medicine at the University of Pennsylvania in 1883 and served for one year as interne at the Philadelphia (Blockley) Hospital. A year abroad was spent in special studies in diseases of the ear, nose and throat in the clinics of Vienna, Berlin, Heidelberg and London. On returning to Philadelphia in 1885 he began a general practice and in a few months became an assistant to J. Solis Cohen at the Philadelphia Polyclinic. Bliss organized and established the ear, nose and throat clinic of the German Hospital in Philadelphia where he was the laryngologist and otologist. This position he held for about ten years and then relinquished it, retaining the children's department and the position of consulting laryngologist and otologist and his work at the Mary J. Drexel Home.

Bliss also held the position of consulting laryngologist and otologist to the Pennsylvania Institution for the Deaf and Dumb; laryngologist to the Chestnut Hill Hospital; consulting laryngologist to the Epileptic Hospital. For several years, and until the death of the late Harrison Allen, Bliss was his assistant in all of his nasal surgical work.

He was elected fellow of the American Laryngological Association in 1883, and was a vice-president in 1900, and he was chairman of the section of otology and laryngology in the Philadelphia College of Physicians.

In 1893 he married Laura Neuhaus of Vienna, Austria, who survived him.

His claim upon posterity is vested in two little books. In one of them, "Theodore Bliss, Publisher and Bookseller" (1911), he has left us a memento of his father's life, for the most part autobiographical, but put down and edited by the son, a valuable picture, full of local color, of our eastern state American home-life over two generations ago, the antithesis of life today. Here we find old Northhampton with its canal stretching down to New Haven on which Bliss made the trip in seven days. Here, too, is a pen sketch of old Philadelphia, the bookseller's trade, the clergy, the volunteer fire companies, the women, often doing all their own house-work, and the day's work stretching from 6 a. m. to 9. p. m. This little volume is a fitting pendant to Bliss's "Blockley Days; Memories and Impressions of a Resident Physician 1883-1884" (1916). We have here the old Blockley Almshouse filled to repletion with its dregs of humanity, and scandalously managed by "the Board of Buzzards," within the memory of many of us yet living, run by a thieving superintendent who filled houses from roof to cellar with food and goods stolen from the poor, the natural outcome of Philadelphia's evil political system, which still rules the city.

Here we find intimate details of the lives of the pauper patients, the nurses promoted from the ranks of patients, nurse Owens, the one-legged sailor, like Leidy's Nash, also one-legged, and a sailor picked up in the Pennsylvania Hospital, a great anatomist and a drunkard, and nurse H. who Bliss says "ought to have been in command of a crew of pirates." Antisepsis lay in the womb of the future and the newfangled Listerism was laughed at. It was here, I think a little later that the artistic "Kelly the bum" tatooed some sixteen men and infected as many with syphilis. Here too stands Dr. P. in the amphitheatre (undoubtedly "Bill Pancoast") "knife in hand lecturing to the students in his rather stagy manner." Here is Edmond the jail bird, "a strange combination of meanness, wickedness, low cunning and moral cussedness," who is autopsied in the celebrated "green room," and Daniel, a boy from the mines with a big sarcoma on his neck "a combination of gentleness, patience and sweet reasonableness." But this is not the place for many such details, suffice it to say that two such books are rare and valuable records of bygone days. Blockley, we are thankful to say, has been a vastly better place for many years now.

Bliss died from acute nephritis at his home in Philadelphia May 1, 1913.

HOWARD A. KELLY.

BLODGETT, John Loomis (1809-1853), botanist of southern Florida, was born in South Amherst, Massachusetts; graduated from the Berkshire Medical Institution at Pittsfield, in 1831, with a thesis on "The Use of Friction to the Skin," moved to Ohio in 1834 and then, in search of a milder climate, to Mobile, Alabama. He was appointed physician and surgeon of the Mississippi and Louisiana Colonization Society and engaged in removing liberated slaves to Liberia. There he lived two years returning to America to settle in Key West, in December, 1838, and to practice as physician and druggist until his return to Amherst just before his death in July, 1853.

Dr. Blodgett was the first botanist to explore the flora of the south Florida keys; he collected several typically West Indian shrubs not again found in Florida. His observations were communicated to John Torrey (q.v.) and to Thomas Nuttall who published several of the trees in his continuation of Michaux's "Sylva", in 1842. His collections of seaweeds, in which he became especially interested latterly, went to W. H. Harvey of Dublin. Several plants are named for him: "Metastelma Blodgetii, Solarium Blodgetii," and "Ditaxis Blodgetii."

BOBBS, John Stough (1809-1870). The first cholecystotomy was performed by John Stough Bobbs of Indiana June 15, 1867, a surgeon, born of American-German descent, in Greenvillage, Pennsylvania, on December 28, 1809. He was a man well educated in the fundamental branches and had given attention to philosophical writings. When eighteen he read medicine with Dr. Martin Luther of Harrisburg and after this attended one course of medical lectures, then settled in Middletown, Pennsylvania, where he practiced for four years. His final location was Indianapolis, Indiana, following a course of lectures in Jefferson Medical College in Philadelphia where he took two courses and studied with a preceptor, as required in those days.

He soon took high rank both as a physician and surgeon. When the Medical College of Indiana was organized he was elected professor of surgery and later dean of the faculty. As a practitioner one of his contemporaries states there was less sham about Dr. Bobbs than any physician he ever knew. Up to his

death he had never given a placebo and always based his treatment on rational lines. Once when called to see a patient suffering from some acute malady he suspended all medical treatment, saying "why give medicine here without reason or purpose?" He believed strongly in an organized and united medical profession and labored to that end. He was first in the work of establishing the Marion County Medical Society in 1847, and prominent in helping to organize the state medical society of Indiana in 1849, being elected president of the latter, when his inaugural address was upon "The Necessity of a State Medical Journal and College." His paper on lithotomy of the gall-bladder was published in the same volume as his presidential address. (Transactions Indiana State Medical Society, 1868.)

The latter part of Bobbs' life was devoted mainly to surgery, and as an operator he was bold and original. Dr. Jameson, whom I quote, mentions an operation in which he assisted in which Bobbs removed the superior maxillary bone together with the eye of the affected side for extensive carcinoma. The operation lasted several hours but the patient made a good recovery. The hemorrhage was so well controlled that little blood was lost. He also mentions a successful operation for extrauterine pregnancy and an unsuccessful one for umbilical hernia. He performed all the usual major operations of the surgery of his day.

During the Civil War Bobbs was a brigade surgeon and medical director for the State of Indiana. He distinguished himself when with Gen. Morris of Indianapolis by bringing a soldier off the field under fire.

He must be remembered also as a public-spirited man intensely interested in civic and state affairs, for one year serving as senator and organizing the Indiana Hospital for the Insane. He may truly be considered as one of the founders of scientific medicine and surgery in the middle west.

In person, we learn, he was slender, of medium height, with striking features, high forehead, dark gray eyes, large nose and prominent chin. He was generally dressed in black broadcloth. He married, in 1840, Catherine Cameron of Pennsylvania and at his death on May 1, 1870, left $2,000 to establish the Bobbs Dispensary to be managed by the Medical College of the Indiana Faculty. He also founded the Bobbs Library which is under the same direction and contains a most valuable collection of medical works.

DAVINA WATERSON.

BODENHAMER, William (1808-1905), specialist and author in rectal diseases, was born in East Berlin, Pennsylvania, in the year 1808. He was graduated in medicine in the now defunct Worthington Medical College of the Ohio University in 1839. He practiced in Paris, and in Louisville, Kentucky, and in New Orleans, and settled in New York in 1859. He wrote "A Practical Treatise on the Aetiology, Pathology and Treatment of the Congenital Malformations of the Rectum and Anus," 368 pp., N. Y. 1860, for the first time gathering into one all the scattered memoranda from every nation, with especial reference to the efforts to give relief by operation. This remarkable treatise is illustrated by 16 lithographic plates, and reports upwards of three hundred cases and will without doubt always remain the foundation stone in the surgery of these distressing abnormalities. Bodenhamer died March 31, 1905, at his home in New Rochelle, N. Y.

BODINE, James Morrison (1831-1915), a teacher of anatomy, organizer of the Association of American Medical Colleges, was born in the village of Fairfield, Kentucky, Oct. 2, 1831, the son of Dr. Alfred Bodine and Fannie Maria Ray Bodine. His paternal ancestors were Huguenots, emigrating to this country in 1625, settling in what is now New Jersey. Later his grandfather came to Kentucky, about the time it was admitted into the Union as a state.

His preliminary education was obtained in the common school of the village where he lived. Later he spent two years at St. Joseph's College at Bardstown, Ky., following which he entered Hanover College, Madison, Ind., but was forced to leave in his senior year on account of ill health. In 1893 Hanover College conferred on him the LL. D.

He began the study of medicine in Louisville under the tutelage of Prof. Henry M. Bullitt (q.v.), in 1852, and graduated M. D. at the Kentucky School of Medicine in 1854. He practiced medicine for a year following his graduation in Austin, Texas, but returned to Kentucky for a visit and was married in Louisville to Mary E. Crowe, the daughter of a prominent merchant and representative citi-

zen. Immediately after his marriage he was called to the demonstratorship of anatomy in his Alma Mater, discharging the duties of this office during 1856-57. In 1857 he moved to Leavenworth, Kansas, with his wife and daughter (his only child), and there rapidly acquired a large practice. He was the first president of the first medical society organized in the State of Kansas and established the first hospital in the State. The conditions brought about by the Civil War through his southern sympathies forced him to leave the state and he returned to Kentucky. For a while he remained with his father's family in Nelson County, but yielding to the wishes of friends returned to Louisville in 1863 and accepted the professorship of anatomy in the Kentucky School of Medicine. In 1866 he resigned this professorship and accepted a similar one in the University of Louisville. Soon after this he was elected dean of the faculty of the University of Louisville and held this position until all the medical schools in Louisville were united in the University of Louisville, in 1907, at which time he gave place to a younger man, having served as dean over forty-one years. On his resignation as dean, he was immediately elected president of the faculty of the University of Louisville, retaining this place up to the time of his death.

While a popular and busy practitioner of medicine for many years, Dr. Bodine's claim to eminence in his profession rests on his career as a medical educator, for he taught anatomy in medical schools nearly fifty years, being one of the most widely known, popular and beloved teachers of anatomy this country has produced. His interest in the advancement of medical education in this country led him to take a prominent part in the organization of the association of medical colleges. In 1876 he was the prime mover in the organization of the Association of American Medical Colleges and he was urged but declined to accept the office of president. In 1881 he was prevailed upon and accepted the presidency, succeeding Dr. Samuel D. Gross. This association was the first organized effort on the part of the American medical colleges to improve the character of their work and thus raise the standard of medical education. In 1892 Dr. Bodine was elected president of the Southern Medical College Association and in 1896, when all the Colleges again took up the effort to further raise the requirements for graduation, he was again chosen president of the re-organized Association of American Medical Colleges.

In 1910 on his retirement from active work as a teacher he was tendered a complimentary dinner by his former pupils, colleagues, professional and personal friends, that was a remarkable testimonial not only to his high character as a man but also to his popularity as a teacher of anatomy. Dr. Bodine was not a frequent contributor to medical literature yet there have been published a number of his addresses delivered at medical college commencenfents and as president of the Medical College Association.

He died January 25, 1915.

JAMES MORRISON RAY.

BODLEY, Rachel L. (1831-1888), a pioneer in the professional education of women, eldest daughter of Anthony R. Bodley and Rebecca W. Talbot Bodley, was born in Cincinnati December 7, 1831, of Scotch-Irish and Quaker-English strain. Deep religious principles were her birthright. Her mother's private school and the Wesleyan Female College completed her early education and in 1860 she entered the Polytechnic College of Philadelphia for a special course in chemistry and physics; in 1862 she returned to Cincinnati and accepted a professorship of natural sciences in the Cincinnati Female Seminary. While there she mounted and catalogued an extensive herbarium of native and foreign plants, the gift of Joseph Clark to the seminary, a work of considerable magnitude. In 1865 the Woman's Medical College of Philadelphia appointed her to the chair of chemistry and toxicology, and she was elected dean of the faculty in 1874 and held both positions to the time of her death. In 1879, as a further tribute, the honorary M. D. was conferred by the Woman's Medical College. With Ann Preston, Rachel Bodley shares the distinction of guiding to successful issues this medical college for women. Ann Preston waged the battle for its existence, Rachel Bodley steadily and comprehensively developed it.

In medical missionary work her religious zeal found fullest expression, and help and sympathy were always readily given. Dean Bodley undertook the business affairs connected with the publication of Pundita Ramabai's book, "The High Caste Hindoo Woman." She wrote an introduction to it. Her correspondence was world-wide and brought her in touch with the leading minds of many

lands. In 1880 she delivered a series of lectures before the Franklin Institute, of which she was a member, her topic being "Household Chemistry," but suddenly in the midst of her activities Dean Bodley died of heart failure.

The following list of memberships and dignities speak eloquently of her attainments.

1864, Corresponding member, State Historical Society of Wisconsin; 1871, member, Philadelphia Academy of Natural Sciences; 1871, Degree of Artium Magister conferred by her Cincinnati alma mater; 1876, corresponding member, New York Academy of Sciences; 1876, a member of the American Chemical Society of New York City.

ALFREDA B. WITHINGTON.

Boerstler, George W. (1792-1871), a practitioner of Lancaster, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 117.

BOHUNE, Lawrence (—— 1622). The exact date of the arrival of Dr. Lawrence Bohune, first physician-general to the colony of Virginia, is not known, but it was within the first half of the year 1610. He was the first physician-general of the London Company appointed for service in the colony.

Of the one hundred and five settlers who reached Jamestown Island on the thirteenth of May, 1607, one hundred and forty-six days out from London, Thomas Wotton, William Wilkinson and Post Ginnet were listed as "Chirurgeons," and Thomas Field and John Harford as apothecaries. Wotton was the fleet's physician, and the first doctor in the American Colonies. His stay in the new world must have been a short one, since the ancient archives contain but little regarding him. A letter to the company under date of July 7, 1610, signed by Lord Delaware and the members of the Council, reads in part:

"I only will entreate yee to stand favourable unto us for a new supply in such matters of the two-fold physicke, which both the souls and bodies of our poor people here stand much in need; the specialties belonging to the one, the phisitions themselves (whom I hope you will be careful to send to us) will bring along with them the peculiarities of the other we have sent herein, inclosed unto us by Mr. Dr. Boone, whose care and industrie for the preservation of our men's lives (assaulted with straunge fluxes and agues), we have just cause to commend unto your noble favours; nor let it, I beseech yee, be passed over as a motion slight and of no moment to furnish us with these things, so much importuning the strength and health of our people, since we have true experience how many men's lives these physicke helps have preserved since our coming in, God so blessing the practice and diligence of our doctor, whose store is now growne thereby to so low an ebb, as we have not above three weekes physicall provisions."

The colonists were as yet unacclimated, and much sickness prevailed, so that Dr. Bohune's pharmacopœia was enlarged by the use of sundry new vegetables and minerals, rhubarb being found "to be of service in cold and moist bodies for the purginge of fleame and superfluous matter."

Dr. Bohune was a share-holder in the London Company and a member of the General Court which met on January 26, 1619, and February 2, 1620. At the former session he was joint claimant with James Swift for such lands as were patentable to those "who have undertaken to transport to Virginia great multitudes of people with store of cattle," and they gave the number of immigrants so transported by them as three hundred. He subsequently purchased Swift's interest. At a session of the General Court held on December 13, 1621, it was ordered: "Mr. Doctor Bohune having desired yt hee might be a Phisition generall for the Company according to such conditions as were formerly set downe by way of Articles unto which place they had allotted five hundred acres of land and twenty Tenants to be placed thereupon att the companies charge."

The confidence extended to the doctor in this new precedence seems fully earned, but he was not long spared to enjoy its benefits and honors. Near the end of the year he was again in England arranging for new medical supplies, new colonists, and the introduction of the silk worm into Virginia. Early in the next year he embarked with eighty-five immigrants on the "Margaret and John." At Guadeloupe they took on six Frenchmen, raising the number of passengers, including the crew, to one hundred and three "soules" —men, women and children. On March 19, 1622, while off the West Indies, which they neared to obtain water, they fell in with two large ships who feinted to be Hollanders until they secured the advantage of position, when they broke the Spanish colors and fired upon the English ships. Nothing daunted by the sheer force of their size and superi-

ority of battery the "Margaret and John" gave battle. Six hours the unequal combat lasted with the most desperate courage on the part of the English, and then they beat off the enemy with the loss of the latter's captain, making "their skuppers run with blood, coloring the sea in their quarter."

In this heroic defense Dr. Bohune fell, while encouraging the crew to resistance. Seven others were killed outright, two died and twenty were wounded. The victory fired the English mind and high tribute was paid the memory of the gallant Bohune.

Purchas used the incident in "Purchas his Pilgrimage," and Captain John Smith recited an account of it in his History of Virginia. George Deseler wrote of it in Amsterdam, and "Tho. Hothersell, late zitysone and groser of London being an I witness an interpreter in this exployte," left a description in manuscript which is still in existence.

CALEB CLARKE MAGRUDER, JR.

BOISLINIERE, Louis Charles (1816-1896), who established the first lying-in hospital in St. Louis, was born September 2, 1816, on the island of Guadeloupe, West Indies, of one of the oldest families of the island. His father was a wealthy sugar planter and took his son to France in 1825 in order that he might have every advantage attainable. Here thirteen years were spent in scientific, classical and legal studies at the most celebrated institutions of the day. Young Boisliniere took a diploma as licentiate in law at the University of France and returned to Guadeloupe in 1839 after the death of both parents. Some months there and an extensive journey through South America made him determine to leave the West Indies entirely and settle in the United States. In 1842 he landed in New Orleans but went almost immediately to Lexington, Kentucky, where he received polite attention from Henry Clay's family to whom he had brought letters of introduction. In 1847 his attention was attracted by the advantages that seemed to be afforded to young men in St. Louis, so he went there, continued his medical studies which had been begun in France, and in 1848 was graduated in medicine in the medical department of the St. Louis University. He immediately entered into practice. In 1853 Dr. Boisliniere took part in establishing under the auspices of the Sisters of Charity what is thought to be the first lying-in hospital and foundling asylum founded in America. In 1858 he was elected coroner of St. Louis County, the first physician who held this office. In 1865 he was elected a member of the Anthropological Society of Paris. He held the professorships of obstetrics and diseases of women and children in the St. Louis Medical College and had for a number of years a clinic for the diseases of women at the St. Louis (Sisters) Hospital. For two successive years he was president of the St. Louis Obstetrical and Gynecological Society. In 1879 he received the degree of LL. D. from the St. Louis University. He died in St. Louis January 13, 1896.

WARREN B. OUTTEN.

BOLLES, William Palmer (1845-1916), surgeon, of Roxbury, Massachusetts, was born June 14, 1845, at New London, Connecticut, not far from the old family home at Waterford, where he used to like to visit. His father was William and his mother Cornelia C. Palmer. He made good use of the New London schools, did not go to college, but studied under the guidance of his father, whose interest in literature and science seem to have served quite as well as the curriculum. He then, in accordance with general usage for medical students, studied and rode for a year with Dr. Manwaring of New London. His father died and William came to Boston to pursue his studies. Entering Harvard Medical School he took his M. D. in 1871.

He obtained an appointment as house officer on the surgical side at the Boston City Hospital. On leaving the hospital he took a summer vacation, to recuperate his health, as surgeon on a sailing vessel, studied for one winter in Vienna, and soon after his return was placed on the surgical out-patient staff at the City Hospital. He received the appointment of professor of materia medica and botany at the new Massachusetts College of Pharmacy (1874-1884) and he was instructor in materia medica at the Harvard Medical School from 1880 to 1884.

Very early in his youth he was attracted by his natural taste to the study of flowers and he always spent much time in his garden, maintaining a keen rivalry with some of his fellow enthusiasts on the perfection of his blooms. He was an admirable cabinet-maker and wrought some beautiful specimens of furniture, such as the mahogany frame of an eight-day clock. He invented instruments and published accounts of them in the City Hospital Reports.

He settled in practice in a pleasant and

then semi-rural part of Roxbury, a part of Boston, and before long his professional intelligence and skill brought to him, still young, the appointment on the active surgical staff of the City Hospital. This position he held for twenty-five years, retiring at the age-limit, but continuing a consultant. He remained an admirable general practitioner until within a few years of his death and was an important man in his community.

Bolles was a natural craftsman, and long before breakfast he was happily at work in his well-equipped work-shop. He carved splints of many kinds, of original and excellent device, such as could not be bought; finger and thumb-splints, too, of brass. He melted silver and fashioned it into artistic shapes. He was a master in photography and his photographs of flowers could hardly be surpassed.

At different times he spent three summer vacations in Europe. He was not of a romantic temperament, and in his eagerness for nature and science, he found no time for poetry or novels. He was of short stature and in later years had a bushy head of gray hair. In operating he gave a great deal of attention to minute details and kept a roomful of assistants occupied.

He spent the last winter of his life in California, with his wife, under the mountains of Santa Barbara. The place was a revelation to them of beauty and comfort. They found old friends there and made new. On the 18th of March, 1916, at the end of a happy day out of doors, Dr. Bolles had a sudden heart-attack, and in a few minutes received his release.

Bolton, James (1812-1869), surgeon and ophthalmologist of Richmond, Va. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912. I. page 95.

BOND, Henry (1790-1895), of Philadelphia, physician and genealogist, was born in Watertown, Massachusetts, March 21, 1790, and was graduated from Dartmouth College in 1813, being a member of the Phi Beta Kappa Society, also from Dartmouth Medical School in 1817. His ancestors came from Bury St. Edmunds, England, and settled in Watertown, Massachusetts, in 1650, where they lived for several generations. His father was Henry Manuel Bond, farmer, and his mother the eldest daughter of Captain Phineas Stearns, both of Watertown; the grandfather was Colonel William Bond of the Revolutionary Army.

After practicing two years in Concord, New Hampshire, he went to Philadelphia in 1819, where he practiced medicine for over forty years. He was a fellow of the College of Physicians and was its secretary for eleven years and he was president of the Philadelphia board of health for several years.

Dr. Bond was the author of a work called "Watertown Family Memorials," two large volumes, giving the personal history of New England families, published in Boston, 1856; he published in the Transactions of the College of Physicians in 1828 a monograph on foreign bodies in the esophagus and how to remove them, with a description of his esophagus forceps.

He died from heart disease in Philadelphia, May 4, 1859.

BOND, Thomas (1712-1784), may with justice be considered one of the foremost eighteenth century medical men in America because of his influence in founding the first hospital and the first medical school (The Pennsylvania Hospital and the medical department of the University of Pennsylvania).

The son of Richard and Elizabeth Chew Bond, he was born in Calvert County, Maryland, in 1712. He studied medicine under Dr. Alexander Hamilton (q.v.), completing his education by European travel and special study at the Hotel Dieu, Paris. He probably came to Philadelphia and began practice there in 1734. In 1735 he married Susanna, daughter of Edward Roberts, of Philadelphia. They had seven children, Elizabeth, Thomas, Sarah, Rebecca, Phoebe, Robert, and Venables; Thomas and Robert following their father's profession. Bond's young brother Phineas came from Maryland in 1738 and the two brothers practiced in partnership being specially active in affairs of municipal health. It must be recalled that at this time Philadelphia was but a village. When Bond was at the height of his reputation (1769) the city had a population of 28,000. The streets were unpaved and unlit at night; there were no daily papers and but few vehicles.

Dr. Bond was accustomed to visit his patients in a two-wheel sulky drawn by a black horse. This was a very unusual method of conveyance at that time and supposedly permitted only to aged and infirm doctors, and was probably enjoyed by Bond because of his delicacy. In the earlier years of his practice,

Bond had a great deal of experience in diseases common to immigrants; he was on intimate terms with two physicians of the port —Dr. Thomas Graeme and Dr. Lloyd Zachary. That they saw a good deal of yellow and typhus fever was probable as he refers to five epidemics of typhus in his introduction to clinical lectures. Between 1740 and 1754 Bond was constantly asked to visit suspected vessels and attend to the isolation of suspicious cases and to fumigating infected houses or ships. His work would now be classed as that of a good, all-round general practitioner; but in his day surgery had not reached its present dizzy height, and his practice must be considered both medical and surgical. He reduced and splinted fractures, incised breasts, and opened "impostumes" (abscesses) of livers, scarified "mortifying" feet, amputated legs, tapped not only legs but both chest and abdomen, operated for stone in the bladder, attended difficult confinements, and also saw much of measles, small-pox, and the other infectious diseases. Benjamin Rush gives Bond credit for the introduction and general use of mercury in practice in Philadelphia. It was his habit to prescribe it in all cases which resisted the common methods of practice. Bond also used the hot and cold as well as vapor and warm air baths in the treatment of disease and had baths introduced into the Pennsylvania Hospital. He also devised a splint called by his name for fracture of the lower end of the radius, which has been familiar to all graduates in medicine during the last hundred years.

It is probable that Dr. Bond from the nature of his practice daily realized the comfort and aid which a well equipped hospital would furnish to many of his patients. It is an assured fact that he constantly talked to his friends and patients about the foundation of a hospital for the care of sick and injured to say nothing of the care of the insane. During the first years of the Pennsylvania Hospital a considerable proportion of its work consisted in the care of the so-called lunatics. It was not, however, until Bond approached Benjamin Franklin and explained to him the value of such an institution to the community, that any material progress was made.

The year 1765 marked the beginning of systematic medical instruction in the United States; that year's courses in anatomy and surgery (and midwifery) were given by William Shippen, Jr. (q.v.), and lectures on physic by John Morgan (q.v.). Dr. Bond taught clinical medicine the following year, and continued to hold clinics at the Pennsylvania Hospital till his death. According to Osler (Occasional Notes on American Medical Classics) the first lecture to be given in a hospital in America was given by Dr. Bond in the Pennsylvania Hospital, Dec. 3, 1766. As will be remembered the appointment of Morgan and Shippen was soon followed by that of Rush (q.v.) and Kuhn (q.v.) to the respective chairs of chemistry and materia medica, and botany. Bond was, however, at this time a man of fifty-four, whereas his associate professors were all men under or a little over thirty.

It is difficult to secure much of an estimate of Dr. Bond's general appearance. Concerning him, Thacher ("American Medical Biography," Boston, 1828, p. 178) says, "Dr. Bond was of a delicate constitution and disposed to pulmonary consumption for which he went a voyage when a young man to the Island of Barbadoes. By unremitted care to his health, the strictest attention to diet, and to guard against the changes of temperature and also by frequently losing blood, when he found his lungs affected, he lived to an age which the greater part of mankind never reach."

But few articles from his pen can be discovered. He made a number of communications to the Philosophical Society and frequently read letters from physicians both in England and in some of the English Colonies. In 1779 he read a paper before the Society on the "Means of Pursuing Health and the Means of Preventing Diseases." Two years before his death he delivered the annual oration at the State House before the Philosophical Society, the title of which was "Rank and Dignity of Men in the Scale of Being." This was published subsequently in the form of a small book of thirty-four pages. The address is distinctly scholarly, but with the exception of a few references to the use of new instruments for the measurement of atmospheric pressure, temperature, etc., which he always considered of great importance, there is little reference to things medical.

In the "Medical Observations and Inquiries," vol. i, page 68, is found a short clinical article by Bond, entitled "A Worm and a Horrid One found in the Liver." This article details the symptoms of a case in his practice in Philadelphia which he supposed to be due to the presence of an intestinal worm found in the liver, with a good description of the au-

topsy and an engraving of the postmortem findings. A second article in vol. ii. of the Observations was on the "Use of Peruvian Bark in Scrofulous Cases." The most notable contribution that he made to literature is, however, his "Introductory Clinical Lectures."

The cause of Dr. Bond's death is unknown. While he was considered rather a delicate man, he was, however, able to continue in his medical work until within several weeks of his death. It seems probable, therefore, that he died of some acute disease, or one of the conditions common to the aged, on Friday, March 26, 1784. He was seventy-two years of age. He was buried on Sunday in the burial ground at Fifth and Arch Streets where his grave is marked by a low flat marble tablet. FRANCIS R. PACKARD.

BOND, Thomas Emerson (1782-1856), was born in Baltimore in 1782. He was a founder of the College of Medicine of Maryland (1807), its first professor of materia medica, resigning the next year, and moving to the country because of ill-health. In 1812 he was a surgeon of cavalry in Harford County, Maryland. Bond's title of M. D. was bestowed by an act of assembly of the Maryland legislature at the same time that the degree was given to John Shaw and William Donaldson, the only instance of the sort on record (Cordell). He received the honorary degree of M. D. from the University of Maryland in 1819, and the degree of D.D.; he was a local preacher in the Methodist Episcopal Church. He practiced medicine in Baltimore, and was professor in the Washington Medical College (1832-34); president of the Board of Health, Baltimore, and of the Board of Trustees, Baltimore College of Dental Surgery, 1839.

In 1830-31 he edited "The Itinerant" and in 1840-52, edited "The Christian Advocate and Journal" (New York).

He was called "Defender of the Church," a title given because of his zeal and conspicuous ability.

He died in New York March 14, 1856.

BOND, Thomas Emerson (1813-1872), son of Thomas Emerson Bond (1782-1856), (q.v.), was born in Harford County, Md., in November, 1813. He received his earlier education at Baltimore College and was graduated M. D. from the University of Maryland in 1834, after which he practiced in Baltimore. One of the founders of the Baltimore College of Dental Surgery, 1839, he was professor of special pathology and therapeutics from its opening until 1872, and dean, 1842-49; professor of materia medica and hygiene in Washington University, Baltimore, 1842-51. In 1853 he retired from practice and removed to Harford County.

Bond was a minister in the Methodist Episcopal Church and was editor of the "Baltimore Christian Advocate" and "The Episcopal Methodist" (1841), and joint editor of "Guardian of Health."

Among his writings are, "Treatise on Dental Science;" "Life of John Knox."

He died Aug. 19, 1872.

BONINE, Evan J. (1821-1892), Michigan, army surgeon, of Quaker parents, was born at Richmond, Indiana September 10, 1821, the third son of a family of twelve children. Until seventeen he worked on his father's large farm during the summer and attended school during the winter, then, owing to his father's financial losses, he depended on himself. He began medical study with Dr. J. Pritchett of Centerville, Indiana, and received his M. D. from the Ohio Medical College in 1843. Settling in Niles, Michigan, he soon became a leader in things surgical and medical; in politics and social life. Several times he served the House of Representatives and in 1870 in the Senate. During the war of the rebellion he was appointed surgeon to the Second Michigan Infantry, rapidly being promoted until he was surgeon-in-chief of the third division, ninth army corps, during service taking part in twenty-nine different engagements. On June 17, 1864, Dr. Bonine had charge of two thousand wounded and dying soldiers brought in from all directions, and forty surgeons working under him. In the fall of 1864, because of illness (chronic diarrhea), he resigned and was appointed examining surgeon on the Provost Marshal's staff for the Western District of Michigan with headquarters at Kalamazoo, and filled the place until the close of the war. He was a member of the Michigan State Medical Society. Dr. S. Belknap of Niles, his partner for eleven years and a personal friend, said: "As a surgeon he had marked ability and superior judgment; he rendered unusual public service to his city and the state; his business ability guided the affairs of many households; his sympathy for his fellows impelled him to put forth his life to help others, either as individuals or institutions." In

1844 he married Eveline Beall, and his three children survived him; one son was Dr. F. N. Bonine. Dr. Evan J. Bonine died at Niles, Michigan, December 28, 1892, from chronic diarrhea acquired during army service. He published a "Report of a Case of Ear Embolism," "Physician and Surgeon," Ann Arbor, vol. vii.

LEARTUS CONNOR.

BONTECOU, Reed Brockway (1824-1907), of Troy, N. Y., was known as one of the largest contributors of pathological specimens to the Army and Navy Museum, which was, of course, indirectly a contribution to the "Medical and Surgical History of the War of the Rebellion" (J. S. Billings). He was born in Troy, New York, on April 22, 1824, the son of Peter and Samantha Brockway Bontecou, of French Huguenot and Scotch ancestry. His early career may be briefly summed up by stating that he graduated B. S. at the Rensselaer Polytechnic Institute, Troy, N. Y., 1842; was instructor in botany and zoology, 1843; studied medicine with Dr. John Wright (q.v.) and Dr. Thomas C. Brinsmade of Troy; attended lectures, medical department, University of the City of New York, 1844-45; made a trip up the Amazon river, 1846, to collect flora and fauna for the Troy Lyceum of Natural History; graduated M. D., Castleton, Vermont, Medical College, 1847, and began to practice in Troy with Dr. Thomas C. Brinsmade.

In 1848 he made a study of Asiatic cholera, epidemic at the time; treated diphtheria (newly recognized as a specific form of disease) by the open-air method and by tracheotomy when necessary; and treated general peritonitis with large doses of pulverized opium, reporting the following remarkable case August 2, 1854: Mrs. W. A., of South Troy, aged thirty-four, in good health and six months pregnant, while in a squatting position, feeding her chickens, ruptured an old umbilical hernia, spilling almost all her abdominal viscera on the ground. Patient when seen was in collapse, intestines covered with pebbles and dirt and swollen to the size of a peck measure. The opening was enlarged, viscera cleansed and replaced, wall repaired by rolling up and fixation with skewers, and a large dose of opium administered "to let her die easy." Despite severe peritonitis, however, recovery ensued under repeated large doses of opium (15 to 20 grains). Another case which attracted great attention as the first of its kind in this country was one of fracture of the cervical vertebræ with complete general paralysis, treated successfully, April 3, 1856, by extension. The patient recovering to resume his occupation as house painter, and to afford the doctor twenty years later the satisfaction of confirming by autopsy his original diagnosis. Bontecou made the first resection of the shoulder-joint (1861) and of the knee-joint (1863) for gunshot wounds, and practiced extensively excision of the fractured ends of long bones and a modified Pirogoff's operation on the foot.

On November 21, 1857, while in charge of the Troy Hospital he ligated the right subclavian artery for diffuse traumatic aneurysm of the axillary artery, the first successful case in America and one of the first three on record.

He enlisted in the Civil War April 13, 1861, as surgeon, Second Regiment, New York State Volunteers, with rank of major and operated on the field at Big Bethel, the first battle of the war. From October, 1863, to June, 1866, he was surgeon in charge of United States Army General Hospital, "Harewood," at Washington, District of Columbia, one of the largest hospitals of the war, with a capacity of 3,000 beds.

Brevetted lieutenant colonel and colonel of United States Volunteers, March 13, 1865, he resumed private practice in Troy in 1866. For many years he was attending surgeon at Watervliet Arsenal, West Troy, and attending physician and operating surgeon for twenty years at Marshall's Infirmary, Troy, where he made one of the earliest operations in this country for typhoidal perforation.

He was a member of the Rensselaer County Medical Society; Medical Society of the State of New York; New York State Medical Association; charter member and fellow, American Surgical Association, 1887.

He married, in 1847, Miss Susan Northrup of New Haven, Connecticut, and had five children.

He died in Troy, New York, March 27, 1907.

Personally a vigorous and handsome man of genial temperament and great originality, he was an indefatigable worker and constant student of his profession, keeping himself abreast of its advances, and covering in his sixty years of practice an immense field of activity and achievement. A healer by instinct and a brilliant surgeon, he was a naturalist by taste and early training. He travelled extensively, and his mind, rich with wisdom and broadened by varied tastes and vast experi-

ence, was a store-house for all who knew him. Lincoln Steffens, the publicist, said of him, "He will go down to history, I suppose, as a great doctor, and yet, what is really so much more to the point is that he was so great a man." REED BRINSMADE BONTECOU.

BOOK, James Burgess (1843-1916), skilful surgeon of Detroit, and financier, was born in Palermo, Canada, November 7, 1843, and died in Detroit, Michigan, January 31, 1916. He was the son of Jonathan Johnson and Hannah Priscilla Smith Book, who were both of Dutch descent. Dr. Book began his education in the Milton county, Ontario, grammar school and continued through the Milton high school and Ingersoll College. In 1858, he entered the literary department of Toronto University, but at the end of his sophomore year took up the medical course in the same institution. Before graduation, however, he went to Philadelphia, where he entered the Jefferson Medical College, and received an M. D. there in March, 1865, returning to Toronto and receiving there a medical degree from the Toronto University. Some months later he began private practice at Windsor, Ont., but soon moved across the river to Detroit and settled there. He took up a series of post-graduate studies in the centers of medical learning in Europe, and in the fall of 1865 went to England and attended a course of lectures at Guy's Hospital Medical School, London. Having completed this course he went to Paris and attended for a year the École de Medicin, which was followed by a three months' course in practical experience in the general hospital at Vienna. He left there to go to Trieste where the cholera plague was raging and studied this dreadful disease, caring for hundreds of victims day and night. In 1867 he returned home to Detroit and resumed his private practice which he combined with his duties as professor of surgery and clinical surgery at the old Michigan Medical College. Later, he was professor of surgery at the Detroit College of Medicine. In 1872 he was appointed surgeon to St. Luke's Hospital, where he remained four years, and then he was attending surgeon at Harper Hospital. In 1882 he became surgeon-in-chief of the Detroit, Lansing & Northern Railroad, where he continued until his retirement from the profession in 1895, when he turned his whole attention to business. He was a director of several banks and insurance companies and helped to finance some of the first and largest automobile companies in Detroit. He was surgeon of the Independent Battalion of Detroit in 1881 and later regimental surgeon in the State National Guard.

He married Clotilde, daughter of Francis Palms, a capitalist of Detroit, and they had three children, James Burgess, Francis Palms, and Herbert Vivian Book.

It was as a skilful and daring operator that Dr. Book was especially noted. In 1882 he was the first in the west to remove successfully Meckel's ganglion. He wrote "Nerve Stretching," the result of a series of new experiments which he had conducted in what was then a new department in surgery; also "The Influences of Syphilis and Other Diseases;" "Malarial Neuralgia," and "Inhalation in Diseases of the Air Passages."

BOOKER, William David (1844-1921), pediatrician of Baltimore, was born in Prince Edward County, Virginia, November 11, 1844, the son of James Madison and Lucy Ann Booker. After graduating from the Hampden Sidney College in 1862, he enlisted as a private in the 3rd Virginia Cavalry, C. S. A., and served until the end of the War. In 1867 he took his M. D. at the University of Virginia.

Dr. Booker was professor of clinical pediatrics in the Johns Hopkins Medical School from 1897 until 1909 when he became professor emeritus. The energies of his life were given to the study of the diseases of children, especially the summer diarrheas, prosecuted in the laboratory of the Johns Hopkins Hospital and involving painstaking studies of the colon bacillus. In 1888, he wrote on the bacteria in the dejecta of infants, afflicted with summer diarrhea. A bacteriological and anatomical study of the summer diarrheas of infants appeared in 1896. He was one of the founders of the American Pediatric Society and in 1901 was its president.

He married Julia T. Manning of Baltimore.

Dr. Booker died from pneumonia, March 15, 1921, at the age of 76.

BOOTH, Charles Miller (1830-1906), early botanist of Rochester, N. Y., was born in Middlebury, Vermont, October 12, 1830. His ancestors came from England in 1640, settling first in Connecticut, afterwards migrating to Vermont. His parents were Ezra Beers and Sarah Ellen Miller Booth. When Charles was

twelve years old he went to Rochester, N. Y., and his early education was obtained in the public schools and high school of that city. Later he attended the Vermont Medical College, at Woodstock, Vt., where he was graduated in 1851, before he was twenty-one years of age. Cards of matriculation show that he attended lectures on chemistry and botany by Dr. Chester Dewey (q.v.), and on the principles and practice of surgery by Dr. Edward Mott Moore (q. v.), in whose office he was for some time after he graduated.

In 1852, in company with two other Rochester young men, Dr. Booth went to Valparaiso, South America, making the voyage in a sailing vessel around Cape Horn.

After his return to Rochester, he bought a number of acres of land on the Culver road, in the town of Irondequoit, on the borders of the city, and engaged in the cultivation of fruit. In this he was eminently successful, as many of his friends could testify, for his kindness of heart and generosity were proverbial.

When quite young he became interested in botany, and after his return from South America devoted much time to this study, and in making collections for his herbarium. Such was his reputation that when, in 1864, it was proposed to found a People's College at Havana, N. Y., he was elected "Professor of Botany and Vegetable Physiology in their relation to Agriculture and Horticulture" in this contemplated institution. The endowment of Cornell University by Ezra Cornell prevented the building of the proposed college at Havana, and thus Dr. Booth lost a position which he would have filled with honor and credit to himself and profit to the cause of education.

Dr. Booth was a charter member of the Botanical Section of the Rochester Academy of Science, organized in 1881, and was for many years a regular attendant at its meetings and a contributor of papers and material for examination. He was a man of wide reading and extended research, a fine general botanist, and exceedingly careful in determining specimens. He was the first botanist in this country to discover the blossoms of "Lemna trisulca" L., and is so credited in the Fifth Edition of Gray's Botany. In the List of Plants of Monroe County and Vicinity, published by the Rochester Academy of Science in 1896, he is credited with finding many rare plants, and in the Supplementary List published by the same Society in 1910, he is authority for a large number of species. He was remarkably quick to recognize a new plant; sometimes when walking along the street and apparently not particularly interested in his surroundings, he would quietly step one side and gather an entirely new species. His studies in later years were mostly among the grasses, mosses and algae. His collections along these lines are now incorporated in the herbarium of the Rochester Academy of Science.

One of the greatest charms of Dr. Booth's home was his garden, in which many of our rare native plants were induced to grow and bloom. One interesting specimen which he raised and of which he was very proud, is a large tree, a hybrid between the English Walnut and the Butternut. This tree has attracted the attention of many botanists, and Prof. Charles S. Sargent, of the Arnold Arboretum, Boston, once paid it a visit.

In character, Dr. Booth was one of the most unassuming of men, gentle, quiet and retiring, enjoying to the utmost the freedom of his country life, with its flowers and its fruits and its opportunities for unostentatious deeds of kindness. His neighbors speak of him lovingly as one of the best of men, one who reminded them of Thoreau. To many of his friends he will ever be an exponent of the simple life.

On December 25, 1867, Dr. Booth married Miss Mary Augusta Baker, of Rochester, who died Nov. 22, 1895. One daughter, Mary Agnes Baker, of Rochester, was their only child.

He died from the infirmities of age at his home in Irondequoit on January 8, 1906. Since his death his land has been incorporated into the city. A sketch of him was published in the Proceedings of the Rochester Academy of Science, Vol. 5, pp. 39-58.

BORCK, Mathias Adolph Edward (1834-1912), surgeon of St. Louis, was born in Hamburg, Germany, April 18, 1834, son of a German surgeon. His mother, to whom he was indebted for his primary education, was a Dane. At the age of eleven he secured in competition a free scholarship in the Hamburg Gymnasium. During the war between Denmark and Germany, involving Schleswig-Holstein, he served as a volunteer dresser in the military hospital, and after the war returned and graduated in 1851, when he left for America to settle in Baltimore, Maryland, supporting himself for a time by teaching caligraphy. After acquiring some English he entered the

University of Maryland, graduating in medicine in 1862. While studying medicine under Nathan R. Smith, Samuel Chew and Edward Dwinnelle, he practiced minor surgery and dentistry.

He was an assistant surgeon and surgeon in the United States army 1863-1864, going with General Banks on the Red River expedition and was post-surgeon under General Granger. Taken with typho-malarial fever, he resigned at New Orleans and returned to Baltimore and on his recovery moved to Hancock, Maryland, where he practiced until 1868. After another brief sojourn in Baltimore he went to Paducah, Kentucky, in 1869, and in 1872 to St. Louis, Missouri, where he practiced and sat under the lectures of John T. Hodgen (q.v.) in the St. Louis Medical College. Here he received an additional degree in 1874. One of the organizers of the College for Medical practitioners of St. Louis, he was professor of surgical diseases of children there, 1882-1884; he was a capable post-graduate teacher. Borck was the first surgeon to advocate and practice the subcutaneous division of the capsule in hip disease in the second stage, the stage of serous or synovial effusion. He wrote on fracture of the femur, abjuring straight splints, and he carried his reports of his ovariotomies on from a single case in 1878, up to fifty in 1885, with five deaths, to one hundred cases in 1895.

In 1884 he went as delegate to the eighth International Medical Congress at Copenhagen and remained abroad to study. He attended, also, the tenth Congress at Berlin, in 1890.

He was an artist with the brush, the Marion Sims Medical College having many of his more than life-size anatomical paintings, and he was a skilful pianist.

He was married in 1854, his widow, Dr. Henrietta Stoffregen Borck, surviving him.

He died in St. Louis Jan. 20, 1912.

HOWARD A. KELLY.

BOSWORTH, Franke Huntington (1845-1925), New York laryngologist, was the son of Daniel P. Bosworth, merchant, by his wife Deborah Wells. Though his forebearers on both sides were of New England ancestry for many generations, Bosworth was born in Marietta, Ohio, where his parents had moved some years before, and there he received his preliminary education which included two years (1858-1860) at Marietta College. At the outbreak of the Civil War he left college and immediately entered into active service under General W. S. Rosecrans who led the Ohio and Indiana troops to victory at Rich Mountain (July 12, 1861), Carnifex Ferry and at several other strategic points in western Virginia. Bosworth entered the junior class at Yale in 1862, but after graduation he enlisted a second time and soon after saw service under Burbridge who eventually routed General J. H. Morgan at the Peninsula. After the War he settled in New York where he began the study of medicine, and in 1869 was graduated from the New York University Medical College as valedictorian of his class. Following an internship at Bellevue Hospital, during which his interest was aroused in the diseases of the throat, he was appointed lecturer on the diseases of the upper air tract in 1871 at Bellevue and ten years later was made full professor, a chair which he held after Bellevue became united with New York University Medical College in 1898 and until he retired from active practice.

The science of laryngology was created through the independent labors of three men: J. Solis-Cohen, of Philadelphia, Bosworth, and Sir Morell MacKenzie of London. Solis-Cohen's monograph dealing with this specialty appeared in 1878. A few months later, in 1879, Bosworth published his "Handbook upon Diseases of the Throat for the Use of Students." The material for this work was drawn almost entirely from his own experience, being compiled from his carefully kept case records. A more comprehensive "Manual of the Diseases of the Throat and Nose" (427 pp.) was published in 1881. MacKenzie's work on the same subject appeared in the following year, and through these four works laryngology as a specialty in medical science had its origin. Bosworth later issued an extensive treatise in two volumes entitled the "Diseases of the Nose and Throat" (1890-92; 670-832 pp.), and it is interesting to note that as a result of ten years active practice he changed his emphasis from the throat to the nose by reversing their order in the title of the later work. The immediate success of this monumental contribution prompted him in 1896 to bring out a shorter textbook, "The Diseases of the Nose and Throat" (814 pp.), which enjoyed great popularity and was for many years the vade mecum of American students and practitioners of general medicine as well as those who specialized in that field. Bosworth also con-

tributed extensively to nose and throat journals, and was among the first to study in detail the pathology of nasal and laryngeal affections. Shortly after the introduction of cocaine he perfected a nasal saw with which spurs of the septum could be easily removed. Bryson Delavan, (Med. Jour. & Rec., N. Y. 1926. vol. 123, pp. 125-126) in referring to Bosworth says very appropriately that he "more than anyone who had gone before, gathered the disjointed and scattered fragments of laryngological knowledge, developed the science of rhinology, and, welding all into a perfectly coördinated form, established them as definite departments of medical science."

Bosworth was one of the founders (1873) of the New York Laryngological Society, the first in the world devoted to that specialty, and he was later made honorary member of the British, French and German Laryngological Societies. Personally Bosworth was a handsome man who spoke both in conversation and in his lectures with an energy and enthusiasm which attracted to him a large number of friends and admirers. He was well known among dramatists and in New York literary circles, and was fond of horses and racing. His wide interests and literary tastes also led him into the study of art.

He married Sept. 1, 1871, Mary Hildreth Putnam, and two children survived their father: F. H. Bosworth, Jr., Dean of the school of Agriculture at Cornell, and a daughter, wife of Hon. Walter R. Herrick of New York. J. F. FULTON.

Botsford, Le Baron (1812-1888), practitioner of St. John, New Brunswick. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 126.

BOTTOMLEY, John Taylor (1869-1925), surgeon-in-chief to the Carney Hospital, South Boston, was born in Lee, Massachusetts, September 24, 1869, the son of John and Ellen Ryan Bottomley. He received an A. B. from Holy Cross College, Worcester, in 1889 and M. D. from Harvard Medical School in 1894. During the Spanish War Dr. Bottomley was first assistant surgeon to the Massachusetts hospitalship, the "Bay State," then he served in the reserve corps of the navy. His first hospital appointment was assistant visiting physician to the Boston City Hospital in 1899; in 1901 he became an assistant in surgery in Harvard Medical School and at the same time supervising surgeon to the Haymarket Relief Station of the City Hospital. From the year 1902 he was a member of the surgical staff of the Carney Hospital and after 1910 he was its surgeon-in-chief. During the World War Dr. Bottomley was a captain in the Medical Corps, using excellent judgment in selecting candidates for enrollment. At the Carney Hospital he developed great skill as an operator; his physique was rugged; his courtesy constant. Among the offices he held are to be mentioned: Lecturer in the Harvard Graduate School of Medicine, Consulting surgeon to the Haverhill City Hospital; the Josiah B. Thomas Hospital, in Peabody; the Union Hospital, Fall River, the Burbank Hospital, Fitchburg; and to the Leominster and Framingham hospitals. He was a Roman Catholic, Fellow of the American College of Surgeons, a member of the American Medical Association, the Massachusetts Medical Society, the American Surgical Society, the Society for Clinical Surgery, the Military Medical Society and of the University, Union and Harvard clubs.

Dr. Bottomley married Miss Mary Agnes Kenney of Roxbury, Boston, and they had three sons and two daughters.

He died suddenly of heart disease in his office in Boston, after a morning of operating at two hospitals, December 17, 1925, at the age of fifty-six.

BOVELL, James (1817-1880), Canadian physician and West Indian missionary, the son of John Bovell, a banker, was born in Barbadoes, West Indies, where his family had lived for several years. At seventeen, he went to England to enter Cambridge but became ill; upon recovery, he took up medicine at Guy's Hospital and is said to have "remained a Guy's man" all his life, delighting in talking of his hospital work and of his old teachers, particularly Bright and Addison who were his ideals. After receiving his license from the College of Physicians, he studied morbid anatomy under Dr. Craigie at Edinburgh and later worked on the pathology of fever with Dr. Buchanan, at Glasgow and then went to Dublin to study under Stokes and Graves. Following an attack of typus fever there, he returned to Barbadoes and began practice at Bridgetown. About 1848, he went to Toronto, Canada, became prominent in medicine, and in 1850, with Dr. Norman Bethune, Dr. Edward M. Hodder and Dr. Henry Melville, organized the Medical Faculty of Trinity Col-

lege and became dean of the faculty and professor of the institutes of medicine during the four successful years of its existence. He was physician to the General Hospital and to the Burnside Lying-in Hospital and in both gave clinical instruction. He was also professor of natural theology in the University of Trinity College. When the Medical Faculty of Trinity College closed, he joined the Toronto School of Medicine, lecturing on physiology and pathology until he left Canada, in 1870, to live on his estate on the island of Nevis, where he took orders in the Church of England.

Dr. Bovell married Julia Howard Griffiths of Henley, Barbadoes; they had four daughters.

He was one of the founders of the "Upper Canada Medical Journal" (1851), the first published in the Province and contributed largely to medical and scientific as well as to theological journals. For the "British-American Journal," he wrote a series of papers on the "Barbadoes Leg." Other works include "Outlines of Natural Theology," "The Advent," and "Preparations for the Holy Communion," 1859; "Outlines of the History of the British Church," 1860; and "Passing Thoughts on Man's Relation to God," 1862.

After suffering for years from an ulceration of the back, Dr. Bovell had a paralytic stroke, December 8, 1879, and died, January 16, 1880. His high attainments were not more marked than his devoutness; he was the "beloved and saintly James Bovell." Sir William Osler began his medical career in Dr. Bovell's office and became his friend and biographer. Of Dr. Bovell, he wrote: "Prominent among his characteristics was a moral nature of unusual delicacy and fineness; vice naturally avoided him, virtue was drawn towards him, and the good side of a man instinctively showed itself in his presence. Mentally he had been richly endowed: a strong memory—except in matters of professional business—keen perceptive faculties, a quick wit, and considerable fluency of expression . . . . As a physician his power of diagnosis was especially good, more particularly in diseases of the heart and lungs . . . . He was a brilliant lecturer rather than a good teacher; his own intuitive grasp of ideas was so rapid and clear that he failed to make allowance for the slower perceptions of less gifted minds. . . . . The influence for good which a life like that of Dr. Bovell exercises in the profession and in society at large is in many ways incalculable. . . . . His own high purpose and unselfish life find living echoes when he himself has long passed away."

HARRIET BLOGG.

BOWDITCH, Henry Ingersoll (1808-1892), chairman of the first Massachusetts State Board of Health, pioneer specialist in diseases of the chest; introducer of "paracentesis thoracis," was the third son of the celebrated mathematician, Nathaniel Bowditch, and of Mary Ingersoll, his wife. He was born in Salem, Massachusetts, August 9, 1808, his early life being spent in Salem; but in 1823 his father moved to Boston, which became his permanent home. The old house in which he lived at first was at 8 Otis Place, now Winthrop Square, at the junction of Devonshire and Otis Streets in the present heart of the business section of Boston, at that time a quiet residential section of the city. In 1859 he moved to 113 Boylston Street (afterwards numbered 324), opposite the Public Garden, where he remained until his death thirty-three years later, in 1892.

He was graduated from Harvard College in the Class of 1828, and subsequently began his medical studies in the Harvard Medical School, receiving an A. M. and M. D. in 1832. Later he was house officer in the Massachusetts General Hospital under the tutelage of his revered master, Dr. James Jackson (q.v.), for whose character and skill he always felt the deepest reverence. In 1832 he went abroad to study in Paris, and was fortunate in becoming associated with the great Louis. For most of two years he was under the latter's guidance in the hospital of "La Pitié" in the "Quartier Latin." With Louis, he became deeply interested in the teachings of Laennec in examination of the chest by auscultation and percussion; and he became so proficient that his contemporaries prophesied that he would be a fitting successor of Dr. James Jackson, who was the leading physician in Boston in this special line of work at that time. This was the beginning of his subsequent fame as a specialist in diseases of the chest and gave him the inspiration for the important work with which his name will be always associated, namely thoracentesis (aspiration of the chest in pleuritic effusions by the aspirating needle and trocar), and his studies upon the probable predisposing causes of pulmonary tuberculosis, at that time usually spoken of as "consumption" or "phthisis."

Previous to his return to Boston in 1834, he

visited the hospitals of Great Britain but found always his chief inspiration in Paris under the men who at that time were leaders in the medical world, the palm always being given by him and others to the great Louis.

After his return to Boston he began practice in general medicine, although he never practiced surgery. During the early years he wrote and published "The Young Stethoscopist," a little book even now often referred to as containing most valuable instruction in the art of auscultation and percussion of the chest.

In 1835, when he had become a member of the Massachusetts Medical Society, he founded with Dr. John Ware the Boston Society for Medical Observation, a similar organization to that under the leadership of Louis in Paris. It existed as a student society for two years when it was discontinued, then revived again by Dr. Bowditch and seven others, the organization being merged many years afterwards into the Boston Society for Medical Improvement. From the Society for Medical Observation, the Boston Medical Library Association took its birth, the first meeting of the association being held in Dr. Bowditch's office, December 21, 1874, six gentlemen being present. In 1878 Bowditch made an address at the dedication of the Library building in Boylston Place and took the keenest interest in its growth from that time.

Incidentally, immediately after his return from Europe he witnessed the so-called "Broadcloth Mob," in which William Lloyd Garrison was mobbed at the Old State House by formerly respectable citizens of Boston for his burning denunciation of slavery. Instantly, Dr. Bowditch with the fire which was one of his marked characteristics, espoused the cause of the Abolitionists headed by Garrison, and took active part in all the auxiliary work in Massachusetts until slavery was abolished by the Civil War. This enthusiasm for the cause of the slave was followed by his being ostracized socially by many of the aristocratic members of Boston society. Such opposition seemed only to fire him to even stronger endeavors, and at the risk of loss of practice, and in spite of vehement denunciations of his course by some of the press in Boston, he resolutely held to his convictions undaunted.

His numerous journals, extracts from which were published by his son, Vincent Y. Bowditch, M. D., in 1902 in the "Life and Correspondence of Henry Ingersoll Bowditch," give vivid proof of Dr. Bowditch's active part in what he used to call the "Thirty Years' War of Antislavery." They form deeply interesting records of the history of that great movement in the United States.

In 1838 Dr. Bowditch was married to Miss Olivia Yardley of London, England, whom he had first met in Paris six years before, and to whom he had become deeply attached: a perfect union which lasted up to her death, fifty-two years later. They had four children.

Notwithstanding the calls upon his time for anti-slavery work, he was always deeply interested in his researches in medicine. His work on the ova of the lymnea (common snails) was an illustration of his great attention to details in any scientific work. Under the microscope, he, for months, daily watched the development of the ova, and with the help of his wife succeeded in illustrating by exquisite drawings the growth of the snail from its earliest stages. This work is a classic which has been often referred to by eminent men in recent times.

Early in practice he was convinced of the lack of proper treatment for pleuritic effusions, and he watched with deepest regret the death of many a patient from the lack of what he then believed to be the proper surgical procedure in cases of large effusions which gave rise to great dispnea and often death from suffocation. Opening of the chest wall by surgical incision had been occasionally practiced at rare intervals in former years, but only in cases of apparent chronic pleurisy. Shrinking from any form of surgery, for which he felt he had no talent, he nevertheless urged surgeons to relieve patients by removal of fluid in acute pleuritic effusions; but in this idea he was strenuously opposed by men of highest reputation, even surgeons. His revered master, Dr. Jackson, told him it was too dangerous, and that absorption by nature's method was the only proper way of removing fluid. One surgeon went so far as to say he "would as soon shoot a bullet into the chest wall" as to follow Dr. Bowditch's suggestion. Convinced of the correctness of his own view, however, Dr. Bowditch persisted, and finally was rewarded by seeing an instrument devised by Dr. Morrill Wyman (q.v.), of Cambridge, Mass., who had used successfully a trocar and canula connected with a suction pump on a case in which Dr. Bowditch had been called in consultation, April 17, 1850. Dr. Bowditch's first paper "On Pleuritic Effusions, and the Ne-

cessity of Paracentesis for their Removal" was read before the Boston Society for Medical Observation, Oct. 20, 1851, and published in the "American Journal of the Medical Sciences," April, 1852. He believed that at last the proper instrument had been found, and from that time proceeded to use the method in suitable cases successfully and in spite of great opposition. During the following ten years, Dr. Bowditch operated in several hundred cases without a single death and with infinite relief to the patients as a rule. He had advised a slight modification of Dr. Wyman's suction pump, which he always used. Several years after Dr. Bowditch had published the records of many cases in which he had thus aspirated the pleural cavity, (Amer. Jour. Med. Sci., Jan. 1863), Dieulafoy in Paris proclaimed to the world his excellent aspirating instrument, which differed in detail, not in principle, from Dr. Wyman's but he never made the least allusion to the work done several years before by Dr. Bowditch; an omission which Sir William T. Gairdner of Edinburgh, the eminent clinician and professor of medicine, sharply criticized in a paper published in later years in the Edinburgh "Medical Journal." Dr. Bowditch in all of his papers spoke of his debt to Dr. Wyman, who invented the original instrument, but the long and exhaustive study of cases and the successful result of introducing to the medical world the now well-known operation of thoracentesis was due to Dr. Bowditch's persistent effort to compel the profession to adopt this method of treatment.

At the same period, Dr. Bowditch was making careful investigations also as to the probable causative factors of phthisis pulmonalis ("consumption"), now usually termed pulmonary tuberculosis. For eight years he pursued his investigations by letters written to physicians throughout the state asking for data in regard to the prevalence of consumption in their localities, and the situation of homes in which the disease was most common. The result of these investigations seemed to prove the fact that residence upon a damp soil is a potent factor in the propagation of the disease. The discovery twenty years later of the bacillus tuberculosis by Koch seems in no way to weaken the theory that high dry soil is less prone to the prevalence of tuberculosis than situations in low swampy lands. As orator at the Annual Meeting of the Massachusetts Medical Society in 1862, he presented the paper entitled "Topographical Distribution and Local Origin of Consumption in Massachusetts." This address was received with acclamation by the society and was subsequently distributed in pamphlet form throughout the state. At almost exactly the same time, Buchanan of London was making similar investigations with like results in England, neither being aware that the other was at work upon the subject.

Dr. Bowditch took the keenest interest in the Massachusetts Medical Society and held important positions; recording secretary 1849 to 1851, corresponding secretary from 1851 to 1854. He attended meetings with marked regularity from 1847 to 1887 when failing health compelled him to cease his attendance. From the time that the subject was first introduced in June, 1875, he advocated strongly the admission of women to the society and afterwards he was chairman of a committee on this subject. He was especially active in matters pertaining to public health projects and the bettering of vital statistics. From 1859 to 1867 he held the position of Jackson Professor of Clinical Medicine at the Harvard Medical School. During his professional career he was at first connected with the Massachusetts General Hospital and afterwards with the Boston City Hospital and the Carney Hospital in South Boston as attending physician.

During the Civil War, 1861-5, Dr. Bowditch gave his services freely to his country. For many months he made examinations at the Enrolment Offices, and after a visit to the battlefields of the South, where he was shocked and horrified at the shameful lack of an ambulance system, with the consequent fearful and unnecessary suffering of wounded soldiers, he addressed letters to Congress, and especially to Vice-President Johnson, and with characteristic ardor described his personal observations of the condition of our suffering soldiers. The singularly pathetic incident of the agonizing experience of his oldest son, left on the battlefield unaided for twenty-four hours, and his subsequent death following close upon the father's fervent appeal to the country to rectify these errors, was a potent factor in bringing about the desired change not long afterwards. In the midst of his crushing sorrow, Dr. Bowditch strove only more earnestly to rectify these wrongs. Within a comparatively short time afterwards, Congress passed a bill making adequate provision for the wounded and an ambulance system was established.

Deeply interested in all sanitary matters,

Dr. Bowditch was appointed in 1869 by the Governor of Massachusetts, with six others, to form a State Board of Health, the first in the United States; and as chairman of the board he gave much time and thought to this work, without salary, for ten years, until with false notions of economy the legislature combined the Boards of Health, Lunacy, and Charity in 1879. The result of this action was such as to destroy all efficiency of work. After a few months of ineffectual attempts to make the Governor change the policy, Dr. Bowditch with deepest regret resigned from the Board in 1879. What the United States owes to the work of Dr. Bowditch and his associates on the Massachusetts Board of Health,—the first to be established in America, and the first to point the way for subsequent similar associations now formed throughout the Union,—can never be estimated. Their names will stand pre-eminent in the history of preventive medicine in the United States.

The respect which was shown abroad for the establishment of the original board was well shown in a comment made upon Dr. Bowditch's first address to the Board in the "Gazette Médicale de Paris."*

During his term of service, in 1871 he issued another work, entitled, "Intemperance in New England and How Shall We Prevent It?" This paper was again the result of several years' investigation of the customs in different countries of the world, as to the use of light wines, beer, and liquors. Basing his opinion upon the replies received from innumerable sources, he declared that the use of light wines and beer in moderation was not seriously detrimental, and that total prohibition was not advisable, even going so far as to say that it would be well to advocate the substitution of beer and light wines for liquors, inasmuch as a natural craving for stimulant among human beings would be thus met without serious detriment to health. Whether he would have modified these views towards favoring prohibition in later years, it is impossible to say, although his inclinations were always towards very moderate use of any alcoholic stimulant whatever. His position on this matter at the time brought forth a torrent of abuse from Prohibitionists, one popular preacher going so far as to announce a lecture entitled, "Dr. Bowditch and Free Rum!" an amusing episode to all who knew him upon whom the attack was launched! In 1874 he published another article for the fifth annual report, entitled, "Preventive Medicine and the Physicians of the Future." After an extensive review of the grand scope of preventive medicine, he finally gives his reasons for placing before the public a brief history of events relative to the subject in Massachusetts. In 1876, at a meeting of the International Medical Congress in Philadelphia, he gave an address called, "State Medicine and Public Hygiene in America," an exhaustive study of the conditions existing then in the United States, and a discouraging but at the same time stimulating account of the wretched lack of hygienic methods in the country, with suggestions as to what could be done to improve them. This address marked an epoch in the history of hygiene in the United States, and was received with enthusiasm by the Association. At the request of its members, copies of the address were sent broadcast to the various state legislatures and Governors throughout this country and Canada.

Although taking no active part in public affairs of this nature in his later years, Dr. Bowditch never lost his interest in all questions pertaining to the realm of Preventive Medicine. He continued the practice of his profession as a specialist in diseases of the chest until within two or three years of his death. The last paper he read was at the meeting of the American Climatological Association in Boston in 1889. In this brilliant and picturesque article entitled "Open-Air Travel as a Cure for Consumption," he gave the history of his own father, who, in 1808, at the age of 35, began to have severe hemorrhages and other symptoms of incipient pulmonary tuberculosis, and adopted as his first means of cure, after the first active symptoms had ceased, a drive lasting several weeks through towns of New England in an open buggy with a friend, the subsequent history being one of entire recovery after change in his methods of life. After his death, at the age of 67, from cancer of the stomach, the healed lesion of the lung was found at autopsy. This article can be regarded almost as a classic in its concrete exposition of the value of hygienic treatment of tuberculosis in a

*Le mois dernier on a fondè à Boston un comité de santé publique sous la présidence du docteur Henry Bowditch. Celui-ci, dans son discours inaugural, a tracé tout le programme que le propose le nouveau comité. Ce programme est trés remarquable, par son étendue et par sa haute portée.

manner little known or understood in those earlier days of New England life.

No biography however short would be complete without allusion to Dr. Bowditch's deeply religious nature. Although devoted to scientific truth, he never swerved from his religious faith which seemed to pervade every action of his life. Although early in life he passed through years of doubt and perplexity in matters relating to forms of religious expression, he came in later years to a serenity of mind on such subjects that never failed. Although a Unitarian in his final beliefs, his breadth of wisdom and tolerance of other views were marked features of his character. Just so long as the expression of any belief was thought by him to be sincere, he gave it that respect which he felt was due to the opinions of others even if they differed wholly from his own. He saw beauty in every form of religious thought while adhering to that which appealed most strongly to him. This breadth of judgment extended to his professional work, and especially to his intercourse with his younger associates who freely turned to him for counsel and advice.

A free and general culture he always strongly advocated to his students as the best means of avoiding the danger of becoming "men of one idea" with consequent detriment to their professional work. He believed in travel and the consequent humanizing effect of the study of men and manners other than our own. His enthusiasm for life extended to his latest years in spite of increasing infirmities and weakness towards the end. The death of his wife, after fifty-two years of an ideally happy union, marked the beginning of the end. Thirteen months later, on January 14, 1892, he died, at the age of 83.

VINCENT Y. BOWDITCH.

BOWDITCH, Henry Pickering (1840-1911), Boston physiologist, was born in that city, April 4, 1840, grandson of Nathaniel Bowditch, the distinguished mathematician and navigator, and son of Ingersoll Bowditch, a merchant honored for integrity and generosity. Through his mother, he was descended from Colonel Timothy Pickering, Secretary of State under Washington. At the age of 21 he was graduated from Harvard College with the A. B. degree. In the fall of that year he volunteered his services for the Civil War and was appointed second lieutenant of the First Massachusetts Cavalry. From January, 1862, until the close of the conflict, he was in active service, and entered Richmond, April 3, 1865, as major in the Fifth Massachusetts Cavalry (colored).

In the autumn of 1865, he began again his studies at the Lawrence Scientific School under Jeffries Wyman, but soon changed to the Medical School from which he received, in 1868, the M. D. degree. Following his medical course Dr. Bowditch went abroad to study physiology and came into relation with Claude Bernard, in Paris, and Carl Ludwig, in Leipzig. Since Ludwig's laboratory was the centre for Physiological study at the time, he there made acquaintance with young men from various countries—Mosso, Kronecker, Brunton, Lankester, Cyon—whose friendships lasted throughout their lives. The years in Leipzig were highly profitable, for one of his papers in which he described the "all-or-none" law of the heart and the "treppe" effect, is a classic in physiology.

Dr. Bowditch returned to Boston in 1871, as assistant professor of physiology in the Harvard Medical School. He soon established a laboratory, the first physiological laboratory for the use of students in the United States. The interests of the laboratory were in fact, broader than physiology, for the researches conducted in it were concerned with general biology, experimental pharmacology and pathology, experimental psychology and experimental surgery, in addition to investigations which would be recognized now as strictly physiological. The first careful work in bacteriology in the United States was begun there. From the beginning the emphasis which Dr. Bowditch placed on the industry of the laboratory was in the direction of productive scholarship. An inventive quality possessed by him found full opportunity in physiological investigation. He first suggested simultaneous records for the kymograph. He contrived the Bowditch clock for registering time on graphic records; the induction apparatus with the secondary coil turning at various angles, as well as a new form of plethysmograph to register the changes in the volume of organs, that testified to his inventiveness.

His own investigations, in addition to those on the peculiar functions of cardiac muscle, included work on the indefatigability of nerves, conditions affecting the activity of the knee-jerk, the force of ciliary motion, the effects of different rates and intensity of stim-

ulation on the action of vasomotor nerves and anthropometric examinations of the rate of growth of school-children.

As a teacher, Dr. Bowditch's lectures were characterized by wise selection of material, cautious inference and orderly exposition. He made use of the method of sending students to original sources for material for physiological theses—a notable contribution to educational procedure. In 1876 he was made professor of physiology, and in 1903 was appointed to the George Higginson professorship. He was influential in founding the American Physiological Society and establishing the "American Journal of Physiology."

His services to the Harvard Medical School were various. He aided in securing a new building for the school on Boylston Street which was occupied in 1883; and with Dr. John Collins Warren he was chiefly instrumental in obtaining funds for the monumental group of buildings across the Fens, in Roxbury, occupied in 1906. From 1883 to 1893, he was dean, and during that time introduced bacteriology and began to bring men from other universities to assume positions in the School. His interest in medical education was expressed in two addresses, "Reform of Medical Education" and "The Medical School of the Future." Among the most valuable of his larger services to medicine was his defense of animal experimentation. The pioneer work in overcoming the zeal of misguided agitators on this subject was done by him before the Massachusetts Legislature, and the methods he used and proved effective have been extended to other commonwealths. His address on "The Advancement of Medicine by Research" was an illuminating statement of the benefits to mankind from animal experimentation.

He made a number of direct contributions to physical anthropology, some of which are of great value, notably his investigations on the growth of children. These appeared in the annual report of the Massachusetts State Board of Health in 1877 and 1879, 1889-90 and 1891, also in the transactions of the American Medical Association, 1881.

In public service he was a member of the Boston School Committee (1877-1881), was president of the Boston Children's Aid Society, was trustee of the Boston Public Library (1895-1902), and was an active member of the Committee of Fifty on the Alcohol Problem.

His services were widely honored. In 1872, he was made a Fellow of the American Academy of Arts and Sciences. He was also a member of the American Philosophical Society of Philadelphia, the National Academy of Sciences, the Royal Society of Medicine and Natural Sciences of Brussels, the Academy of Science of Rome and other foreign societies. The University of Cambridge made him honorary Doctor of Science in 1898. He was granted the degree of Doctor of Laws by Edinburgh (1898), Toronto (1903), Pennsylvania (1904), and Harvard (1906).

Dr. Bowditch possessed a rare combination of sober judgment and vigorous will—the qualities of a natural leader. His ingenuity and effectiveness were manifest not only in physiological research, but in matters of affairs. He possessed unfailing courtesy, fairness and goodwill, warmed by a delightful sense of humor. His friendships he cultivated in many happy ways, both at his home in Boston and in his summer camp in the Adirondacks. His last years were saddened by the gradual limitation of his vigor and activity through the advances of paralysis agitans. But throughout the gradual decline he accepted his fate with cheerfulness and with gentle consideration for those about him. He died at his home in Boston, March 13, 1911, being survived by his widow, Selma Knauth, whom he had met in Leipzig, and a family of sons and daughters. One of the last times that he appeared in public was in Sanders Theatre at the ceremonies of dedication of the new Medical School buildings. The occasion was a memorable one, and Dr. Bowditch's impressive figure, clad in the scarlet robes of his Edinburgh doctorate, and seated at the front of the platform, side by side with Dr. Warren, made a fitting center to the striking scene.

Some of the important publications of Dr. H. P. Bowditch are:—

1871. Uber die Eigenthümlichkeiten der Reizbarkeit, welche die Muskelfasern des Herzens zeigen. Arb. a. d. physiol. Anst. zu Leipz., 1871, 139-176. Also: Ber. d. k. sachs. Gesellsch. d. Wissensch. Math. phys. Kl., 1871. 1875. A new form of inductive apparatus. Proc. Amer. Acad., Oct. 12, 1875. 1876. Force of ciliary motion. Boston Med. & Surg. Jour., vol. xcv, 159-164. 1877. The growth of children. 8th Annual Report of the State Board of Health of Mass., Boston, 1877, 275. 1879. A new form of plethysmograph. Proc. Am. Acad., May 14, 1879. 1880-82. Dr. Bowditch and Hall, G. S. Optical illusions of motion. Jour. of Physiol., 1880-82, vol. iii, 297-307.

1883. Dr. Bowditch and Warren, J. W. Plethysmographische Untersuchungen über die Gefässnerven der Extremitäten. Centralbl. f. d. med. Wissensch., 1883, vol. xxi, 513. 1885. Note on the nature of nerve-force. Jour. of Physiol., 1885, vol. vi., 133-135. 1886. Dr. Bowditch and Warren, J. W. Plethysmographic experiments on the vasomotor nerves of the limbs. Jour. of Physiol., 1886, vol. vii, 416-450. 1890. Dr. Bowditch and Warren, J. W. The knee-jerk and its physiological modifications. Jour. of Physiol., 1890, vol. xi, 25-64. 1890. Uber den nachweis der Unermüdlichkeit des Säugethiernerven. Arch. of Physiol., 1890, 505-508.

WALTER B. CANNON.

BOWLING, William K. (1808-1885). When Dr. Bowling, medical editor, was asked how old he was, he said, "When the Third Napoleon, Emperor of the French, Salmon P. Chase, Robert E. Lee, Andrew Johnson, and Jefferson Davis came into the world and when the American slave trade terminated by a provision of the Constitution of the United States, I came—born when giant men came, and when a giant sin and outrage died." This event occurred June 5, 1808 in the Northern Neck of Virginia, in the county of Westmoreland, the native county of George Washington. Tradition and history represent his ancestors as planters, and, while remarkable for kindness and generosity, none of them filled any conspicous place in church or state.

In 1810 his father moved to North Kentucky, where William Bowling—the fifth of ten children, was educated privately by excellent tutors, and among them three authors of books. He says "Like Clay and Drake, I was dropped down in the wilderness of Kentucky and left to fight the battle of life as best I could without education, family influence or patronage. To three vagabond authors, whom my father fed for my benefit, and a public library of five hundred volumes, which I devoured before I was fourteen, I owe the foundation of all I am or hope to be. I attended one course of lectures in the Medical College of Ohio, and practiced five years, and attended another course at the Medical Department of Cincinnati College, known as Drake's School, and graduated. Drake was my medical idol, and his memory is yet. I was used to the society of authors. I had slept with them, roamed the wild forest with them, raved and ranted with them, and felt almost as big at eighteen as any of them, and they felt as big as all out-doors. One was a poet, William P. S. Blair, brother of the celebrated Francis P. Blair, of Kendall and Jackson memory. Lyman Martin, afterwards my medical preceptor, a scholar from Connecticut, spent many hours at my father's with these men, but he never raved or ranted. God bless him! He was everything to me, taught me, and believed in me."

Bowling received his medical degrees in the spring of 1836; as a practitioner from 1836 to 1850 he gained a great eminence in Logan County, Kentucky, near the Tennessee line, and became widely known in both states. During this time he had always under his tuition a number of office students, who spread his reputation as an original teacher of medicine far and wide. In 1848 he was offered the chair of theory and practice in the Memphis Medical Institute, the pioneer medical school of Tennessee. This offer he declined. In 1850 he removed to Nashville, hoping by his presence to stimulate physicians of eminence, to whom he had vainly written, to take part in aiding Dr. J. B. Lindsley in founding a medical school. The latter brought his plans to Bowling who at once declared that he would give largely of means and labor in connection with the "Old University," and would not invest a cent in a private enterprise. Dr. Lindsley and his associates accepted his views, gave him the chair of theory and practice, and made him their mouthpiece in communicating with the board of trustees, by which the faculty was commissioned on October 11, 1851. In the school thus established (the medical department of the University of Nashville) by the energy of a college-bred youth and the wisdom of a backwoods practitioner, coupled with the assistance of a most able corps of teachers, he became at once a master spirit. Understanding the nature of the medical student with an insight given to but few, he had a hold upon the class peculiar to himself. In 1851 he founded the "Nashville Journal of Medicine and Surgery," and sustained it for a quarter of a century. His contributions to medicine are principally contained in this journal, where he was never negative, but definitely aggressive or defensive, concerning all things pertaining to his profession.

Many thousand copies of Dr. Bowling's "Introductories" and also of pamphlet editions of articles from the medical journal were circu-

lated by order of the faculty. He wrote on the various epidemics of cholera "as it appeared at Nashville" from 1849 to 1873.

Bowling always strenuously advocated the organization of the profession, and contributed his quantum of labor and time to local and national associations. He had avoided office. However, in 1856 he was elected third vice-president of the American Medical Association, in 1867 first vice-president, and in 1874 president. In 1873 he was made by the medical editors of the United States president of their national association. In 1877 he was transferred from the chair of principles and practice of medicine to that of ethical medicine and malarial diseases, which he occupied during that and the succeeding session in the school which he had helped to found, and for which he had labored so long, so faithfully, and so well. In 1879 he was tendered and occupied jointly with the present occupant the chair of theory and practice of medicine in the medical department of the University of Tennessee, and was elected "emeritus professor" in 1884. The year following he died.

In 1837 he married Mrs. Melissa Cheatham, and had one child, a son, named Powhatan.

Bowman, Nathaniel (1767-1797), a young practitioner of Gorham, Me. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. i. p. 101.

BOYLSTON, Zabdiel (1679-1766), the first inoculator for smallpox in America, was the son of Thomas Boylston (sometimes written Boyson), a farmer of Muddy River (Brookline), Massachusetts. It is probable that Thomas was the son of Thomas who emigrated from London to America in the "Defense" and settled in Watertown in 1635. Zabdiel, the fourth child of Thomas and Mary Gardner, was born in Brookline, March 9, 1679. He received his medical education from Dr. John Cutter, an eminent practitioner of Boston, and began practice there. Such was his industry and tact that he soon acquired a handsome fortune and a large clientage. He was especially interested in botany and zoology and made a large collection of American plants and animals. Dr. Boylston married Jan. 18, 1705-6, Jerusha, daughter of John and Elizabeth (Brick) Minot of Dorchester.

He is known chiefly as the first person in America to inoculate for smallpox. According to his own statement ("Account of the Small-pox," 1726, p. 1) he had the disease himself in 1702 and narrowly escaped with his life. The smallpox appeared as an epidemic in Boston in the year 1721, carrying with it great terror and alarm among the inhabitants. The scholarly Dr. Cotton Mather received the accounts of inoculation from England and communicating them to Dr. Boylston, urged him to try it. On June 26, 1721, Boylston inoculated his six-year-old son Thomas, and two negro servants. The attempts proved successful. Most violent was the opposition of the physicians, the press and the public, and Boylston's life was in danger at times. He persisted, however, supported by Cotton Mather. The epidemic subsided in May, 1722.

Dr. Boylston in 1721 published: "Some Account of what is said of Inoculation or Transplanting the Small-pox by the Learned Dr. Emanuel Timonius and Jacobus Pylarinus, With some Remarks thereon. To which are added a Few Queries in Answer to the Scruples of many about the Lawfulness of this Method. Published by Dr. Zabdiel Boylston, Boston, 1721." He inoculated all who came to him, treating 247 with his own hands, and in time the method came to be accepted. In the year 1721 and the beginning of 1722 there were in Boston 5,759 cases of smallpox. Of these 844 died. During the same time 286 persons were inoculated and of these six died ("Boylston's Account of the Small-pox," 1726, pp. 33 and 34).

To show the extent to which hatred of Boylston and Mather moved the populace it is related that on October 31, 1721, the Rev. Mr. Walter, minister in Roxbury and nephew of Mather, was inoculated by Boylston and while convalescing at Mather's home was visited at night by a mob. They stormed the house, insulted its occupants, and hurled a lighted bomb into the patient's room. Fortunately the fuse of the bomb broke off and no damage was done. "The Boston News Letter" of November 20, 1721, says of the incident: "When the Granado was taken up there was found a paper so tied with a thread about the fuse that it might outlive the breaking of the shell, wherein were these words: "Cotton Mather, I was once of your meeting, but the cursed lye you told of—You know who, made me leave you, you Dog, and Damn You, I will inoculate you with this, with a pox to you."

The honor of having introduced inoculation into America must be divided between the Rev. Cotton Mather and Dr. Zabdiel Boylston, although the latter was the active agent.

Isaac Greenwood writes of him in his dedication to "A Friendly Debate; or Dialogue Between Academicus and Sawny (Douglass) and Mundungus (Archbold), Two Eminent Physicians, About Some of their Late Performance, Boston, February 15, 1721-2," as follows: "To my very worthy physician Mr. Zabdiel Boylston. Sir, I know of no person so proper to present the following dialogue to as yourself. . . . . To you under the auspicious providence of God, we are indebted for the blessing of inoculation, and you can claim the undivided honor of introducing it among us."

Boylston himself says in his "Account of the small-pox." "I began the practice indeed from a short consideration thereof, for my children, whose lives were very dear to me, were daily in danger of taking the infection by my visiting the sick in the natural way; and although there arose such a cloud of opposers at the beginning yet finding my account in the success, and easy circumstances of my patients (with the encouragement of the good ministers), I resolved to carry it on for the saving of lives, not regarding any, or all the menaces and opposition that were made against it."

In 1723 he visited England and received honors at the hands of King George the First. While there he published, at the request of the Royal Society, an account of his practice of inoculation in America, dedicating it to Princess Caroline ("An Historical Account of the Small-pox Inoculation in New England," etc., Zabdiel Boylston, 1726, vol. viii, p. 53, London). After his return to New England he practiced medicine for many years, living in a house on Brattle St., retiring to his farm in Brookline in his old age and dying there within eight days of his eighty-seventh birthday, March 1, 1766.

WALTER L. BURRAGE.

BOZEMAN, Nathan (1825-1905), inventor of the "button suture," gynecologist, was born in Butler county, Alabama, March 26, 1825, the son of Nathan and Harriet (Knotts) Bozeman. His father was a farmer of Dutch descent. On coming of age young Bozeman engaged in surveying but soon entered the medical department of the University of Louisville, Ky., where he took his M. D. in 1848, having had the good fortune to be a private pupil under S. D. Gross, (q.v.) then professor of surgery in that institution. Dr. Bozeman settled in general practice in Montgomery, Ala.; after a brief interval he became interested in the diseases of women and for a time was associated with the world famed J. Marion Sims, (q.v.) then a resident of Montgomery. In the year 1854 he removed an enormous tumor of the scrotum due to elephantiasis, weighing forty-six pounds, and also developed his button suture for the closure of fistulae between the bladder and vagina. Marion Sims had recently demonstrated that such openings, due to prolonged and instrumental labors, could be closed by refreshing the edges and using sutures of pure silver wire, angled and twisted, the parts being made visible by the duck billed speculum. Dr. Bozeman modified the procedure by inserting a lead plate over the line of closure of the fistula and fastening the silver sutures, through holes in the plate two and two, into buttons which rested on the plate. Although placing this form of suture occupied more time than suturing by Sims' method Dr. Bozeman claimed that the results he obtained by its employment were superior.

In 1858 he visited Europe and introduced there his method of suture and his operations for vesico-vaginal fistula, an injury that had previously caused untold suffering and had made many a woman a hopeless invalid. He operated in London, Edinburgh, Glasgow and Paris. Returning the same year he opened a private hospital for the diseases of women in New Orleans. From there he went to New York in 1866; two years later establishing a private hospital and perfecting a portable operating chair, intended to utilize to better advantage the knee-chest position for the more complicated cases of vesico-vaginal fistula. Duing the civil war Dr. Bozeman had served as surgeon in the army of the Confederacy, being present at the first battle of Manassas and being on the medical board for the examination of applicants for the position of surgeon. Following the year 1870 he became engaged in a controversy with Professor Gustave Simon, of the University of Heidelberg, as to the value of the operation for closing the vagina in cases of vesico-vaginal fistula, in place of suturing the opening between the bladder and vagina. He went to Germany in 1874 and demonstrated his methods of closing fistulae in Heidelberg; in Vienna, in the clinic of Karl Braun; and in Paris for professors Dolbeau, Le Fort and others, returning in the spring of 1877 to read a paper before the American Medical Association in which he argued that closure of the vagina was never necessary in the treatment of such lesions. From 1878 to

1888 he was attending surgeon at the Woman's Hospital in the State of New York, then situated at 50th Street and Lexington Avenue. There he did all sorts of gynecological operations, but specialized in ureteral, kidney and bladder surgery until, finding the labor so exacting he resigned and opened another private hospital where he was assisted by his son, Nathan G. Bozeman, who had been an assistant surgeon to the Woman's Hospital.

He was a frequent contributor to medical literature, describing his suture and also writing a history of ovariotomy, besides recording many unusual operations. His persistent advocacy of his methods of closing vesico-vaginal fistula served to draw the attention of the world of medicine to Marion Sims's wonderful discovery that woman was no longer doomed to suffer from this injury of childbearing.

A man of large stature and strong physique he was a hard worker, he held to his theories through thick and thin and accomplished results by painstaking endeavor.

Dr. Bozeman was married to Fannie B. Lamar of Macon, Ga., October 25, 1852. They had four children. She died in 1861 He was married again in 1867, this time to Mrs. Amelia Lamar Ralston of Macon. He died of cerebral hemorrhage on December 16, 1905, in New York and was buried in Macon.

WALTER L. BURRAGE.

BRACKETT, Joshua (1733-1802). It is with more than ordinary interest that I write concerning the career of this benevolent physican, because he was not only related to me on my mother's side, but my grandfather, Dr. Lyman Spalding, knew him well, visited him in his last illness, and delivered a most acceptable eulogy at the meeting of the New Hampshire Medical Society in 1807. Joshua Brackett, the son of Captain John and the handsome Elizabeth Pickering Brackett, was born in Greenland, New Hampshire, May 9, 1733, studied with the Rev. Mr. Rust of Stratham, and filled his youthful mind with the theology of the Bible and of the Universalist church, as was the fashion in those days. Those who investigate the history of the Brackett family will, for instance, find one of them reading the Bible through twice, before her pious death, at the age of seven. Possessed of much book learning, Joshua entered Harvard in 1748, was graduated in 1752; in 1792 he received the honorary M. D.; and at the end of his life he left his alma mater a goodly sum of money toward the foundation of a professorship of natural history and allied arts. On graduation he settled in Portsmouth, preached eloquently and prayed extemporaneously at amazing lengths in the Universalist church, until he fell ill and then made the intimate acquaintance of Dr. Clement Jackson, the leading practitioner of the town. This clever man soon discovered from bedside talks with his patient, that he had been forced into theology largely against his inclinations, and was really only an imitative preacher and maker of ecstatic prayers. So soon then, as young Brackett was well, Dr. Jackson put him into his office, set him to compounding drugs, took him about to visit his patients, and after the proper instruction young Brackett settled down beside his teacher, who was glad enough in his advancing years to enjoy his youthful society and honorable competition. The young doctor soon studied obstetrics as a specialty and became well known. With the oncoming of the Revolution he aided the cause zealously, was on the Committee of Safety, and in his leisure time sat on the bench as judge of the Maritime Courts. This position he owed to Captain Whipple of Kittery whose sister Hannah Dr. Brackett had married in May, 1761, and obtained with her a dowry of 300 pounds in Spanish silver dollars. He remained on the bench until 1784 when his court was abolished and the circuit court established in its place.

From this time on to the end of his life he continued in active practice, was elected honorary and active fellow of the Massachusetts Medical Society, was one of the charter members of the New Hampshire Medical Society, its first vice-president and then its president for six successive years. (1793-1799). The meetings under his guidance were held in various towns, and were attended by a dozen members, some one presenting a rare case, which was discussed until noon when dinner was served, and then after a pipe and a glass of punch the members with the lowering sun, set off on horseback on their lonely rides, to far distant homes. To this society, Dr. Brackett gave many valuable medical books, the cream of the literature of the era, and from this lending medical library the members had a chance to know all that was best in medicine and surgery of the day. He served on the committee for preparing a permanent seal for the Society, which was finally made of solid silver at a cost of 6 pounds. At his death he gave additional books to the

society; when Mrs. Brackett died she left $500 to keep the library in order, and to add more books in time, and at Dr. Spalding's suggestion, the books were marked in golden letters: "Brackett to the N. H. Med. Soc." Let me add for those curious concerning books, that a few of these here mentioned can still be seen in the New Hampshire State Library at Concord.

From the eulogy mentioned at the beginning of this notice, this single sentence may be quoted: "With the rugged art of surgery he was not so much delighted as with the tranquil fields of physic; but midwifery was his forte; here he shone in all his splendor and was peculiarly successful."

Suffering with more than usual severity from a cardiac affection, Dr. Brackett set off in May, 1802, for the springs of Saratoga, but he obtained no relief and finding himself steadily failing he turned back for home, reached Portsmouth about the tenth of July and died on Saturday the seventeenth.

I sum up this benevolent physician as a man of extensive reading, accurate observation, acute reasoning, firm friendship and unbounded benevolence. Nor should we forget that from his early training he could, more successfully than other physicians, minister to the souls of his patients. In other words he was a man to whom one could unbosom secrets, confess sins, and obtain from him all those mental uplifts, which in so many instances raise the patient from a bed of suffering sooner than all the medicines at the command of the indifferent physician.

JAMES A. SPALDING.

BRADBURY, James Crockett (1806-1865), of Oldtown, Maine. In the days when capital operations were rarely well done, Dr. James Crockett Bradbury did more than one and with excellent results. For that reason his life is worth recording more carefully than has before been done. He was born at Buxton, Maine, March 5, 1806, worked on a farm, and studied during every spare moment, besides attending school. With an intense thirst for learning, by his own earnings he paid most of the expenses incurred in preparing for medical study, studies begun under his brother Samuel in Bangor, Maine. He graduated at the Medical School of Maine in 1829, practiced first in Howland, Maine, and then in Oldtown where he devoted himself energetically to medicine for the rest of his life.

Dr. William Henry Allen of Orono falling ill in 1862, Dr. Bradbury kept on with his own practice and overloaded himself with the patients of Dr. Allen. The governor of Maine having to select a board to examine candidates for surgeons to the Maine soldiers during the war, nominated Dr. Bradbury for the head of the board. He was also temporarily one of the surgeons to take charge of a hospital at Augusta overflowing with invalided soldiers from the front. Dr. Bradbury here did more than his share in bringing order out of confusion; the mortality decreased, rapid convalescence ensued upon his labors. Besides this, he was an active member of the Maine Medical Association, and once its honored president. He was a practical physician, rather slow to adopt new theories but his mind was active; he decided quickly; arrived at diagnosis often by intuition, and by bold treatment was celebrated far and wide for having saved the life of many a patient whose life hung in the balance. His fame rested on two special cases. One an "Extensive Laceration of the Muscles of the Forearm" ("Boston Medical and Surgical Journal," vol. xxxvii), showing how a very extensive injury of the elbow-joint may, under proper treatment, escape amputation and be useful for life to the patient. Any surgeon would be proud of such a result as Dr. Bradbury obtained. In fact it was never doubted that he was probably unsurpassed in Maine in contriving splints for fractures and in thus saving limbs which otherwise would be amputated. October 11, 1851, he performed that most formidable operation in surgery, amputation at the hip-joint for osteo-sarcoma of the femur; the fourth time it had ever been performed successfully in this country. Again in February, 1860, he successfully removed from the neck an enormous fibrous tumor involving the entire parotid, the patient being still alive seven years after.

In 1837 he married Miss Eliza Smith of Warren, Maine, who cheered him in the performance of his onerous practice.

The enormous work of his latter life, in taking care of so many patients at Augusta, impaired his health most seriously. He had an attack of paralysis February 14, 1863, gradually recovered, then relapsed; his mind grew cloudy, his body enfeebled, and he gradually fell asleep into another world, October 3, 1865, undeniably to be enrolled among the most worthy medical men that Maine has seen.

JAMES A. SPALDING.

BRADFORD, Edward Hickling (1848-1926), Boston orthopedist, was a scholarly open-minded servant of the public, a worthy lineal descendant of Governor William Bradford, who came over in the "Mayflower" and wrote the History of the Plymouth Plantation. Edward, the son of Charles Frederic, an author, and Eliza E. Hickling Bradford, the daughter of a publisher, was born in Roxbury, a part of Boston, June 9, 1848. He was educated at the Roxbury Latin School and at Harvard College, where he took his A. B. in the class of 1869 with honors in history and political economy, thus early showing an interest in general culture, outside the field of medicine. Four years later the university conferred on him the degrees of A. M. and M. D. and he completed a year's surgical internship at the Massachusetts General Hospital. Then followed nearly two years of medical study in Vienna, Berlin and Strasburg with a return to his native city and the beginning of general practice. The possibilities of orthopedics appealed to him and he studied under Charles Fayette Taylor (q. v.) in New York and then at home with Buckminster Brown (q.v.). Bradford maintained always most friendly relations with Brown and finally succeeded him as visiting surgeon to the orthopedic department of the House of the Good Samaritan, the only hospital in the city at that time to have such a department. Bradford felt that orthopedics must advance not only through channels of manual dexterity in mechanics but also through a knowledge of general surgery, so he devoted himself to that art, accepted positions of surgeon to the Carney Hospital and to the Boston Dispensary, and moved along, in the usual progression of the surgeons of that time, to be surgeon to out-patients at the Boston City Hospital. This was in the year 1880 when he was made clinical instructor in orthopedic surgery at Harvard, an office he filled for only two years, however, having been appointed instructor in surgery. It was in 1893 that he became assistant professor of orthopedics and ten years later full professor of orthopedic surgery, occupying the chair until 1912.

Dr. Bradford was connected with the Childrens Hospital from 1878 until 1909, either as surgeon to out-patients or as visiting surgeon. At the City Hospital he was advanced from the out-patient department to be visiting surgeon, resigning in 1894 in order to give his whole attention to the work at the Childrens and in the founding of the Industrial School for Crippled and Deformed Children. Bradford had been abroad and had studied the needs of the victims of infantile paralysis and of other bodily defects. He organized this, the first school of its kind in this country, served as a member of the board of trustees during his life time and gave constant attention to its growing needs. It is a day school where the children are gathered from different parts of the city in motor busses in the morning, are taught the grammar and high school grades and at the same time such occupations as are fitted to their disabilities, such as printing, typewriting, cane seating and sewing so that they may become self supporting; they are given a good lunch in the middle of the day and are returned to their homes in the afternoon. The school has grown from small beginnings until it now occupies a large establishment on St. Botolph street and cares for nearly two hundred pupils. At the Childrens and at the Cripple School Bradford's great love of children found expression in his contact with the little sufferers. Even the mites who had to be strapped to a "Bradford frame", that rigid rectangle of gas piping, in order to straighten their deformities, greeted him with shouts of joy on his visits. He joked and laughed with them, giving play to his keen sense of humor, a salient characteristic. At the Massachusetts Hospital School for Crippled Children, at Canton, where the State maintains a home of 400 beds for the physically handicapped and teaches them trades, Bradford was chairman of the board of trustees from the opening of the school, in 1907, until his death.

He contributed many articles to current medical periodicals. In 1890 he and Robert W. Lovett (q.v.) brought out the first edition of their "Treatise on Orthopedic Surgery," a book which became a standard text and went through five editions.

Bradford was the third president of the American Orthopedic Association, in 1889; in 1899 he gave the annual discourse before the Massachusetts Medical Society with the topic: "The Expansion of Medicine". Clear-headed, a good speaker he was an able presiding officer, an all too rare qualification in a physician. From 1894 to 1898 he was a useful member of the committee to regulate athletic sports at Harvard and he served as an overseer of the university from 1919 to 1925, lending weight to the deliberations of

that governing body by his opinions on general as well as on medical questions. Another office he held was president of the board of trustees of the Massachusetts Eye and Ear Infirmary and, during the world war, gave arduous service to the duties of the Board of Draft Appeal. He filled the position of dean of Harvard Medical School from 1912 to 1918.

Just before the advent of the automobile as a means of conveyance everyone rode the bicycle. Bradford, though so near sighted that he was unable to play many of the college sports, took to bicycling. While coasting down a steep hill in Brookline he lost control and ran into a stone gate post thereby suffering serious injuries to his face and losing one eye. On his recovery he viewed the accident objectively with the sense of humor that he used in other aspects of life. Far from having any self-pity he said to a friend: "I don't want any sympathy. Call me a damned fool if you like." When he was over seventy his other eye became almost sightless. Bradford dominated his blindness. He learned to write the typewriter by touch and to decipher the Braille print; he had someone to read to him constantly, keeping up his interests in a wide range of subjects; he was lead by an attendant to the meetings of the different organizations in which he held office and carried on to the end.

He married in 1900, at the age of 52, Miss Edith Fiske of Milton. They had four children, twin boys distinguishing themselves on the football eleven at Harvard and one of them, Charles Hickling, following his father's profession.

Dr. Bradford died suddenly from a heart attack while sitting on a bench on the Charles River Esplanade, in the rear of his Boston home, May 7, 1926, at the age of 77.

WALTER L. BURRAGE.

BRADFORD, Joshua Taylor (1818-1871), ovariotomist, of Augusta, Georgia, was born in Bracken County, Kentucky, December 9, 1818, a son of William Bradford of Virginia, who in 1790 emigrated to Bracken County, his mother being Elizabeth Johnson. Joshua was educated in Augusta College and studied medicine with his brother, Dr. J. J. Bradford, graduating from Transylvania University in 1839. From the beginning he directed his attention to surgery, and in all probability received much of his inspiration from Benjamin Winslow Dudley (q.v.), his surgical teacher in the Transylvania University. Soon after graduation, he successfully performed an ovariotomy. Lunsford Pitts Yandell says: "And it was not long before he became the foremost surgeon of Kentucky, and of all the West, in that affection. Nor is it too much to say that at the time of his death he stood first among surgeons everywhere—in Europe and in our own country—as an ovariotomist. Not that he had done the operation oftener than any other surgeon. Such is not the fact. It has been performed much oftener by Atlee, Wells, Dunlap, and others; but by none with the measure of success that crowned his operations. In the hands of the surgeons just mentioned the recoveries were respectively 71, 73, and 80 per cent. With Bradford the cases in which he operated successfully amounted to 90 per cent." It was not alone in this operation that Dr. Bradford proved himself to be a surgeon of the highest order. In whatever cases he was called to operate he exhibited the same coolness and dexterity, the same fruitfulness in resources, and the same thorough knowledge of his art. It is understood that he meditated a work on operative surgery, but he was not permitted to carry out his purpose.

He continued to practice in Augusta, where he was raised, and not being ambitious preferred the charms of his "Piedmont" home to the allurements of professional life, which goes far toward explaining the comparative obscurity into which he lapsed. Strange to say, unlike McDowell, Dudley and others, he was almost lost to the medical literature of Kentucky which is not altogether to the credit of his followers. He twice declined the chair of surgery and but a short time before his death was again urged to accept the same chair in Cincinnati.

He excised the os calcis and cuboid, "New York Medical Times," February, 1862. Most of his cases were reported in the "Cincinnati Lancet," "Gross' Surgery," "New York American Monthly," "American Chirurgical Review," "Louisville Semi-monthly News." His cases of ovariotomy have been published by Dr. E. R. Peaslee of New York. Two articles by him are: "Selections from a Report on Ovariotomy," read before the Kentucky State Medical Society, at its annual meeting at Louisville, April, 1857. "Complete Rupture of the Perineum of Ten Years' Standing, Successfully Operated On." Reprinted from "Cincinnati Lancet and Obstetrics," 1869.

Yandell thus describes him: "In manners

he was dignified, urbane, cordial and gentle. Of an imposing presence he was a man to attract notice and command respect in any circle; and his warm feelings, varied attainments, and social nature made him one of the most charming of companions."

He died October 31, 1871, in the fifty-third year of his age, the disease which terminated his life being abscess of the liver.

AUGUST SCHACHNER.

Bradford, William (1729-1808), physician, lawyer and legislator of Rhode Island. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 138.

BRADLEY, Samuel Beach (1796-1880), physician and botanist, son of the Rev. Joel Bradley and Mary Anne Beach, was born in Westmoreland, Oneida County, New York, August 14, 1796. He was graduated at Union College in 1814, then studied medicine with Seth Hastings (q.v.) who had an extensive botanical garden for the special use of his students, and it was here that young Bradley became interested in botany and made a thorough study of the local flora. He practiced in Eaton, New York, and in 1820 moved to Parma, New York; in 1823 he settled in West Greece, Monroe County, which became his home the rest of his life.

As a botanist his reputation was more than local. He is cited as an authority in Gray's Botany (5th ed.); in Paine's "Catalogue of Plants of Oneida County and Vicinity" (1865) he is given as the sole authority for twenty-one species of plants found in the neighborhood of Rochester; and in the "List of Plants of Monroe County, New York and Adjacent Territory," published by the Rochester Academy of Science (1896), he was credited with eleven species not hitherto reported. A close and accurate observer, his work along the lake shore, inlets and ponds was particularly thorough. Dr. Bradley was a noted linguist, a master of seven languages, and an indefatigable reader. He was rather stout, with broad shoulders and a fine head, broad forehead, eyes dark and brilliant.

He was twice married, first in 1817 to Cornelia Bradley, who lived only a few months; second to Mrs. Sarah Bartlett Crane. His children were two daughters, and a son, William Bradley (1838-1907), who became a physician of Evanston, Illinois. The last months of his life were devoted to naming and rearranging the specimens in his herbarium; the greater part of which at his death was given to the Northwestern University, a part remaining in the Rochester Acadamy of Science.

He died at his home in West Greece, October 3, 1880. FLORENCE BECKWITH.

BRAINARD, Daniel (1812-1866), Chicago surgeon, was born in the town of Western, Oneida Co., N. Y., May 15, 1812. He was the fifth child in a family of nine born to Jepthai Brainard, Jr., and Catharine Comstock Brainard. The ancestor of the Brainards in this country was also named Daniel Brainard, and was brought from England when eight years old to Hartford, Connecticut. About 1662 he became a proprietor and settled at Haddam. The name Daniel appears often among the descendants of the original bearer of the name. Several of the Brainards served in the Revolutionary war, and many of the line entered the professions of medicine, law and the ministry. The father of the subject of our sketch was a farmer in comfortable circumstances and of excellent character while his mother was a most exemplary refined woman. Daniel Brainard was given a good common school and academic education, the latter probably in the Oneida Institute in Whitesboro, N. Y. In 1829 he began his professional studies in Whitesboro under Dr. R. S. Sykes, but soon went to Rome, N. Y., where he entered the office of Dr. Harold H. Pope. He then attended a course of lectures at Fairfield Medical College and two courses at Jefferson Medical College, where he received his medical degree in 1834. After graduation he returned to Whitesboro where he remained nearly two years with his former preceptor, nominally in practice but mostly engaged in the study of the Latin and French languages and in professional teaching. He gave a course of lectures on anatomy and physiology in the Oneida Institute in the spring of 1835.

In the autumn of 1835 he came to Chicago. He at once took up the practice of his profession and in 1837 secured a charter for Rush Medical College, expecting to organize the faculty as soon as the opportune moment arrived. In 1839 he went to Paris, France, at that time the Mecca of American medical students, and remained until 1841. The profound influence of the time thus spent is shown in all his subsequent writings and activities. In May, 1842, Dr. Brainard was

appointed to the chair of anatomy in St. Louis University, where he delivered two courses of lectures.

In 1843 he organized Rush Medical College, Chicago, assuming the duties of professor of anatomy and surgery, and remained professor of surgery up to his death, being always the leading person in the faculty. In association with various of his colleagues he aided in editing the "Northwestern Medical and Surgical Journal" which later became the "Chicago Medical Journal." He contributed a large number of surgical articles, mostly clinical, and also many editorials. In 1853 he again visited France, and while there read before the Academy of Science a paper upon experiments on the venom of rattlesnakes, and the means of neutralizing its absorption. Later he presented before the same society a paper upon iodin as an antidote for curare. Before returning home he read a paper before the Society of Surgery of Paris entitled "On the injection of iodin into tissues and cavities of the body for the cure of spina bifida, chronic hydrocephalus, oedema, fibrinous effusions, oedematous erysipelas, etc." At this time he was made a corresponding member of the Société de Chirurgie of Paris. In 1854 he was president of the Illinois State Medical Society and this same year he was awarded a premium by the committee on prize essays of the American Medical Association. The essay was entitled "An Essay on a New Method of Treating Ununited Fractures and Certain Deformities of the Osseous System." The motto of the essay was in French of the Sixteenth Century from Ambrose Pare, which liberally rendered into modern English reads: "And notwithstanding all the pains I have heretofore taken, I have reason to praise God, in that it hath pleased Him to call me to that branch of medical practice, commonly called surgery, which can neither be bought by gold nor by silver, but by industry alone and long experience." The essay occupies forty-four pages of the Transactions, and is one of the classical medical articles of America. Dr. Brainard was a man of strong personality, a skilful surgeon, a splendid teacher and an able original investigator. His scientific work attracted world-wide attention, his influence has probably reached farther and been of more fundamental value than that of any other medical man of the West. His interests were very wide and reached all subjects of general and medical moment, taking a prominent part as he did in matters relating to the city and state and being active in medical society work.

A few hours after lecturing to the students in Rush Medical College upon cholera, he was smitten by the disease which was quickly fatal, October 9, 1866.

Four children were born to the Brainards, two of whom grew to maturity, Julia and Edwin.

GEORGE H. WEAVER.

BRASHEAR, Walter (1776-1860), surgeon, of Lexington, Ky., was born in Prince George's County, Maryland, on the eleventh of February, 1776. Eight years after, his father, Nacy Brashear, emigrated to Kentucky and settled near the Long Lick within three miles of Shepardsville. Walter was the seventh son; therefore, according to the old idea destined for the medical profession. After a limited education at schools then within the reach of his scanty means, he entered the literary department of the Transylvania University, where he acquired a good knowledge of the classics and in 1796 began to study medicine under Dr. Frederick Ridgely (q.v.) of Lexington. Two years after he attended a course of lectures in the University of Pennsylvania and in 1799 sailed to China as surgeon to the ship "Jane" and while in China amputated a woman's breast, probably the first operation of the kind among the Celestials. On his return he abandoned the profession for a time, devoted himself to mercantile pursuits, and proving ultimately unfortunate, in 1813 moved from Bardstown to Lexington, where his career as a professional man may be said to begin.

It was previous to this period, however, while merchant and surgeon, he amputated at the hip-joint in August, 1806, eighteen years prior to the much eulogized case of Dr. Mott of New York. The subject was a mulatto boy, seventeen years of age, belonging to the monks of St. Joseph of Bardstown. He had fracture of the thigh complicated with severe injury of the soft parts. He recovered completely, living in good health many years after. Dr. Brashear had no precedent to guide him in his hazardous undertaking, for the cases of Larrey and other army surgeons of Europe had occurred only a short time before and were then entirely unknown to the bold and adventurous backwoodsman. The operation was performed upon a very novel plan comprising two distinct stages: first the thigh was removed about its middle in the ordinary

manner; then the remainder of the bone was separated from its muscular connection by a long incision on the outside of the limb and disarticulated at the socket.

The operation was done in the presence of Dr. Burr Harrison and Dr. John Goodtell, the boy's doctor. Brashear seemed to possess peculiar tact in treatment of diseases of the bones and joints, especially in cases of scrofulous enlargement, called "white swelling." He was also very successful in the management of fractures of the skull, and had a set of trephining instruments constructed under his immediate direction in Philadelphia, which he regarded as much superior to those in ordinary use.

He practiced medicine and surgery in Lexington from 1813 to 1817 with great success, and was the first in the West to change from the depleting to the stimulating plan of treatment in the so-called "cold plague," prevalent and very fatal during a portion of that period.

He left Kentucky in 1882 and removed his family to the Parish of St. Mary, where he had previously held property.

Dr. Brashear had a mind of great originality and of infinite resources. Nature had evidently designed him for a great man, and it is much to be regretted that he allowed himself to be drawn aside from his professional pursuits. He was successively physician, merchant, legislator, lawyer, and naturalist.

H. H. GRANT.

Bremer, Ludwig (1844-1914), medical educator of St. Louis. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 140.

Brevard, Ephraim (1750?-1783), a North Carolina patriot of the American Revolution, reputed author of the Mecklenburg Declaration of Independence. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 140.

BRICKELL, Daniel Warren (1824-1881), New Orleans gynecologist, was born in Columbia, South Carolina, October, 1824, of Huguenot, German and Irish extraction. In 1844 he prepared to enter Yale but determining to study medicine, matriculated at the University of Pennsylvania under the private tutorship of W. W. Gerhard (q.v.) and received his diploma in 1847. He made a special study of gynecology, but applied for admission to the United States Navy, passing second among forty applicants. There being no vacancy for foreign service and having been assigned to duty at Pensacola, he resigned his commission as assistant surgeon and began to practice medicine in New Orleans in 1848. Teaching private classes in the Charity Hospital, he soon became known and was offered the professorial chair which he so long adorned. With Fenner, Choppin, Peniston, Picton, Axson and others he organized the New Orleans School of Medicine. He was editor of the "New Orleans Medical News and Hospital Gazette, Southern Journal of Medical Sciences." In 1862 he was a member of the committee of safety and did what he could for the defense of the city; on its surrender he entered the service of the confederacy and served in field and hospital until the close of the conflict. In 1873 Bellevue, New York, tendered him the chair of obstetrics, which after a short while he resigned, returning to the home of his affection and there he remained until his death in December, 1881.

A wise, cautious, conservative physician. A bold, dextrous and self-reliant surgeon, as lecturer, clear, cogent and terse; a successful journalist. In every phase of his multiform character, a valuable member of society.

JANE GRAY ROGERS.

BRICKELL, John (1710?-1745), author of "The natural history of North Carolina" (Dublin, 1737; with altered title page, Dublin, 1743; reprinted, 1911), is believed to have been a native of Ireland, and to have returned to that island after his brief residence in America. Little is known of the details of his life. The plausible suggestion has been made that he came to North Carolina with Governor George Burrington in 1724. While in North Carolina his home was at Edenton. About 1730 he was one of a party of ten who, with two Indian guides, spent nearly two months in the exploration of the interior country of the province; they penetrated the mountains, and it has been claimed that they reached what is now eastern Tennessee. In 1731 Brickell was still at Edenton, but soon afterward left the colony.

The book upon which his reputation rests, a remarkable work of 408 pages illustrated with copper plates "whereon are curiously engraved several strange Beasts, Birds, Fishes, Snakes, Insects, Trees and Plants" has been severely criticized, because he copied into it, without credit, a large part of John Lawson's earlier "History of Carolina"

(1714). It must be remembered, however, that Lawson's book was well known, and was the only earlier work of similar scope, so that Bickell might reasonably have been expected to incorporate anything of value that it contained and may have considered the giving of specific credit under the circumstances quite superfluous; besides, Brickell added much information that he had gathered at first hand. He observes truly of the rattlesnakes that "they are a majestick sort of creature and will seldom or never bite (except they are provoked) which they cannot do until they gather themselves into a Quoit or Circle." Their rattles "they shake and shiver with wonderful nimbleness." He gives an account of the hornsnake.

In addition to his book, Brickell is said to have published, at Dublin, a "Catalogue of American trees and plants which will bear the climate of England" (1745).

JOHN H. BARNHART.

BRICKELL, John (1749-1809), botanist of Georgia, was born in or about the year 1749, in County Louth, Ireland, and died at Savannah, Georgia, December 22, 1809. He came to America about 1770, and it is very likely that he was the John Brickell who entered King's College (now Columbia University), New York, in 1774, but had not completed the course when the activities of the institution were suspended in 1776. Shortly afterward, during the Revolution, he settled in Georgia, and practiced medicine for many years at Savannah. He was recognized as an accomplished scholar and a sincere patriot. Outside of his professional work, his chief interest was in the science of botany. He was a correspondent of Muhlenberg; and, of his five papers contributed to the earlier volumes (1798-1809) of the "Medical Repository," two were devoted to descriptions of plants found by him near Savannah. "Brickellia," a genus of Compositae, was dedicated to his memory by Stephen Elliott in 1823. Dr. Brickell's only surviving relative, at least in Georgia, seems to have been his brother James, to whom he left all of his property by will.

JOHN H. BARNHART.

BRICKNER, Samuel Max (1867-1916), gynecologist, writer, of New York, was born at Rochester, New York, January 11, 1867, the son of Max Brickner, president of the Rochester Chamber of Commerce. He was graduated from the University of Rochester in 1888, and took his medical degree in 1891, at the College of Physicians and Surgeons, New York, where he won the first Harsen clinical prize. He did post-graduate work in Berlin, Leipzig and Vienna, and later served on the house staffs of the Sloane Maternity Hospital and of Mt. Sinai Hospital, with which he remained connected until 1913, when ill health compelled him to resign his position as associate gynecologist. As he approached middle life, he had already made his mark in obstetrics and gynecology, when he was stricken with tuberculosis and eventually compelled to give up active work. In 1914, he retired with his family to Saranac Lake, where he occupied himself with literature during the short remaining period of his life. In this field, he had had previous experience in newspaper work in his youth, as one of the associate editors of the "New York Medical Journal," as a reader of manuscripts submitted to publishing houses, and as a talented writer of light verse. In 1915, he started and edited the "Medical Pickwick," a literary magazine for physicians, devoted to the humorous and picturesque side of medicine, which he edited with success for a year or more. He was a man of attractive personality, quiet in demeanor, modest, friendly and charming in every way. During his last illness, he delighted his friends with his bright cheerful letters, and with brief occasional poems, of which the lines written for the unveiling of the Stevenson memorial tablet at Saranac Lake and the copy of verses entitled "The Feast" are the most remarkable. In his calm perception of the fact that death was not far off at any time and in the unfaltering courage with which he met his end, he was the "peak-faced and suffering piper" of Stevenson's lines, a cheerful, serene spirit to the last. He died on May 4, 1916, at the age of 49, and was buried from Mount Hope Chapel, Rochester, New York. He married Miss Josephine Hays, of Rochester, and was survived by his widow and two sons.

His contributions to gynecology and obstetrics include: "A short umbilical cord as a cause of distocia, with a description of a new symptom" (1889); "On the physiological character of the pain of parturition," (1899); "Unvollständiger angeborener Querverschluss der Scheide, nebst einer Theorie zur Erklarung seines Ursprunges" (1903); Fibroma molluscum gravidarum. A new clinical entity"

(1906); "Some causes of failure in plastic operations on the female genitalia" (1907); "The unfavorable influence of pregnancy upon chronic progressive deafness" (1911).

FIELDING H. GARRISON.

BRIDGE, Norman (1844-1925), Los Angeles physician, born at Windsor, Vermont, was the son of James Madison Bridge by his wife Nancy A. Bagley. He received his M. D. from Chicago Medical College, now Northwestern University Medical School, in 1868, and was made instructor in medicine at Rush Medical College in 1874 and professor of clinical medicine at Rush in 1887, a position which he held for 14 years. Rush gave him an M. D. in 1878 and Occidental University and University of California later conferred on him their LL.Ds. In 1901 he moved to Los Angeles and soon developed a large practice and became an influential member of the community. During his first years in California he returned for several months each year to deliver lectures in Chicago. His clinics on tuberculosis were especially popular and were reproduced in book form in 1903, and issued by Saunders (302 pages.) Bridge also contributed the section on asthma, bronchitis, and whooping cough to Ware's "System of Practical Therapeutics" (vol. 4, 1897—pages 267-297, Philadelphia.) With George F. Butler (q.v.) and H. B. Savill Bridge wrote a joint work on "Materia Medica and Therapeutics" published in Chicago in 1911 (365 pages). Bridge also contributed from time to time to the current medical journals.

Bridge had a striking and rather formidable personality and is said to have enjoyed great popularity as a lecturer because of his energetic delivery and many happy turns of phrase. As a consultant in California he was much sought after and much beloved. During the past few years of his life, however, he retired from active practice and engaged in the petroleum business, being vice president of the Pan American Petroleum and Transport Company, which was apparently a successful business venture. During these years he made several trips to Mexico in order to take care of his property. He married Mae Manford of Chicago in 1874. He died January 10, 1925.

Bridge has left a number of literary and sociological works, among them an interesting and modest autobiography entitled "The Marching Years" published in 1924.

BRIDGES, Robert (1806-1882), physician, chemist and botanist, was born in Philadelphia March 5, 1806. His lineage was pure English and his ancestors were "vigorous, enterprising, intelligent and respectable." The first Edward Bridges was a lieutenant in the English Army in 1648, another Edward Bridges settled in Philadelphia in 1739 and was in the dry goods business at Front and Walnut Streets where his place was called "the Scales." He left three sons; one of these had a son, Culpepper Bridges (1776-1823), who married Sarah, fifth daughter and eleventh child of William Cliffton, of Southwark—and these were the parents of the subject of our sketch.

With his brother, William Cliffton, Robert received his early education at the University Grammar School; he was a member of the sophomore class of the University of Pennsylvania (there was no freshman class at that time), then left and went to Dickinson College where he was graduated in 1824. Returning to Philadelphia he became the pupil of T. T. Hewson (q.v.) who had a large class of students and several assistants in a two storied house on Liberty Street near Fourth Street. Bridges became assistant to Franklin Bache (q.v.) who taught chemistry at the school, and served him in this capacity when Bache lectured at Franklin Institute, at the Philadelphia College of Pharmacy, and at Jefferson Medical College, an association altogether of 40 years; he thus became an excellent teacher as well as expert chemist. He studied with Hewson four years, received his M. D. from the University of Pennsylvania in 1828 with a thesis on "Neuralgia," and immediately opened an office on the corner of Vine and Thirteenth Streets and practiced there until 1837.

From 1839 to 1846 he was assistant editor of the "American Journal of Pharmacy." In 1831 he began his work at the Philadelphia College of Pharmacy as assistant to Franklin Bache, became an active member of the Society in 1838, member of the board of trustees in 1839, and professor of general and pharmaceutical chemistry in 1842. When he resigned in 1879 he was made emeritus professor of chemistry with a salary attached. He was one of the committee to revise the 1840 issue of the Pharmacopoeia, and was on the committee to revise the issue of 1870.

Bridges joined the Academy of Natural Sciences of Philadelphia in 1835; in collaboration with Paul B. Goddard he prepared an index

of the genera in the herbarium of the Academy, presented in 1835, and in 1843 he presented a new index of the herbarium, as well as one of Menke's Herbarium. He served the Academy as librarian, secretary, auditor, vice-president, and in 1864 as president. In 1844 he became a member of the American Philosophical Society. When the Philadelphia Association for Medical Instruction was formed (1842) Bridges taught chemistry; his associates were: Joshua M. Wallace, surgery; Francis Gurney Smith, Jr., physiology; Joshua M. Allen, anatomy. Bridges was the only original member who remained when the Association dissolved in 1860. From 1846 to 1848 he was professor of chemistry in the Franklin Medical College.

Besides his papers on chemistry, many of which appeared in the "American Journal of Pharmacy," he wrote reviews of books on chemistry for the "American Journal of Sciences;" he edited several American editions of Fownes's "Elementary Chemistry . . . . " (1852); also the American edition of Graham's "Elements of Chemistry;" and assisted George B. Wood in preparing the twelfth (1865), the thirteenth (1870) and the fourteenth (1877) editions of the United States Dispensatory.

For a few years before his death he suffered from chronic cystitis. He died on February 20, 1882, in the house in Philadelphia in which for twenty-eight years he had lived with his brother and his family. He never married.

A portrait of Bridges hangs in the Library of the Academy of Natural Sciences.

HOWARD A. KELLY.

BRIGGS, William Thompson (1828-1894), surgeon and obstetrician of Nashville, Tenn., the son of Dr. John McPherson and Harriet Morehead Briggs, was born at Bowling Green, Kentucky, on December 4, 1828. After studying with his father he was graduated from the medical department of Transylvania University in 1850 and was made demonstrator of anatomy in the University of Nashville. He settled down at Nashville in partnership with Dr. John M. Watson. As a surgeon he did good work; ligating the internal carotid artery for traumatic aneurysm, removing both upper jaws for gunshot injury; amputating at the hip joint for elephantiasis arabum (the leg weighed 80 pounds), and he removed over 300 ovarian tumors.

His most important publications were: "History of Surgery in Middle Tennessee;" "Enchondromatous Tumors of the Head, Forearm and Hand" (1871); "Trephining in Epilepsy" (1869); "The Surgical Treatment of Epilepsy" (1884).

He was one of the founders of the American Surgical Association and its president in 1885; a member of the Southern Surgical and Gynecological Association; staff surgeon to the Nashville City Hospital; adjunct professor of anatomy in the University of Nashville, and in that institution, successively, professor of surgical anatomy and professor of obstetrics and diseases of women and children, and professor of surgery.

He married in 1851, Annie E., daughter of Samuel Stubbins, of Bowling Green, and had four children. The three sons became physicians. Charles S., Waldo, and Samuel S.

BRIGHAM, Amariah (1798-1849), alienist, first superintendent of the Utica, N. Y., insane asylum, was born in New Marlborough, Berkshire County, Massachusetts, December 26, 1798. His father, John Brigham, was a native of the place, a farmer by occupation and a descendant of Thomas Brigham, who came over from England and settled in Cambridge in 1640.

Amariah becoming fatherless when eleven years old was adopted into the family of his uncle, Dr. Origin Brigham of Schoharie, New York, who meant to educate him for the medical profession. Within a short time, however, the boy was thrown upon his own resources by the death of his uncle, and at fourteen made his way to Albany and secured employment as clerk in a bookstore, where he had access to books and leisure to read them. After three years' service he returned to his mother's home in New Marlborough, where he spent a like period fitting himself for the medical profession, and had, besides, a year in New York in attendance at lectures. During this period he taught school through the winter months, and it is said of him in this connection that up to this time he had never studied English grammar but in order to qualify as teacher he mastered the subject in a single day. Some time was spent as a medical student under Dr. E. C. Peet, of New Marlborough, and in 1820 he went to Dr. Plumb, of Canaan, Connecticut, with whom he began to practice. In 1821 he established himself in Enfield, Massachusetts, where he remained for two years, removing thence to

Greenfield, and there some seven years' practice brought him such financial success that he was able to spend a year in travel and study in Europe. He returned in 1829 with increased ambition and confidence, and soon selected Hartford, Connecticut, as a more prominent and lucrative field for his labors, settling there in April, 1831. His early residence in Hartford was marked by a controversy in which, in his solicitude for the mental and physical health of his fellow-citizens, he opposed the custom of revivals and protracted religious meetings, bringing upon himself a charge of scepticism and infidelity. He published his views on this subject in two small volumes entitled "Influence of Mental Cultivation on Health" (1882) and "Influence of Religion on the Health and Physical Welfare of Mankind" (1836). About this time Asiatic cholera made its first appearance in America. He made a careful study of the disease and published a treatise on "Epidemic Cholera."

The year 1840 saw another work entitled "An Inquiry Concerning the Diseases and Functions of the Brain, the Spinal Cord and the Nerves," and in the same year he became a candidate for the office of superintendent of the Retreat for the Insane at Hartford, but having created prejudice by his stand against undue religious enthusiasm, and by his strong democratic political views, his candidacy was opposed, but the appointment in the end was conferred.

In 1837 he delivered a course of lectures before the College of Physicians in New York and in 1842 he accepted the superintendency of the New York State Lunatic Asylum at Utica, opened in January of the following year, which he labored to make a model institution and to persuade the public of its curative rather than custodial function. To this end he sought to diffuse a more extended knowledge of mental diseases through the medium of his annual reports and popular lectures. For the same purpose he undertook the publication and editorship of the "American Journal of Insanity," at the time the only magazine of its kind. The first number appeared in July, 1844. Besides having the supervision of about 500 patients he delivered popular lectures, was often called to testify in the courts as an expert and made a success of the business management of his institution.

Dr. Brigham married, in 1833, Susan C. Root, daughter of Spencer Root, of Greenfield, Massachusetts. They had four children, one son and three daughters.

He kept a journal relating to his health, and it is noted that from 1845 his condition caused him some uneasiness. In February, 1848, he was obliged to give up work temporarily, and spent two months in travel in the southern states. The benefit derived from this change was soon offset by great sorrow at the death of his son, which occurred in August, 1848; an affliction followed by the death of his mother. The following year is a story of struggle against failing health, and in August he was prostrated by an attack of dysentery to which he succumbed on September 8.

The Utica State Hospital is an enduring monument of his ability as an organizer, and his annual reports and editorial writings in the "Journal of Insanity" bear witness to his professional fitness for this pioneer service in the state of New York. It may be said without hesitation that his most prominent characteristic was a benevolent interest in his fellow men. His self-reliance and strong determination were traits which served equally to advance his own ambitions and the welfare of the afflicted in his care.

BRIGHAM, Edwin Howard (1841-1926), long time custodian of the Boston Medical Library and willing literary assistant to several generations of medical men in New England, was born in Boston September 27, 1840. He served in a Massachusetts regiment during the Civil War and was captured by the enemy at the second battle of Bull Run. When paroled he found his way north to his home in Watertown, returned to service in the army and was transferred to Boston on sick leave in 1864, serving as recruiting officer and clerk, later hospital steward, until his resignation in 1875. That was at the founding of the Boston Medical Library when he was put in charge of the modest rooms in Hamilton Place. Previously, at the suggestion of his superior officer in the army headquarters in Boston, he had matriculated in Harvard Medical School, his M. D. being conferred on him in 1868.

Dr. Brigham became associated with the medical library through the good offices of Dr. Henry I. Bowditch (q.v.), also Dr. James R. Chadwick (q.v.), the first librarian of that institution, having been previously for a short time clerk in the office of the State Board of Health under Dr. Bowditch. Brigham studied chirography and always wrote a legible hand. When the library moved into rooms

in Boylston Place he managed the directory for nurses and, living in quarters over the library, cared for readers and the meetings in the halls both by night and by day until another move was made to the building at 8 The Fenway in 1901, when he moved his residence to Brookline. He served as librarian of the Massachusetts Medical Society from 1884 to 1922, when he became Librarian Emeritus. He was of greatest service to all of the literary inclined members of the profession during his entire service; always greeting them and their friends most cordially and doing all sorts of favors in the way of looking up literature and compiling statistics; he managed the catalogues of the State medical society, sought for missing men and kept track of the changing addresses for a long series of years, besides assisting the treasurers of both the library and the State society. Dr. Brigham's cordial and sociable nature and his hearty greeting to strangers as well as to friends made him a valuable asset both to the library and to the society.

He wrote an account of his experiences at the battle of Bull Run that was published in "Bivouac, an Independent Military Magazine", 1882. Always interested in military matters he was the first librarian of the Massachusetts Military Historical Society, attended its meetings regularly and also those of the Grand Army of the Republic, besides collecting a large number of books relating to the Civil War.

He married Jane Spring Peirce, of Medford, in 1871. She died in 1893. He was survived by a son and daughter.

His death occurred in Watertown, where he had retired on account of poor health, September 14, 1926, at the age of eighty-six.

BRILL, Nathan Edwin (1860-1925), New York neurologist, son of Simon Brill by his wife, Adelheit Frankenthal, was born in New York on January 13, 1860 and received his early education in the public schools of that city. He received his A. B. degree from the College of the City of New York in 1877 and the A. M. in 1883. His medical degree, however, had been taken from New York University Medical College in 1880, and from 1879 to 1881 he served as interne at Bellevue Hospital. Throughout his life, he devoted himself to the study and practice of medicine in its broadest aspects. Shortly after he left Bellevue he became associated with Edward A. Spitzka (q.v.) who stimulated his interest in neurology. As a result of this influence he was lead to write an important monograph on the congenital defects in the nervous system (1895, "Text Book Nervous Diseases, American Authors," Dercum.—Pages 315 to 147). He is chiefly noted for his original description in 1910 of the endemic form of typhus fever, now known eponymically as Brill's disease. This reflected great credit upon his acumen as an observer. Brill also did important work on many of the blood diseases, especially leucemia. He also wrote an important paper on the value of splenectomy in thrombocytopenic purpura which did much to clarify a group of greatly confused and obscure diseases.

Throughout a long period Brill was known in New York as an active and energetic clinical teacher, whose lectures were attractive and always well attended. In 1893 he was appointed attending physician to the Mt. Sinai Hospital. He always emphasized the value of purely clinical methods and continued until the end of his life to teach that diagnoses can and should be made at the bedside rather than by the aid of innumerable laboratory tests. Personally, he was a genial and kindly man of broad interests and literary tastes, and is said to have combined the finest qualities of a learned physician with those of a man of broad culture. He was active in many of the local medical societies in New York and took a leading part in the affairs of the Association of American Physicians and the New York Academy of Medicine. During the war his health did not permit him to go abroad but he served well directing the work of Base Hospital No. 3 in this country, and much to his delight was raised to the rank of major in the United States Army Medical Corps.

Brill married June 8, 1899, Elsa M. Josephthal of New York and had two children, a boy and a girl.

In 1917 signs of ill health first appeared to which he finally succumbed after a long, painful illness on December 13, 1925. Brill is to be distinguished from his fellow neurologist, Abraham A. Brill, translator of the works of Freud.

J. F. Fulton.

BRINCKLE, William Draper (1798-1862), Delaware physician, pomologist, the son of Dr. John (a former student of William Shippen) and Elizabeth Gordon Brinckle, was born February 9, 1798, in St. Jones' neck, Kent County, Delaware, where his ancestors

were early settlers. In 1807, Dr. Brincklé moved his family to Wilmington, Delaware, to give his children a better education; here William studied in the Wilmington Academy. He was graduated from Princeton in 1816. After beginning the study of medicine in his father's office, he finished at the University of Pennsylvania, in 1819, where Philip Syng Physick (q.v.) was his valued counsellor. The young physician settled in Smyrna, Delaware, in 1820; an alarming epidemic of typhoid fever made practice so exacting that his health broke down and he moved to Wilmington the following year. There he remained until 1825 when he moved to Philadelphia and became the chief assistant of Dr. Physick. He served as medical superintendent of the City Hospital at Bush Hill from 1827 to 1839; in 1829 he was also identified with the staff of the Smallpox Hospital. During the epidemic of Asiatic cholera in 1832, he was active in relief work. From 1837 to 1839 he was a member of the obstetrical staff of Philadelphia Hospital. Of papers on medical topics are found an "Oration" before the Medical Society of Delaware in 1823, strongly advocating postmorten examinations, and an "Introductory Lecture" to a course on materia medica at the Medical Lyceum of Philadelphia in 1826.

He married Sarah T. Physick, niece of his chief, in 1821; they had five children. In 1830 she died. Two years later he married Elizabeth Bispham, daughter of Benjamin Reeves of Philadelphia, by whom he had seven children.

From his father, he inherited a love for the cultivation of fruit, but this interest did not assert itself until about 1840 when he felt the need of relaxation. In a room of his Philadelphia home, he hybridized strawberries and had fruit every season of the year. In his small garden he grew his raspberries (most of his work being done with the old world species, Rubus idoneus, which is not hardy in America, greater perfection being reached in the yellow fruited variety) also pear and apple seedlings. In raising pear seedlings, he grafted and regrafted annually from seed after the second or third year and produced new fruits in half the time required by Van Mons, many of whose novelties did not fruit within twenty years from seed. He distributed thousands of grafts to amateurs and tradesmen, prepaying the carriage. After his second wife died in 1858, he retired from practice and joined his family at Groveville, New Jersey, where he carried on his pomological activity on a larger scale. During his latter years, he temporarily lost the sight of one eye and an illness left him dependent on crutches. Dr. Brinkle left as graphic record of his labors a voluminous correspondence, "Remarks on Entomology," written at the invitation of the Agricultural State Convention—in which he contends for legal enactment for the protection of insectivorous birds, also "Ad Interim Reports," written as chairman of the Fruit Committee of the Pennsylvania Horticultural Society, which he joined in 1843. In 1860, he edited "Hoffy's North American Pomologist," illustrated with colored plates. He was an organizer and president of the American Pomological Society.

Dr. Brincklé died December 16, 1862.

Prior to 1750, "Brincklé" was spelled "Brinckloe." A grandson, Dr. William Draper Brincklé, of San Diego, California, has recently legalized the old spelling.

BRINTON, Jeremiah Bernard (1835-1894), army surgeon, botanist, was born on August 16, 1835, near Waynesburg, Chester County, Pennsylvania; his parents were members of the Society of Friends, his father being Jacob Lindley Brinton and his mother Annie Bernard. He lived for a short time in Philadelphia, where he attended the Philadelphia High School, and then moved to a farm in Maryland. In 1857 he began to study medicine and graduated at Jefferson Medical College in 1859. He practiced and was lecturer on practical anatomy at the Philadelphia School of Anatomy and Operative Surgery. Soon after the Civil War broke out he applied for a position as assistant surgeon and was commissioned in 1862; in 1863 he was appointed medical purveyor to the Army of the Potomac and held this position until the close of the war, when he was mustered out with the rank of major. During this time he kept up his interest in botany and continued collecting plants; his collections were captured by Colonel Mosby, the guerilla in the Confederate Army, who burned them. He returned to Philadelphia and after a few year's practice retired from medicine and engaged in business. He joined the Academy of Natural Sciences in 1878, and the American Association for the Advancement of Science in 1884, when the Association met in Philadelphia and Brinton acted as guide to the visiting botanists to the pine barren region

of New Jersey; it was on this occasion that he showed the "Schizaea pusilla" (Pursh) to Asa Gray and to Carruthers, president of the Linnaean Society. He became an active member of the Torrey Botanical Club and was its president until his death.

Brinton made a study of the Pine Barrens of New Jersey, in which he was an authority; although he published little, he made many exchanges and corresponded with American botanists. He was a large collector and dexterous in dissecting botanical specimens; his skill as a cabinet-maker made it possible for him to make his herbarium cases, cabinets and stands, excellent examples of amateur work. He was noted for great accuracy and painstaking work; he had a remarkable memory for names and persons.

In 1862 Dr. Brinton married Sallie W. Clemens of Philadelphia. His wife died before him, a daughter and two sons survived him. He died suddenly in Philadelphia December 6, 1894.

BRINTON, John Hill (1832-1907), of Philadelphia, who gathered the nucleus of the Army Medical Museum was the son of George (Collegiate Department, University of Pennsylvania, 1822) and Mary Margaret Smith Brinton. He was born in Philadelphia, May 21, 1832, and first studied under an old schoolmaster, Samuel Crawford, and then at the Classical Institute conducted by Dr. Faires. In 1846, he entered the University of Pennsylvania and received his A. B. in 1850, his A. M. in 1852, and his LL.D. in 1901. In 1852 he took an M. D. from Jefferson Medical College. After a year's post-graduate work in Paris and Vienna, he entered upon general practice in Philadelphia and became, first, demonstrator and, then, lecturer in operative surgery at Jefferson. Commissioned by Lincoln as a major and brigade surgeon of volunteers in August, 1861, he served as medical director of Grant's army, participating in the Tennessee and Cumberland River Campaign of 1862. The same year, he was assigned to duty in Washington in the office of the Surgeon General and in June, 1863, was ordered to prepare the "Medical and Surgical History of the War of the Rebellion," a monumental surgical record of the war, to which he contributed the article on gunshot wounds. At this time also, he gathered the nucleus of the Army Medical Museum. Later, he saw active service under General Rosecrans and was Medical Director in the field in the Missouri campaign and superintendent of the hospitals in Nashville, Tennessee and Medical Director of the Army of the Cumberland.

At the close of the war, Dr. Brinton resumed practice in Philadelphia and his former work at Jefferson. During 1866-82, he was one of the surgeons to the Philadelphia Hospital; in 1869, the Mütter lecturer on surgery and pathology; in 1877, surgeon to the Jefferson Hospital; and in March, 1882, after the retirement of Samuel D. Gross, professor of the practice of surgery and clinical surgery becoming emeritus professor in 1906.

He married Sarah Ward, September 13, 1866, by whom he had six children.

He died at his home from cerebral hemorrhage, March 18, 1907.

Brock, Hugh Workham (1830-1882), physician of Morgantown, West Virginia. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. i. p. 111.

BRODIE, William (1823-1890), army surgeon, chief factor in the Wayne County Medical Society, Michigan, was born at Fawley Court, England, July 26, 1823. In 1832 his father emigrated and settled on a farm twelve miles west of Rochester, New York. William had his general education at a district school and the Collegiate Institute at Brockport, New York. In 1847 he became a student with Dr. William Wilson of Pontiac, Michigan, and after one course of lectures in Berkshire Medical Institution at Pittsfield, Massachusetts, one in Vermont Medical College at Woodstock, Vermont, and one in the College of Physicians and Surgeons of New York, he took his M. D. from the last in 1850, at once beginning practice in Detroit, Michigan. In 1857 he was secretary of the American Medical Association and its president in 1886. He was one of the editors of the "Peninsular Medical Journal," 1855-56-57; editor of "New Preparations," 1879-80; editor of the "Therapeutic Gazette" from 1880 to 1885; president of the Michigan State Medical Society, 1876; from 1850 to 1863 he was surgeon to St. Mary's Hospital; president of the Wayne County Medical Society (Detroit) from 1876 to 1890 excepting two years; a founder of the Detroit Medical Society (1852-59), and its president in 1855; professor of clinical medicine in the Michigan College of Medicine. For many years he was the motive power of the Wayne County Medical Society, maintaining a club feature with refreshments and social dis-

cussion at all meetings, thus attracting the members. Dr. Brodie was the first surgeon to volunteer from Detroit during the Civil War and was commissioned surgeon of the First Regiment, Michigan Volunteers, and took charge of the wounded during the first battle of Bull Run. Later he was appointed brigade surgeon with Gen. Fremont. His friends, before antiseptic surgery was introduced, used to wonder that Dr. Brodie's surgical cases rarely suppurated. The fact was, from his natural neatness of person, clothes and surroundings, including instruments, he was clean all the time. Dr. Brodie was about five feet ten inches tall, of medium weight with reddish-gray hair, closely cut whiskers, nervous manner, energetic movement, always pushing for some person or thing; quite ready to fight obstacles opposing his plans.

In November, 1851, he married Jane Whitfield, daughter of James Whitfield, of England, by whom he had two sons and one daughter. One son, Benjamin P., became a physician.

Dr. William Brodie died at his home in Detroit, July 30, 1890, from the results of vascular degeneration.

His writings are to be found in the Transactions of the American Medical Association, and in the "Peninsular Medical Journal" for the most part. LEARTUS CONNOR.

BRONSON, Henry (1804-1893), professor of therapeutics at Yale, historian, was born in Waterbury, Connecticut, January 30, 1804, the son of Judge Bennet Bronson (Yale, 1797), a man of large landed interests. While attending nearby schools, he worked on the farm and so became discontented at the thought of managing the estate in the future. Accordingly he prepared for and entered the medical department of Yale and was graduated in 1827. The same year, he began to practice in West Springfield, Massachusetts. Shortly after his marriage in 1831 to Sarah Miles, a daughter of the Hon. Samuel Lathrop of Springfield, he settled in Albany, New York, where he became a partner of Alden March (q.v.). In 1832, he was commissioned to investigate in Canada the natural history of Asiatic cholera and its possible prevention. He reported that there existed no evidence of the power of chlorine, as used, over the principle of contagion or infection, while faith in disinfectants actually caused neglect of cleanliness. Bronson settled in his birthplace in 1834. From continued exposure while serving his large rural practice, his health broke down and he left for the milder climate of Italy, later visiting London and Paris. He became professor of materia medica and therapeutics at his Alma Mater in 1842. Although he resigned after ten years, he continued to instruct classes until 1860, when health again impaired, he spent the winter in the Barbadoes. He was president of the Connecticut State Medical Society in 1869-70.

Bronson's best known contribution is a "History of Intermittent Fever in the New Haven Region, with an Attempt to distinguish Known from Unknown Causes," 1875. By nature an historian, he collected many data relating to the history of Waterbury. He also prepared an interesting series of historical and biographical papers pertaining to the medical history of New Haven County (1872-76). Attached to the Herbert Spencer school of political economists, he wrote on finance and political economy, notably, "An Historical Account of Connecticut Currency, Continental Money, and the Finances of the Revolution" (Trans. New Haven Colonial Historical Society, 1863) and, ten years later, "The Money Problem again." Dr. Bronson gave largely toward founding a professorship of comparative anatomy and physiology at Yale and to the New Haven Hospital, also to the hospital at Waterbury.

He died of old age, at his home in Waterbury, November 26, 1893.

BROOKS, John (1752-1825), colonel in the Continental Army, governor of Massachusetts Medical Society, was born in Medford, Massachusetts, May 31, 1752. The son of a farmer, he received his education at the town school and at the age of fourteen was apprenticed to Dr. Simon Tufts, Jr., of Medford, for seven years, according to the custom of the day. At school he was the companion and friend of Count Rumford. Dr. Brooks at the termination of his apprenticeship began to practice in the neighboring town of Reading.

He interested himself in raising a company of minute men in his town, and was chosen commander. On the news of the Battle of Lexington he marched to the front at once with his company and assisted in harassing the British on their retreat. He was actively engaged in the military operations of the Revolution, with the rank of colonel, and was designated by Gen. Washington for the com-

mand of a brigade at its close. Settling in Medford after the war was over he engaged in active practice, and was one of the early members of the Massachusetts Medical Society and its president from 1823 to the time of his death in 1825, preceding James Jackson in this office. In 1816 he was elected Governor of the Commonwealth and served seven years in that capacity. Yale College conferred her honorary A. M. upon him in 1781, and Harvard the same in 1787, and he received the Hon. M. D. from Harvard College in 1810, also LL. D. in 1817. He was president of the Society of the Cincinnati, president of the Bible Society of Massachusetts and a member of the Academy of Arts and Sciences.

He died March 1, 1825, in his seventy-third year. His wife, Lucy Smith, of Medford, died early in life, leaving two sons and a daughter. One son was a major of artillery in the United States Army and the other, a lieutenant in the navy, was killed in the battle of Lake Erie.

As a physician Dr. Brooks was a good diagnostician and conservative in treatment. His anniversary oration before the Massachusetts Medical Society in 1808 is preserved in its transactions, with the title, "Pneumonic Inflammation." He published also an oration delivered before the Society of the Cincinnati (1787), a discourse before the Humane Society (1795) and a eulogy of Washington (1800).

WALTER L. BURRAGE.

BROOKS, William Allen (1864-1921), Boston surgeon and executive, was the son of William Allen Brooks of Haverhill, Massachusetts, where he was born, August 15, 1864. After graduating from Harvard College with the class of 1887, where he distinguished himself in football and rowing, he took an M. D. at Harvard Medical School in 1891 and also an A. M., served as house officer at the Massachusetts General Hospital and settled in practice in Boston, devoting himself to surgery. From 1893 to 1895 he was assistant in anatomy at his alma mater and was visiting surgeon to St. Elizabeth's Hospital. While there he developed a good surgical technique and was known as an accurate and painstaking operator. From 1895 to 1901 he filled the position of demonstrator of anatomy at the school and two years later became assistant visiting surgeon to the Massachusetts General Hospital, later being advanced to full visiting. In time he devoted a large share of his time to the duties of examining surgeon for the Boston Elevated Railway, a position requiring much tact as well as surgical skill. In 1915 he built and incorporated the "Brooks Hospital" of 34 beds on the summit of Corey Hill, in Brookline, a suburb of Boston, where there were wards for the care of industrial accidents. In 1917 when news was received of the explosion and disaster at Halifax, Nova Scotia, Dr. Brooks displayed his executive ability by organizing and dispatching the first medical relief expedition, with doctors, nurses and supplies for the stricken city, within the brief space of twenty-four hours. During the world war his age and the condition of his heart would not permit his entering the regular service but he did notable work as chief surgeon of the State Guard, with the rank of lieutenant colonel, by organizing an emergency hospital in the great Commonwealth Armory at Allston, where a very large number of injured could be cared for. Also, in order to be ready for any demands that might be made on the state, he perfected a motor dressing station for use in riots and military emergencies, that he demonstrated to his fellow members of the Massachusetts State Committee, Council of National Defense, Medical Section. It was a most ingenious and thoroughly practicable affair; a station that was supplied with all necessary apparatus, surgeons and nurses, and could be moved by motor to any point where needed, at a moment's notice. At the time of the influenza epidemic in 1918, he established the Corey Hill Cubicle Hospital for the outdoor treatment of influenza patients.

Dr. Brooks was of thickset athletic build and genial personality. His wife who was Miss Helen M. Winchell of New Haven, Conn., died after a prolonged illness in 1919 and the doctor then moved his office from Boston to the Brooks Hospital, where heart disease terminated his labors, May 20, 1921. Their only child died in infancy.

WALTER L. BURRAGE.

BROWER, Daniel Roberts (1839-1909), Chicago alienist, was born in Philadelphia October 13, 1839, and graduated from the Philadelphia Polytechnic College in 1860 with the degree of M.S. and from the Medical Department of Georgetown University in 1864. His ancestors were of the early Dutch settlers in this country. He served as an assistant surgeon for two years during the Civil War, and afterwards as superintendent of the Freedman's Hospital, Richmond, Va., and later of the Eastern State Hospital for the

Insane, Williamsburg, Va., for nine years. He came to Chicago, Ill., in 1875, and soon became an important figure in the medical life of the city. He was connected with Rush Medical College, first as professor of materia medica and therapeutics, and later as professor of nervous and mental diseases, and later held for many years the chair of diseases of the nervous system in the Woman's Medical School and the Post-Graduate Medical School. He was a member of the American Medical Association, the American Neurological Association, the American Electro-Therapeutic Association, the National Association for the Study of Epilepsy, the Mississippi Valley Medical Association, the Chicago Physicians' Club, and the American Medico-Psychological Association, besides being an honorary member of the Moscow Society of Neurologists and Psychiatrists, and one of the founders of the Senn Club. He was a member of the attending staff of St. Joseph's, Cook County and Presbyterian hospitals, and consulting physician to the Women's and Children's Hospital and Oakwood Sanitarium, besides being president of the Chicago Medical Society in 1891 and of the State Medical Society in 1895.

He was the author of a text-book on insanity and of many monographs on nervous and mental diseases and received the honorary degrees of A. M. from Wabash College, and of LL. D. from Georgetown University, Kenyon College and St. Ignatius College.

He was married, May 15, 1868, to Eliza Ann Shearer, of Pennsylvania, and they had two children.

Dr. Brower was in apparent good health until a week before his death, when he was seized with cerebral apoplexy, causing paralysis of the left side, but apparently not affecting his mind. He gradually failed physically, but retained consciousness until a few hours before his death, which occurred at his home in Chicago, March 1, 1909, at the age of 69.

BROWN, Bedford (1825-1897), physician and army surgeon, was the son of the Hon. Bedford Brown, United States senator from North Carolina from 1828 to 1841, and was born in Caswell County, North Carolina, January 17, 1825. His mother's maiden name was Mary L. Glenn. In 1845 he studied under Dr. Benjamin W. Dudley (q.v.), of Lexington, Kentucky; attended two courses of lectures in the medical department of the Transylvania University, and graduated in 1848. Two years later he took a course of lectures at the Jefferson Medical College in Philadelphia, and took his M. D. from that institution in 1855.

After graduation he practiced three or four years in Virginia, and about 1855 returned to North Carolina and practiced at Yanceyville until the outbreak of the Civil War. At its close he settled in Alexandria, Virginia, where he practiced until death. In the spring of 1861 he was appointed chief surgeon in the camp of instruction at Weldon, North Carolina, then assigned to the troops sent from Richmond, Virginia, to northwestern Virginia and eventually served during the rest of the war as inspector of hospitals and camps. Dr. Brown performed many capital operations during his military service, and after the war had a large practice.

He was a member of the Southern Surgical and Gynecological Association of which he was vice-president in 1893, and one of its judicial council from 1894; a member of the Board of Medical Examiners of Virginia from 1885 to 1894, and of the Medical Society of Virginia, of which he was president in 1886.

He married, in 1852, Mary E. Simpson of Washington, District of Columbia, and had three children, two sons and a daughter. William Bedford, who became a physician in New York City, was one of the sons.

During the last months of his life he was troubled with chronic cystitis, for the relief of which an operation was performed by the late Dr. Hunter McGuire, (qv.) but failing to rally, he died at his home in Alexandria, September 13, 1897.

The "Transactions of the Medical Society of Virginia," from 1879 to the year of his death, contain many papers read before the society by Dr. Brown, too many indeed to enumerate. Several also are to be found in the "Transactions of the Southern Surgical and Gynecological Association," many of these of historical interest.

ROBERT M. SLAUGHTER.

Brown, Benjamin (1756-1831), navy surgeon of the Revolution, practitioner of Waldobrough, Me. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 149.

BROWN, Buckminster (1819-1891), orthopedist, was the son of Dr. John Ball Brown (q.v.) and grandson of Dr. John Warren (q.v.). He was born in Boston, July 13, 1819. His father had introduced subcutaneous

tenotomy in New England and managed a private orthopedic infirmary where patients came for treatment from all over the country. Buckminster was to follow in his father's footsteps, so when he had received his M. D. from the Harvard Medical School in 1844 he went abroad to study the new specialty of orthopedics in London under J. Little; in Paris under Guérin and Bouvier, and in Germany under Stromeyer. On his return to Boston in 1846 he established himself in general practice, in the course of a few years gravitating to the exclusive practice of orthopedics. He was associated with his father in the infirmary and established an orthopedic department in the House of the Good Samaritan. Although handicapped by poor health, having had Pott's disease when a boy, and in consequence leading a shut-in life, he carried on, in spite of his deformity, an arduous and exacting practice for fifty years. Patience characterized his work, his favorite quotation being "Genius is the talent for taking pains." Of a refined and sensitive nature he shrank from publicity, devoting himself to his patients and his books. Dr. C. C. Foster, his assistant for ten years, said of him: "His mechanical ability was very great and his surgical dexterity equally remarkable. His operating and his whole handling of a case were characterized by a certain delicacy and finish that I have seen in no other man's work." Also, "His sense of touch was also very keen and he learned much through the ends of his fingers. To watch him as he manipulated a contracted tendon or a carious spine was an object lesson."

He published, with his father, in 1850, "Reports of Cases Treated at the Boston Orthopedic Institution." In 1853 appeared "A Case of Extensive Disease of the Cervical Vertebræ," and in 1859 he made an address with the title: "Ectopia cordis," before the Suffolk District Medical Society. In 1847 appeared "The Treatment and Cure of Cretins and Idiots" and an essay on the "Pathology and Physiological Effects of Ethereal Inhalation." His best work was in club-foot, where his persistency with the clumsy methods of the day enabled him to obtain success which less painstaking surgeons did not gain.

Dr. Brown married, in May, 1864, Sarah Alma Newcomb, daughter of Joseph Warren Newcomb, and great-grandaughter of Gen. Joseph Warren.

He died at Auburndale, Massachusetts, December 26, 1891, leaving in his will his collection of specimens to the Warren Museum at the Harvard Medical School, and a large sum of money to found the first professorship of orthopedic surgery in Harvard University. He was an active member of the American Orthopedic Association and the Boston Society for Medical Improvement.

WALTER L. BURRAGE.

BROWN, David Tilden (1822-1889), alienist and explorer, was born in Boston, Massachusetts, in August, 1822, and in 1828 moved with his parents to New York City. He went to school in Poughkeepsie and at the Washington Institute. He studied medicine under Willard Parker (q.v.) and received an M. D. from the College of Physicians and Surgeons in 1844. When twenty-two he was senior medical officer of the City Asylum on Blackwell's Island. For one year he was medical assistant at the Vermont Asylum and for one year was at the Utica State Asylum, resigning to practice with his former preceptor, Willard Parker. His health failing, he gave up practice and became interested in the enterprise of opening a route across Central America for emigrants to California in 1849, his knowledge of the Spanish language proving helpful. "He explored several routes which have since become well-known and ultimately negotiated the first treaty which secured the right of transit across the Isthmus of Nicaragua. His efforts brought fortunes to others but not himself." (Henry M. Hurd).

From 1852 to 1877 he was in charge of Bloomingdale Asylum, succeeding Charles Henry Nichols (q.v.), who had followed him at Utica. Brown prepared the plan adopted for the Sheppard Asylum (now Sheppard and Enoch Pratt Hospital) at Baltimore, visiting Europe at the request of the trustees of the institution.

After resigning from Bloomingdale, he went abroad to benefit his health and never again resumed hospital work. He died at his home in Batavia, Ill., September 4, 1889.

BROWN, Francis Henry (1835-1917), pioneer compiler of New England medical directories and promoter of medical and patriotic organizations, was born in Boston, where he spent his life, August 8, 1835. He was the son of Francis and Caroline Mathilde Kuhn Brown, was prepared for Harvard College at the Boston Public Latin School, graduated in 1857, and received an M. D. from Harvard in 1861, becoming an assistant instructor in

chemistry at Cambridge, from 1857 to 1859, then serving as house officer at the Massachusetts General Hospital. He entered the Army and was acting assistant surgeon from 1862 to 1864. When he had been in practice six years he became a founder of the Boston Children's Hospital and he served that institution as secretary and as surgeon and consulting surgeon for a lifetime. He became treasurer of the Obstetrical Society of Boston, founded in 1861, and held the position until his death, and he was secretary of his college class. Among his other activities were: Surgeon to Boston Dispensary 1866-1872, editor "Boston Medical and Surgical Journal" 1870-1872, president Suffolk District Medical Society 1897-1898, president Massachusetts Society Sons of the American Revolution 1901-1903, treasurer of the Unitarian Club, and secretary of the Bunker Hill Monument Association.

In 1875 Dr. Brown published "The Medical Register for the Cities of Boston, Cambridge, Charlestown and Chelsea for the years 1866, 1873 and 1875," 3 vols. And in the same year, "The Medical Register for the State of Massachusetts," to be followed in 1879 by "The Medical Register for New England," the eighth edition of which containing biographical notices of practicing physicians, a most useful book, was published in 1895. Besides these works he wrote "Harvard University in the War of 1861-1865," and "The Second Church in Boston, 1900." He contributed also to "Allibone's Dictionary of Authors" and to the volume on medical biographies, of Irving A. Watson (q.v.) and W. B. Atkinson (q.v.).

On September 24, 1861, Dr. Brown married Louisa Beckford of Salem, Mass.; she died in 1865 and March 23, 1871, he married Mary Sherwood Wood of Auburn, N. Y. There were two children. Dr. Brown's personality epitomized geniality. He was rather below the average in height, had a military bearing and was unfailing in his attendance at meetings of the societies of which he was a member.

During the latter part of his life he had an office in the business part of Boston, where he was medical examiner for life insurance companies and transacted the business of the many positions he held. His death which occurred on May 16, 1917, was due to injuries received from being struck by a street car in front of his residence, the Hotel Buckminster.

WALTER L. BURRAGE.

BROWN, Frederic Tilden (1853-1910), was a general surgeon and voluminous writer on surgical topics, who early became active in the genito-urinary field where through his skill as well as the invention of delicate instruments, he became one of the conspicuous landmarks in his specialty. He was born in New York October 7, 1853, the son of David Tilden Brown (q.v.) and Cornelia Wells Clapp. He graduated at Harvard University in 1877 and received his M. D. at the College of Physicians and Surgeons, New York, in 1880. In that year he was house surgeon at Mt. Sinai Hospital, New York. He was professor of genito-urinary diseases at the University and Bellevue Hospital Medical College, and attending surgeon to Bellevue Hospital and consulting surgeon to the Presbyterian, Nassau and Mineola Hospitals. Brown's lamp-bearing cystoscope secured a closer approximation of lamp and lens and hence better visual properties than any earlier instrument (see "Annals of Surgery," 1902, vol. xxxv, 642-643).

Numerous papers by him are listed in the General Index to the "Annals of Surgery" from 1885-1889. He wrote: "The Metrourethrotome" (N. Y. 1897); "A case of Cystitis, Pyelonephritis due to Colon-bacillus Infection" (N. Y. 1895).

Dr. William Nye Swift wrote of Dr. Brown: "He was a member of the Natural History and Fine Arts Societies, captain of the Rifle Club and rowed in several victorious club crews. . . . He was a tremendous worker and overwork had undoubtedly much to do with breaking down his health. . . . Perhaps the price he paid for his work was not too high —he accomplished so much." (Report vii of the Harvard Class of 1877).

Dr. Brown married Mary Crosby Renwick. Their two children were Frederic Rhinelander Brown and Margaret Renwick Stricker.

He died suddenly at Bethel, Maine, May 7, 1910.

HOWARD A. KELLY.

BROWN, Gustavus (1689-1765), an early practitioner of Maryland, was the first of his family to arrive in that state, and was born at Dalkeith, near Edinburgh, Scotland, on April 10, 1689. His parents were Gustavus and Jane Mitchelson Brown, and his paternal grandfather was the Rev. Richard Brown, of the established Church of England, a graduate of the University of St. Andrews and minister to Salton in Scotland in the reign of Charles I. The name was formerly spelled

Broun. Nothing is known of Dr. Brown's education. He came to Maryland in May, 1708, and is said to have been a surgeon's mate on board an English vessel. While his ship lay at anchor, he went ashore, but before he could return a storm arose which made it necessary for the ship to weigh anchor. Thus left, with nothing but the clothes on his back, he made himself known, and informed the planters of his willingness to serve them. He soon gained their respect, married in 1710 a lady of wealth, and acquired a large practice. Many years later he went to Scotland to live, but his wife not liking the country, he returned to Maryland in 1734. Dr. Brown's place, called "Rich Hill" was four miles from Porto Tobacco, in Charles County. He was prominent in the affairs of the state. He was one of seven trustees appointed by the General Assembly to select teachers for the Province.

He had a number of medical students, two of whom Dr. Michael Wallace, of King George County, Virginia, and Dr. John Key, of St. Mary's County, Maryland, became his sons-in-law. His nine daughters, known as "the nine graces," married men of prominence. Dr. Brown showed remarkable shrewdness by requiring all their husbands to secure upon them, at marriage, the property which he gave as dower.

Dr. Michael Wallace told that on one occasion Dr. Brown was sent for in haste to pay a professional visit in the family of a Mr. H., a wealthy citizen of King George County, Virginia, who was very slow in paying his physician but very ostentatious in displaying his wealth. In leaving the patient's room it was necessary for Dr. Brown to pass through the dining-room where Mr. H. was entertaining some guests at dinner. As Dr. Brown entered the room, a servant bearing a silver salver on which stood two silver goblets filled with gold pieces, stepping up to him and said: "Dr. Brown, master wishes you to take out your fee." It was winter and Dr. Brown wore his overcoat. Taking one of the goblets, he quietly emptied it into one pocket, and the second goblet into another, and saying to the servant: "Tell your master I highly appreciate his liberality" he mounted his horse and returned home.

Dr. Brown died at Rich Hill, suddenly, of apoplexy, in April, 1765. In his will he speaks of himself as "Practitioner in Medicines and Laird of Mainside and House Byers in Scotland."

He married first in 1710, Frances Fowke, daughter of Col. Gerard Fowke, of Charles County, by whom he had twelve children, of whom one son and seven daughters survived their mother. She died November 8, 1744. His second wife was Mrs. Margaret Black Boyd, a widow, and by her he had a son, Gustavus Richard Brown (q.v.), and a daughter.

EUGENE F. CORDELL.

BROWN, Gustavus (1744-1801). This physician was the grandson of the eminent Dr. Gustavus Brown, Sr. (q.v.). He was the son of Rev. Richard Brown, a minister of the Anglican Church, and a nephew of Dr. Gustavus Richard Brown (q.v.). He was born at Morningside, near Edinburgh, Scotland, in 1744, and after studying medicine at that university for seven years, received his M. D. in 1770. His name appears in the catalogue of graduates as "Brown, Gust. Brit. De Cynanche Phlogistica, 1770." He came to America shortly after, in company with several of his fellow students, and settled in St. Mary's County, Maryland. In 1782 he attended one of these, Dr. Ireland, and the illness proving fatal, married his widow. This lady was the only child of Col. John Reeder, an officer of the Revolution, and of a Huguenot family settled in Maryland since 1736. Her estate was called "Summerseat," and she is said to have been very rich. There the doctor settled down and practiced until his death, July 3, 1801, at the age of fifty-six. He had no children.

Dr. Brown practiced with great success and had the honor of being called to attend Gen. Washington by Drs. Craik, Dick and Gustavus R. Brown. Receiving the summons at midnight, he mounted his horse and hastened towards Mt. Vernon, but on reaching Long Bridge he learned of the patient's death and turned back. The hastily-written summons, together with other relics, was destroyed by fire at the old homestead in 1874. To him, through his father, descended by entail the Scotch estate. His remains were interred in the Reeder burial grounds at Westfield, St. Mary's county, and his tombstone bears an inscription highly commendatory.

EUGENE F. CORDELL.

BROWN, Gustavus Richard (1747-1804), a son of Dr. Gustavus Brown, Sr. (q.v.) by his second marriage, he was born, according to his own statement, at his father's seat near Port Tobacco, Maryland, October 17, 1747, and

educated at Edinburgh University where he took his M. D. in 1768, his thesis being "De Ortu Animalium Caloris." Among his fellow students was Dr. Benjamin Rush (q.v.), who said that he was second to no student in the university at that period. After "walking" the London hospitals for several months, he returned to Maryland, stopping on the way for some time at the Maderia Islands, and bringing thence a large collection of rare plants and flowers. He settled to practice at Port Tobacco. During the Revolution he was a firm and active patriot. He was a county judge in 1776 and 1777. In the spring of the former year, in company with his nephew, Dr. James Wallace, he established a hospital for the inoculation of smallpox near the Potomac river, on the Virginia side. He was a member of the State Convention, which was called to ratify the constitution of the national government in 1788.

Like his father, Dr. Brown was a man of fine personal appearance, being over six feet and well proportioned. His manners were pleasant and affable, and he was a well-read physician and fine classical scholar. He was particularly fond of botany and cultivated with great care and success an extensive garden of rare flowers and plants, not for their beauty alone, but for their medicinal qualities. It was the most extensive and artistic collection in the state, occupying a sloping lawn of some ten acres, with three terraces and interlaced with serpentine walks, bordered with box-wood, savin, juniper and other rare evergreens. His collection had been gathered from all parts of the world and his home took its name from his rare and extensive collection of roses. He provided means of irrigation for the summer, and a large hothouse for propagating plants and for the care of the more delicate during the winter. Dr. Hosack (q.v.) is said to have been a frequent visitor to Brown during the former's residence in Alexandria, Virginia, about 1791, and to have thus gained the idea for the public botanical garden which he afterwards founded in New York City. Brown was a favorite preceptor with medical students from the adjoining parts of Maryland and Virginia. From the close of the Revolution to his death his office is said to have been filled with them. In his practice he is said to have used but few remedies, those being of the most efficient character. Both his sons became physicians. An interesting letter from Dr. Brown to Dr. Craik is published in "Lossing's History," Rec. 11, 506, quoted in "Hayden," in which the former acknowledges that they were wrong in bleeding Washington so much.

On May 15, 1769, Dr. Brown married Miss Margaret Graham, of Prince William County, Virginia, and had four children, two daughters and two sons.

He died at his house "Rose Hill," September 30, 1804, aged fifty-six. He was in active practice up to his last short illness.

EUGENE F. CORDELL.

Brown, Harvey E. (1840-1889), army surgeon and author of "The Medical Department of the United States Army from 1775 to 1873." See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 153.

Brown, James (1854-1895), of Baltimore, who first catheterized the male ureter during life. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 154.

BROWN, John Ball (1784-1862), pioneer orthopedist of America, son of Dr. Jabez Brown of Wilmington, Massachusetts, was born in that town October 20, 1784. Graduating from Brown University in 1806, he studied medicine with Dr. E. A. Holyoke (q.v.) and Dr. Moses Little at Salem and began practice in Dorchester in 1809 but returned to Boston in 1812, shortly after (1814) marrying the third daughter of Dr. John Warren (q.v.). He was appointed surgeon and physician to the Boston Almshouse in 1817 and associate surgeon to the Massachusetts General Hospital when that institution was organized, while in later years he became consulting surgeon.

In 1838 Dr. Brown began to devote his attention especially to orthopedics, a new specialty, being the first to introduce it to this country. He was the first in America to do subcutaneous tentotomy and had a wide reputation in the treatment of wry-neck, club-foot and spinal curvature, patients seeking his aid from places so remote as the Sandwich Islands. Dr. Brown was said to have great mechanical ingenuity in the invention and application of special surgical apparatus. He was assiduous in following up his patients, who were treated for the most part in his orthopedic infirmary, the first of its sort in Boston, and was an occasional writer for the

medical journals on subjects connected with his specialty. In 1839 he republished from the "Boston Medical and Surgical Journal," "Remarks on the Operation for the Cure of Club-feet, with Cases."

He died May 14, 1862, aged seventy-seven years, being succeeded in the practice of orthopedics in Boston by his son, Buckminster Brown (q.v.).

WALTER L. BURRAGE.

BROWN, Samuel (1769-1830), a pioneer inoculator for smallpox and one of the first two professors of the Transylvania University Medical Department, was born on January 30, 1769, in Augusta, now Rockbridge County, Virginia. He was the son of the Rev. John Brown, Presbyterian minister, and Margaret Preston, the second daughter of John and Elizabeth Patton. His early education he received from his father, who founded a grammar school for the education of his sons and other boys in the neighborhood. He went eventually to Dickinson College in Pennsylvania, where he took his bachelor of arts degree. At once he began to study medicine under his brother-in-law, Dr. Humphreys, at Staunton, Virginia. After several months he went to Philadelphia and became a private pupil of Dr. Rush (q.v.); did not remain there long but went to Edinburgh where he had as classmates Dr. Hosack, Dr. Davidge, and Ephraim McDowell (q.v. to all). Not having fulfilled certain requirements of the Edinburgh University, he did not graduate there. On returning to America he began to practice at Bladensburg near what is now the city of Washington. Although he prospered, a strong desire to be with his family is the reason given for his leaving the shores of the Potomac in 1797 and joining his brother, James Brown, who began the practice of law in Lexington, Kentucky.

In 1804 the health of James Brown compelled him to seek a milder climate and he chose New Orleans. Dr. Brown, unable to separate himself from his brother, descended the Mississippi in 1806 and entered upon practice in New Orleans, where, after three years, he married Katherine Percy, abandoning New Orleans and settling upon a plantation at Fort Adams, a short distance from Natchez, practically giving up medicine. His wife died a few years after this, leaving him three children, the last of whom followed its mother to the grave.

This made another change in the career of Dr. Brown. He left Natchez and with his negroes moved to a plantation near Huntsville, Alabama. His energies were now directed for a time to educating his children until they reached the age for school. He also co-operated with Dr. Daniel Drake (q.v.) in a project to establish a medical school in Cincinnati. Dr. Drake had obtained a charter from the state of Ohio in 1819. About this time the trustees of the Transylvania University offered Dr. Brown the chair of practice, which he accepted. This was the reorganization of the medical department of the Transylvania University as he and Dr. Frederick Ridgely (q.v.) had been appointed in 1799, Brown as professor of chemistry, anatomy and surgery. In the spring of 1825 he tendered his resignation in favor of his friend, Dr. Daniel Drake, who was unanimously appointed his successor.

According to Lunsford P. Yandell, Sr., the first medical paper from the pen of a Kentucky physician was one written by Brown for the "American Medical Repository" in June, 1799. Its title was: "A curious Instance of Disease in which the Feeling of the Patient was Abolished while the Power of Motion remained Unimpaired." He was an industrious writer but composed no elaborate papers and his letters to scientific men, which were very numerous, were more interesting than his medical papers. The crowning effort of his life was the organization of a society with branches in other cities, whose members pledged themselves to ideals similar to those of Dr. Brown, a society styled "The Kappa Lambda Association of Hippocrates." Its members were elected by unanimous vote and on the exaction of a promise similar to that of the Hippocratic oath. A journal was put forth in 1825 in Philadelphia under the auspices of this association, under the name of the "North American Medical and Surgical Journal."

He was active in the organization of societies for the discussion of questions of science and literature, and probably the first to make known to his countrymen the discovery of the art of lithography in Europe, and the first to suggest a process of clarifying ginseng, rendering it fit for the Chinese market. He also made some valuable suggestions about the distillation of spirits. His contribution to "The Transactions of the American Philosophical Society" consisted of a paper under the title of "A Description of a Cave on Crooked Creek, with Observations on Nitre and Gunpowder."

His death, at the residence of Col. Thomas G. Percy, near Huntsville, Alabama, was caused by apoplexy in the third attack of which he died on the twelfth of January, 1830, in the sixty-first year of his age.

AUGUST SCHACHNER.

BROWN-SÉQUARD, Charles Edward (1817-1894). This great and original "savant," cosmopolite physiologist and physician who taught in England, America and France, Charles Edward Brown-Séquard was born at Port Louis, Mauritius, April 8, 1817, the posthumous son of Edward Brown (a Philadelphian), captain in the merchant service. His mother's family, the Séquards, had been for some years settled in the Isle of France and as his father was Irish the lad inherited a large amount of vivacity, and it is easy to imagine his routine work as clerk in a store was soon thrown up. His mother in 1838 went to Paris and kept her son at his medical studies by taking in some students, also Mauritians, but she died soon after and Brown affixed her maiden name to his own. In 1846 he was admitted M. D. at Paris with a thesis on "Researches and Experiments on the Physiology of the Spinal Cord." In 1849 he was auxiliary physician under Baron Larrey at the military hospital of Gros Caillou during an outbreak of cholera. During these years he had a hard fight with poverty but devoted himself to physiology and on the foundation of the Société de Biologie became one of the four secretaries.

The political troubles of 1852 made him fear the consequences of his own republicanism and he sailed for New York where he taught French, attended obstetric cases at $5.00 each, and married an American woman, with whom and a baby son he returned to France the year following, to stay only one year, for he seems to have had touches of travel fever leading him to go to Mauritius to practice. There was just then an outbreak of cholera in the island and Brown-Séquard helped in its suppression. His next journey, in 1855, was as long as the title he was asked to assume—professor of the institutes of medicine and medical jurisprudence at the Virginia Medical College in Richmond, Virginia.

But the duties were uncongenial, or fortune was tossing him about until she had landed him in the fittest position. At any rate he was soon back in Paris, where he rented with Charles Robin a small laboratory in the Rue St. Jacques and taught students who afterward did honor to their master. In 1858 his lectures on the physiology and pathology of the central nervous system attracted universal attention and when next year the National Hospital for the Paralyzed and Epileptic was opened in Queen Square, London, he was chosen physician. Four years of this and special practice wore him out and he came again to America; this time as professor of physiology and pathology of the nervous system at Harvard (1864-1867). Four years later his first wife, Ellen Fletcher, a niece of Daniel Webster, died leaving him one son. He went once more to his beloved Paris where, as co-editor with Vulpian and Charcot of the "Archives de Physiologie Normale et Pathologique," and as professor of comparative and experimental pathology in the faculty of medicine he achieved a brilliant success. In 1872 he was again in America, settled as a New York physician and married to another American, Maria R. Carlisle of Cincinnati, who died in 1874, by whom he had one daughter. Three years later he left for London, then on to Paris and Geneva to be in the last town professor of physiology, and marrying there his third wife, an English woman, Mrs. Elizabeth Emma Dakin, widow of T. Doherty, an artist. She died in 1894, and he only survived her three months and died of an apoplectic seizure April 1, 1894, in his flat, 19 Rue Francois Premier, Paris.

In 1878, when his friend and rival Claude Bernard died, Brown-Séquard succeeded him as professor of experimental medicine in the College of France; the honor he coveted most, the presidency of the Société de Biologie, fell to him in 1887. All his life he devoted himself to the experimental study of the most recondite parts of physiology. Money and position, a professorship in Virginia, a fashionable practice in London, and an assured income in New York were reckoned as nothing when found incompatible with his life's work. Horace Bianchon, writing of him says, "his bronzed face, long white hair, and feverish alertness gave him the appearance of an old imaginative Canadian." His mind was always working and inventing and notes were jotted down haphazard on newspaper wrappers, margins of books, and old envelopes of which he had a whole cupboardful in his room.

"He was chiefly concerned with the properties and functions of the nervous system. He traced the origin of the sympathetic nerve fibers into the spinal cord and was the first

to show that epilepsy could be produced experimentally in guinea-pigs. With Claude Bernard he shares the honor of demonstrating the existence of vasomotor nerves. From June, 1889, he was much interested in the secretion of certain glands; his conclusions, not generally accepted, will probably be found to contain the germs of further advances in physiology."

His writings, of which there is no full list, are chiefly in the "Journal de la Physiologie Normale de l'Homme et des Animaux;" "Bulletin de la Société de Biologie;" "Archives de Physiologie Normal et Pathologique;" "Archives of Scientific and Practical Medicine and Surgery;" "The Philadelphia Medical Examiner," 1853, and in London and New York medical journals. In 1858 he established at his own cost the "Journal de la Physiologie Normale de l'Homme et des Animaux" and in 1861 was elected fellow of the Royal Society, delivered the Croonian lecture on the "Relation between Muscular Irritability, Cadaveric Rigidity and Putrefaction." The "Archives of Scientific and Practical Medicine," in which he published his first article on Inhibition, was founded by him in 1874.

BROWN, William (17— -1792), of Alexandria, Va., army surgeon, was born in Scotland, probably Haddingtonshire, where his grandfather had left an entailed estate. William was the grandson of Dr. Gustavus Brown, Sr. (q.v.) of Rich Hill, near Port Tobacco, Maryland and the son of the Rev. Richard Brown. He took his M. D. in 1770 from the University of Edinburgh, where he had been a student, the subject of his thesis being "De Viribus Atmosphæræ." Settling in Alexandria upon his return, he soon attained a high professional rank, and being a man of culture and polished manners, became intimate with many of the leading men of the day, among them, Washington, Jefferson and Madison.

At the beginning of the Revolution he entered the service of his country as surgeon to Col. Woodford's regiment of Virginia troops, but on the twentieth of September, 1776, was elected assistant to Dr. Shippen (q.v.), chief physician of the Continental Army. Upon the recommendation of Dr. Hugh Mercer (q.v.), he was elected by Congress, February 7, 1778, to be physician-general of the middle department in place of Dr. Rush (q.v.), a position he resigned on July 21, 1780, returning to private practice. In resigning he forfeited his right to be paid in bounty lands, but so highly were his services esteemed, the General Assembly of Virginia made an exception in his case and decreed that he should receive the pay due him, and also that he should be entitled to the bounty of land allowed surgeons of regiments raised under the authority of the state (Hening's "Statutes," vol. vi).

Dr. Brown married Miss Catherine Scott of the District of Columbia, and had a large family. His son, Gustavus Alexander, became a physician and practiced in Alexandria for many years.

He died in January, 1792, and was buried at Preston, the Alexander estate, near Alexandria, Virginia.

His chief writing was a "Pharmacopœia for the Use of Army Hospitals," a copy of which is now in the Toner collection in the Library of Congress. ROBERT M. SLAUGHTER.

Browne, John Mills (1831-1894), surgeon-general of the Navy. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 158.

Bruce, Archibald (1777-1818), professor of mineralogy and materia medica in the College of Physicians and Surgeons, New York. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 158.

BRÜHL, Gustav (1826-1903), one of the most prominent physicians in Cincinnati, Ohio, was born on May 31, 1826, in Herdorf, a small village in Rhenish Prussia. His father was a proprietor of a mine in this mining district and lost his wife while Gustav was still a child, so he was sent first to a boarding school and afterwards to a college in Treves. For medical education he visited the universities of Halle, Munich and Berlin. After finishing his studies in Europe, he resolved to emigrate to the United States of America, with the avowed intention of settling in Missouri, where an uncle of his was living at the time. On his journey thither, in 1848, he visited an aunt in Cincinnati, who prevailed upon him to abandon his further trip, and induced him to stay in that city. Owing to an outbreak of an epidemic of cholera he soon obtained a large practice, especially among the German population, in the western portion of the city, where he was the first, and, for a time, the only German physician, but he was soon known over the entire city. Besides his

skill as a physician, his eminent literary qualifications, and particularly his oratory, enabled him to acquire a leading part in the intellectual life of the "Queen of the West," where he delivered lectures on the historical and political topics of the day, chiefly under the auspices of various German societies.

As a medical man he was interested in the organization of the first German Hospital of Cincinnati, which was founded by the Sisters of the Poor of St. Francis, a religious order from Aix-la-Chapelle, who established their first charitable institution in that city in 1858. With his financial and moral aid St. Mary's Hospital was erected, and in it he served as first physician for many years. During this time he again visited Europe and studied the newly formed specialties of laryngology and rhinology under Czermak at Prague, and Tuerck at Vienna, being the first to introduce these specialties in Cincinnati, but after a few years again abandoned them to devote himself more particularly to the practice of obstetrics and general medicine. He became one of the organizers of the Cincinnati Medical Society, an offshoot of the Academy of Medicine in the early '70's. He was a diligent student of archeology, anthropology, and ethnology, to which he devoted all of his leisure time when not professionally engaged. In these branches he became a prolific writer. Under the auspices of the German Pionier-Verein he founded a monthly periodical, "Der Deutsche Pionier," to which he contributed largely as editor, besides securing contributions from almost all the prominent German writers on the history of the German settlements in the United States. As a result of these studies he soon extended his researches to American antiquities in general, more particularly of the old Spanish possessions, making extensive trips through Central and South America for the purpose of visiting the places and searching the archives in these old settlements. These archeological and historical studies he brought forth in a work called "Die Culturvoelker von Alt-Amerika" (Primitive Peoples of America). Other travels in the Western Hemisphere were recorded later, in a work with the title: "Zwischen Alaska und dem Feuerland" (From Alaska to Terra del Fuego). He, moreover, published papers on archeological and ethnological subjects in various German and American magazines devoted to these departments of science.

Accordingly, as his reputation among the cultured classes was that of a scientist and historian, Dr. Brühl became widely known with the masses, not only as a public speaker, but as a poet. He is indeed ranked as one of the foremost German poets of America. His subjects were chiefly derived from the tales and myths of the Indians, as well as the achievements of the early German settlers. Besides numerous smaller poems he wrote "Charlotte," and "Die Heldin des Amazon." Other verses are collected in two volumes entitled, respectively, "Poesien des Urwalds" (Poems of the Primitive Forests) and "Abendglocken" (Evening Chimes), the latter containing the production of "The Evening Tide of Life." A posthumous epic poem, "Skanderberg," was published by his family after his death, which occurred suddenly on February 16, 1903, of paralysis of the heart. He was for many years a member of the American Association for the Advancement of Science. He was a member of the first board of trustees of the University of Cincinnati. He married Miss Magdalen Reis, of Cincinnati, January 31, 1849, and had four sons and one daughter.

A. G. DEURY.

BRUNS, John Dickson (1836-1883), born in Charleston, South Carolina, on February 24, 1836, took his M. D. from the South Carolina Medical College. During the Civil War he was surgeon to a general hospital of the Confederacy and in 1866, after spending some time in study abroad, was professor of physiology and pathology in the New Orleans School of Medicine. He wrote "Life, its Relations, Animal and Mental" (1857) and "Fever of the Lower Coast of the Mississippi River" (1880). As a poet and scholar he wrote many things showing considerable genius. He made a specialty of diseases of the chest and throat. He was editor and proprietor of the "Charleston Medical Journal and Review" from January, 1858, to January, 1861.

In 1858 he married Sarah, daughter of Dr. S. H. Dickson (q.v.) of Charleston. She died, leaving two children, Henry Dickson and Margaret Graham. In 1870 he married Mary, daughter of Levi Pierce, who survived him with two sons, John Pierce and Robert Martin. His death took place in New Orleans on May 20, 1883.

JANE GREY ROGERS.

BRYAN, James (1810-1881), pioneer surgeon and lecturer of Philadelphia, was born in Merthyr, Wales, August 23, 1810, son of John Bryan of Shropshire, England, and Mary Williams, of Merthyr. In the autumn of 1818 the family came to America, but his father died soon after their arrival and James was placed with a farmer, a Friend, in Delaware County, Pennsylvania. When sixteen he went to Philadelphia and apprenticed himself to a hatter, but wishing to take up medicine he gave his spare time to the classics, French and English, to fit himself for the profession. At twenty-one he had $200 and began to study with Joseph Parrish (q.v.), of Philadelphia, and in 1831 entered the Medical Department of the University of Pennsylvania, graduating in 1834 with a thesis on "Epidemics." While a student at the University he was resident at the Philadelphia Dispensary. He began practicing at 28 North Eighth Street, Philadelphia, and in 1835 gave a series of lectures on physiology at Franklin Institute. In 1838 he was appointed by the managers of the Preston Retreat to study lying-in hospitals abroad, and spent fourteen months in Europe for that purpose. The hospital which appealed most to him was the City of London Lying-In Hospital with a record of but one epidemic of child-bed fever in sixty-five years; he suggested this hospital as a guide for the Retreat.

In 1840 he was elected professor of surgery and medical jurisprudence in the medical College of Castleton, Vermont, a position he held for four years.

From 1848 to 1853 he lectured on surgery at Geneva Medical College; removed to Syracuse in 1872 and became part of Syracuse University; from 1846 to 1856 he was professor of surgery in the Philadelphia College of Medicine; he was a founder and first president (1849) of the Medico-Chirurgical College; from 1859 to 1860 he was professor of anatomy in the New York Medical College.

Bryan served as surgeon in the Civil War under McClellan in Virginia, Burnside in North Carolina, Rosecrans in Tennessee, and Grant at Vicksburg; his health failing, he was appointed to hospital duty at Washington and, later, at Pittsburgh, and was honorably discharged in 1865.

Bryan was an advocate of medical colleges for women and advised the admission of Elizabeth Blackwell (q.v.) as a student to Geneva Medical College. He wished to establish a veterinary college, and in consequence was called the "horse doctor." On March 19, 1852, an act was passed incorporating the Veterinary College of Philadelphia and among the trustees were besides Bryan, George Cadwalader, William Gibson, George Woodward, and Bishop Alonzo Potter. In 1850 Bryan had received a silver medal from the Pennsylvania State Agricultural Society for a lecture on veterinary science.

He wrote on the history and progress of medicine, on surgery, and "Anatomy, Physiology, and Diseases of the Human Ear" (1851).

In 1840 he married Elizabeth T. Woodruff, of Elizabeth, New Jersy. They had one child, Mary, who married Louis W. Noe, of that city. Joseph Roberts Bryan, M. D., University of Pennsylvania, 1889, was a nephew.

Bryan moved to Elizabeth and died there November 5, 1881.

BRYANT, Joseph Decatur (1845-1914). Joseph Decatur Bryant, widely known New York surgeon, teacher and consultant, born March 12, 1845, in East Troy, Walworth County, Wisconsin, was the son of Alonzo Ambrose and Harriet Atkins Bryant. His ancestors on both sides were English. On the maternal side Dr. Bryant was descended from the English family of Atkins, active in the wars of the Crusaders. His father, a native of Chenango County, N. Y., was one of twelve, none of whom died before seventy; he married in 1842, and Joseph Decatur was his only child. Joseph received his preliminary education in the common schools of his native town, and worked on the farm in summer; he also attended the high school and the Norwich Academy. Bryant began to study medicine with Dr. George W. Avery, entered Bellevue Hospital Medical College in 1866, and graduated in 1868. He was an interne at Bellevue Hospital, 1869-1871, and from that period until the consolidation of Bellevue Hospital Medical College with the New York University Medical College in 1897, held various teaching positions in that institution. From the union of the schools until his death he was professor of the principles and practice of surgery. As visiting or consulting surgeon he was attached to many hospitals, among them Bellevue and St. Vincent's, in New York City. In civil and military life, he held important appointments, notably those of medical health commissioner of New York City, 1887-93; surgeon with the rank of major, in the 71st Regiment National Guard, New York, 1873-82; surgeon-general,

ranking brigadier general, on the staffs of Governors Cleveland, Hill, and Flower; and his most recent appointment, lieutenant in the Medical Reserve Corps, U. S. A.

He was not a prolific writer; his most comprehensive effort was "Operative Surgery" in 2 volumes. He was an officer or fellow of a great many medical societies and associations; president of the New York Academy of Medicine, 1895; president of the New York State Medical Association, 1898; president of the Medical Society of the State of New York, 1905 and 1906; president of the American Medical Association, 1907. He received the degree of LL. D. from the New York University in 1907. In the Department of Health he inaugurated a crusade against pulmonary tuberculosis, and secured the systematic enforcement of the tenement house law against overcrowding; he was active in preventing the invasion of cholera. He was chairman of the committee of the American Medical Association on national incorporation, and worked strenuously to secure recognition by Congress. The subcommittee of the committee on judiciary, of the House of Represenatives of the fifty-eighth session, regarded the bill as unconstitutional, particularly the clause "to hold or convey real estate and transact business anywhere in the United States," so the Association still operates under a charter from the State of Illinois.

Dr. Bryant married Annette Amelia, daughter of Samuel and Jane Crum, at Bath, N. Y., in 1874; they had one child, Florence Annette, who married Frederick Augustus de Peyster.

It was not known until twenty-five years later, after his own death, that he had performed a serious operation upon Grover Cleveland, when President of the United States. This operation was for sarcoma of the left upper jaw. Almost the entire upper jaw was removed, except the floor of the orbit. The operation took place July 1, 1893, on Commodore E. C. Benedict's yacht, the "Oneida." Dr. Bryant had in consultation, Drs. E. G. Janeway, W. W. Keen, R. M. Reilly (later Surgeon-General) and John F. Erdmann. Dr. Bryant was the family physician and warm personal friend of Grover Cleveland as governor and as president.

A story is told of him while serving in the New York Department of Health. His stringent measures to keep out cholera, antagonized a group of merchants. "You will stop commerce," they cried. Bryant replied calmly, "I don't give a continental, but I'll stop cholera."

Bryant was a keen observer, an excellent diagnostician, and a conservative operator; he was particularly kind to the poor.

Though long ill with diabetes, he continued his professional and public work until death, April 7, 1914.

GEORGE DAVID STEWART.

BUCHANAN, George (1763-1808), a founder of the Medical and Chirurgical Faculty of Maryland, was of Scotch descent, the son of Andrew and Susan Lawson Buchanan, and grandson of George Buchanan, the emigrant who laid out Baltimore town in 1730. He was born at "The Palace," Baltimore County, Maryland, September 19, 1763, and studied under Dr. Charles Frederick Wisenthal (q.v.), a famous Prussian surgeon of Baltimore, and under Dr. William Shippen (q.v.) of Philadelphia. With the latter he served in the Revolution. He received an M. B. at the University of Pennsylvania in 1785 and then spent about three years in Europe, chiefly in medical study at Edinburgh University. While there he held the office of president of the "Royal Physical Society." Returning to America, he received from Pennsylvania University his M. D. in 1789, his thesis being "Dissertatio Physiologica de causis Respirationis ejusdemque Affectibus." He began practice in Baltimore the same year. With Dr. Andrew Wisenthal (q.v.) he also attempted to found a medical school, and lectured during the winter of 1789-1790 to a class of nine students on "diseases of women and children and the Brunonian system." In connection with this enterprise he published a treatise on "Typhus Fever," the proceeds of which he desired to go towards the founding of a lying-in hospital. Unfortunately dissensions, the nature of which are not now evident, arose and, notwithstanding the efforts of Dr. Buchanan, the society was dissolved and the school abandoned. In 1790 he issued a letter to the inhabitants of Baltimore in which he urged the registration of deaths, the creation of a public park, and the establishment of a humane society. In a fourth-of-July oration the following year he discoursed on "The Moral and Political Evils of Slavery." He retired from practice on account of bad health in 1800 and in 1806 removed to Philadelphia. There he became resident physician to the Lazarettos, in which institution he died of yellow fever on July 9, 1808, in his forty-fifth year. In 1789 he had

married Laetitia, daughter of Thomas McKean of Pennsylvania, a signer of the "Declaration of Independence."

EUGENE F. CORDELL.

BUCHANAN, Joseph Rhodes (1814-1899), was called the "last survivor of the 'Fathers of Eclecticism';" other terms applied to him were "medical philosopher, investigator, speculative reasoner, scientist, and general scholar" (Felter)—and the same biographer adds that he "obtained no eminence as a practitioner of medicine." He was born in Frankfort, Kentucky, December 11, 1814, son of Professor Buchanan, teacher of medicine and law in Transylvania University. The younger Buchanan at six years of age was studying astronomy, geometry, history and French, at eleven was interested in sociology, and at twelve began the study of law. His father died and he became a printer; afterwards a teacher, but health failing he took up medicine, graduating at the Louisville University in 1842. He was interested in cerebral physiology, phrenology and anthropology and lectured in a peripatetic fashion.

He settled in Cincinnati as professor of physiology in the Eclectic Medical Institute (1846-1856), and became a dominating force in the school. His biographer says "he actually became the manager of the college, and his domineering course and peculiar theories gave rise to dissensions, which were unfortunate for the school." He was elected president of the National Eclectic Medical Association in 1848, but later "repudiated" the Association. He was dean of the Institute from 1850 to 1855, but in 1856 was removed from the faculty; he was made dean of the new institution, the Eclectic College of Medicine. After remaining there a short time he went to Louisville, and in 1863 was the Peace Party candidate for the United States Congress.

When the Civil War ended he went to Syracuse, New York, where he manufactured salt; in 1867 he was elected professor of physiology in the Eclectic Medical College of New York City, to resign in 1881. Settling in Boston, he founded the American University where he taught and opened the College of Therapeutics to promulgate the "doctrines of physiology, sarcognomy, and the healing art;" he founded the Buchanan Anthropological Society. Moving to California he settled finally in San José. Buchanan was editor of "Buchanan's Journal of Man;" the "Eclectic Medical Journal" (with R. S. Newton); and the "Western Medical Reformer" (with T. V. Morrow). He wrote "Outlines of Lectures on the Neurological System of Anthropology" (384 pp., Cincinnati, 1854); "Therapeutic Sarcognomy" (269 pp., Boston, 1884), besides other works. His last book was entitled "Primitive Christianity."

In 1841 he married Anne Rowan, of Louisville; many years after her death he married Mrs. Caroline H. Decker, a clairvoyant. He died at San José, December 26, 1899.

BUCK, Albert Henry (1842-1922), New York otologist and medical historian, was the son of Dr. Gurdon Buck (q.v.) of that city. After being educated in Switzerland, near his mother's native place (Geneva) where he acquired a facility in the use of languages that distinguished him in later life, he returned to America and matriculated at Yale University. There he received an A. B. in 1864 and going on to the College of Physicians and Surgeons, Columbia, took an M. D. in 1867. He served an internship at the New York Hospital and went abroad to study the physiology of the ear in Germany and Austria. When he returned in the course of several years he was made aural surgeon to the New York Eye and Ear Infirmary in 1872. With this institution he was associated during his life. From 1888 to 1904 he was clinical professor of diseases of the ear in the College of Physicians and Surgeons, his alma mater. Dr. Buck wrote frequently for otological journals; he edited and translated the American edition of Ziemssen's "Cyclopedia of the Practice of Medicine," published between 1874 and 1880. With Dr. J. D. Bryant (q.v.) he edited the "American Practice of Surgery," the eight volumes of which appeared between 1906 and 1911. To his credit are to be placed a translation of Stricker's "Manual of Histology" 1872; a "Treatise on Hygiene and Public Health," two volumes, 1879 and his most important work: "Diagnosis and Treatment of Ear Diseases," eight editions of which were published from 1880 to 1898. It was a popular text-book in the schools. Dr. Buck had written "An Essay on the Mechanism of the Ossicles of the Ear" in 1870 and three years later had edited a translation of Helmholtz's work with the same title.

After he had resigned his professorship in 1904 he began the study of the history of medicine the first fruits of which was a book of some 500 pages entitled: "The Growth of Medicine from The Earliest Times to

About 1800," published by the Yale University Press in 1917, under the auspices of the Williams Memorial Publication Fund. The book, admittedly a compilation, showed the author's gift for writing and proved to be an interesting and readable contribution to the history of medicine. "The Dawn of Modern Medicine" 188 pages, 1920, a sequel to the Growth of Medicine, embodied a study of the full collection of early nineteenth century medical works in the library of Transylvania College, at Lexington, Kentucky. It is a scholarly work that is well-written, and has been widely read.

Dr. Buck lived in later life at Cornwall, Orange County, N. Y. and there he died of heart disease on November 16, 1922, after a life well-spent in instructing his fellow laborers in the field of medicine, both in the science of otology and in the story of the past of medicine.

WALTER L. BURRAGE.

BUCK, Gurdon (1807-1877), New York surgeon, was born in Fulton Street, New York, on the fourth of May, 1807, a son of Gurdon Buck, a New York merchant, and Susannah Manwaring Buck of Connecticut, both grandchildren of Gov. Gurdon Saltonstall of Connecticut. Dr. Buck went to Nelson Classical School and finally determined to study medicine. With this in view he studied under Dr. Thomas Cock and in 1830 received his M. D. from the College of Physicians and Surgeons in the city of New York. After passing the regular term on the medical side of the New York Hospital he went to Europe and continued his studies in the hospitals of Paris, Berlin, and Vienna for a period of about two years and a half. In 1836 he made a second visit to Europe, and in Geneva, Switzerland, married Henrietta E. Wolffe, of that city. In 1837 he was appointed visiting surgeon to the New York Hospital and held that position up to the day he died. He was also appointed visiting surgeon to St. Luke's Hospital and the Presbyterian Hospital at the time of the organization of those institutions, and was visiting surgeon to the New York Eye and Ear Infirmary, from 1852 to 1862. He was a fellow of the Academy of Medicine from its organization, and served as its vice-president for one term; a member of the New York Pathological Society, serving a year as president, and he was a member of the state and county medical societies.

As a surgeon, Dr. Buck was remarkable for boldness in operating, and thoroughness of details in after-treatment. His patient study of his cases was one of his peculiar traits. He was particularly attentive to cases of fractures and not infrequently devoted the greater part of the day to these cases in the wards of the New York Hospital. As a result of such painstaking care he was enabled to revolutionize the prevailing system of treatment. The improvements which he made in the then existing apparatus are matters of surgical history. His method of treating fractures of the thigh by the weight and pulley was at once recognized by surgeons throughout the civilized world as the establishment of an original principle of great value and to this day it is known as "Buck's Extension." His investigations with regard to the pelvic fasciae are to be found in the first volume of the "Transactions of the American Medical Association." His joint surgery was especially noteworthy in a preantiseptic era; he excised the elbow joint ("New York Journal of Medicine and Surgery," 1841), and the knee joint ("American Journal of the Medical Sciences," 1845). He was successful in treating edema of the glottis, wrote much about abscesses in the right iliac fossa but never learned their cause, and was deeply interested in rhinoplastic, stomatoplastic and other reparative operations, publishing a work on these subjects of some 237 pages in 1876.

For some years previous to 1877 his health had slowly been failing, and grave symptoms appeared, referred to kidney trouble. Finally the symptoms of uremic poisoning became more marked, until he sank into a coma, in which state he quietly passed away on March 6, 1877.

As a man Dr. Buck was noted for his sterling integrity of character, his high sense of professional honor, his consistent christianity, his charity to the poor, and his quiet devotion to his family. He left a widow and five children, three sons and two daughters. Two of the sons became physicians.

BUCK, Jirah Dewey (1838-1916), a leading Homeopathic teacher and writer, born in Fredonia, New York, Nov. 20, 1838, was the son of Reuben and Fanny Buck; his early education was obtained at Belvidere Academy, Belvidere, Illinois, and at the Janesville Academy, Wisconsin. At the early death of his father he left school and assumed the responsibility of breadwinner for the family. His work at bookkeeping stopped at the age

of seventeen, through failing health, and fear of lung trouble; he then took to the Michigan woods and swung an axe in summer, and taught school in winter.

At twenty-three he enlisted, at the call for civil war volunteers, in Merrill's Horse, Company H., a regiment recruited at Battle Creek, Michigan. His health failed again, and after three months in the hospital at Camp Benton, Mo., he was honorably discharged and sent home. On regaining his health, he taught school in winter, and worked as a master carpenter in summer, and so aided in supporting his mother, and began to study medicine with Dr. Smith Rogers at Battle Creek, Mich.; he later attended the Hahnemann Medical College at Chicago, and graduated in 1864 from the Cleveland Medical College.

Buck was made instructor of physiology and histology in his alma mater at Cleveland in 1866. While teaching medicine the demands of private practice grew until he became a widely known consultant. He removed to Cincinnati in August, 1870. In 1872 he called a meeting of physicians at Dr. Pulte's (q.v.) office which resulted in the founding of Pulte Medical College, in which Dr. Buck was registrar and professor of physiology from its organization until 1880. He was then made dean and professor of the theory and practice of medicine, and held this position almost up to the time when the Pulte Medical College was absorbed by the Ohio State University. He took up the study of psychology as a basis for his work in medicine in nervous and mental diseases, and was then made professor in this branch. He wrote on ethics and economics.

Dr. Buck was a member of the Cincinnati Literary Club for 44 years; he was a president of the Theosophical Society in America.

Some of his writings were: "The Study of Man," "Mystic Masonry," "The Nature and Aim of Thesophy," "Constructive Psychology," "The Genius of Freemasonry," "Browning's Paracelsus," and "The Riddle of Riddles."

He married Melissa M. Clough at his old home in Fredonia, N. Y., in 1865.

He died Dec. 13, 1916. A. G. Drury.

BUCKE, Richard Maurice (1837-1902), Canadian alienist, and literateur, was born March 18, 1837, at Methwald, Suffolk, England. In 1838 his family emigrated to Canada and settled on a farm in London Township, County of Middlesex. Here he remained until he was 16 years of age, then moving to the United States to see the world. He had a varied experience with cattle trains and explored in the great west, being nearly captured by the Indians. While in the mountains of California he was badly frozen and finally returned to Canada by way of the Isthmus of Panama in 1860 and began the study of medicine, graduating with high honors in McGill University, Montreal, in the spring of 1864, and winning a prize. After his graduation he spent 18 or 20 months in the London and Paris hospitals, and on his return went to California for eight months as a witness in a mine suit.

He settled in Sarnia, Ont., where he practiced for ten years, when he was appointed medical superintendent of the Hamilton Asylum for the Insane, and after a year's service was transferred to the London Asylum, where he remained until his death, just 25 years later.

On his return from California he married Miss M. Gurd, who survived him.

Dr. Bucke was president of the American Medico-Psychological Association in 1898, and was regarded as one of the foremost men in medical circles in Canada. As an alienist he was eminent, and his name is associated with the names of such reformers as Joseph Workman (q.v.). He accepted non-restraint as something better than a fad, and in his institution the non-restraint system was first adopted (1882), this lead being promptly followed by Kingston and Toronto. It marked the beginning of an era of better things for the insane of Ontario, and Dr. Bucke's energy was a stimulus to many of the juniors in the service. His views on the abuses of alchohol in the treatment of insanity, and his investigations in gynecological surgery among the insane are well known. He believed that a large proportion of insane women suffered from uterine and ovarian diseases which would be benefited by operation. The improved physical health resulting implied a better state of mentality. That this was good common sense all agree, the point at issue being the ability, or want of ability, on the part of the majority of specialists to decide which cases should be operated on.

Dr. Bucke was an indefatigable student of literature and philosophy; his library contained a large collection of works on Indian philosophy; he accepted and defended with enthusiasm the Baconian authorship of the works of Shakespeare; he wrote "Man's

Moral Nature" and "Cosmic Consciousness." When the last book was reprinted in 1924 a critic in the "Bookman Magazine" called it the greatest book ever written by a Canadian.

In person he was of striking appearance, of splendid physique and carrying the stamp of intellectual force in his face. He dressed much after the style of Walt Whitman, and would be marked in any assemblage as a man of originality. In daily life he was simple, direct and honest and was a great lover of nature. The happiest days of each year were those spent at his summer retreat at Gloucester Pool in Muskoka.

On Feb. 19, 1902, he died suddenly when, apparently he had been in the best of health.

BUCKINGHAM, Charles Edward (1821-1877), Boston physician, was born in Cambridge, Massachusetts, June 27, 1821, the son of an influential newspaper editor of the day. He was graduated from Harvard College in the class of 1840 and from the Harvard Medical School in 1844. In college he developed a taste for chemistry and was employed as a student assistant to Prof. John White Webster (q.v.). Early after graduation he became physician to the Boston Dispensary and to the Home of Industry, which gave him clinical advantages improved by keeping careful notes of cases.

In 1847, together with a number of physicians of about his own age, several of whom became distinguished in later life, he formed the Boylston Medical School. This school, in which he had charge of instruction in obstetrics and diseases of women and children, was an ambitious one, and established a partly graded course as early as 1850. He was unable, however, to get its charter extended to the granting of degrees, and owing to this and to increased difficulty in getting anatomical material, it was abandoned in 1855. For the next ten years he held no appointment of any kind except that he inspected hospitals on the Ohio river for the sanitary commission for a month during the Civil War.

On the establishment of the Boston City Hospital (1864) he was made visiting surgeon and there gave a course of clinical lectures. In the same year, after consultation with his colleagues of the hospital, he accepted the appointment of adjunct professor of theory and practice of medicine in Harvard University, later becoming professor of obstetrics, an appointment he held at the time of his death in 1877. He was also consulting physician to the Boston Lying-in Hospital. He was an original member of the Boston Society for Medical Observation, then an active clinical society, and was also a member of the Obstetrical Society of Boston, and of the American Gynecological Society. He was a corresponding member of the Philadelphia Obstetrical Society and an honorary fellow of the Obstetrical Society of London.

Dr. Buckingham died in Boston February 19, 1877. Dr. D. W. Cheever says of him as a surgeon at the Boston City Hospital: "He always had new ideas; usually practical, sometimes eccentric, frequently brilliant. He was a tireless worker, he never gave up a case; was full of expedients; and his advice was usually wise and judicial." His son, Dr. Edward Marshall Buckingham, was a well known physician of Boston who served as treasurer of the Massachusetts Medical Society for twenty years, dying in that office in 1916.

WALTER L. BURRAGE.

BUCKLER, Thomas Hepburn (1812-1901), Baltimore teacher and writer, was born at Evergreen, Maryland, on January 4, 1812, and was educated at St. Mary's College, Baltimore, taking his M. D. in 1835 with a thesis on "Animal Heat." He practiced afterwards in that city as physician to the City Almshouse, and from 1866 to 1890 he became a Paris physician under a license from the French government; then he returned to Baltimore.

He was best known as a teacher and writer. His views were independent and original—some said original even to eccentricity. Quinan, in his "Medical Annals of Baltimore" gives a list of thirty-two of his writings, a great many of them on sanitary and social subjects, among other things, the filling up the "Basin" or inner harbor of Baltimore, with "Federal Hill," and the introduction of the waters of the Gunpowder River for the supply of Baltimore. The latter of these recommendations was carried out many years later. He introduced phosphate of ammonia for the treatment of gout and rheumatism, and as a solvent of uric acid calculi, and the lithic acid diathesis generally; also the hydrated succinate of the peroxide of iron for the prevention of gallstones. He laid great stress in the pathology of uterine affections on the strangulation of the vessels in the cervix and the resulting malnutrition of the organ. More elaborate works are his history of the "Cholera Epidemic of 1849" and a

treatise on "Fibro-bronchitis and Rheumatic Pneumonia," 1853.

Dr. Buckler was a man of striking personal appearance and was much sought after on account of his brilliant conversational powers and wit. He never had a large practice; in fact never sought one, and lacked the steadiness and plodding perseverance of his brother. He was twice married and left a son, William H. There are two portraits of Dr. Buckler in the building of the Medical and Chirurgical Faculty, Baltimore.

EUGENE F. CORDELL.

BUDD, Abram Van Wyck (1830-1891), surgeon of North Carolina, was born in Pemberton, New Jersey, October 17, 1830, and graduated at Mercersburg College in 1847, and from the medical school of the University of Pennsylvania in 1853. While there he was a private pupil of George B. Wood (q.v.) and afterwards spent two years in the Philadelphia ("Blockley") Hospital. In 1855 a coal company at Egypt, North Carolina, offered young Budd a position as surgeon to their works and six years later, when Civil War came on, he was made surgeon in the Confederate army and served throughout the war.

By natural instinct Dr. Budd was gifted as a surgeon, and for many years did all the surgery in and about Egypt. It was crude, but always thorough and for the most part successful. He removed many ovarian tumors and opened all his intestinal obstruction cases. He was unusually adept in lithotomy and his "high operation" was the subject of much comment in the '80's, but he never could be prevailed upon to report any of his cases. A colored woman, now aged seventy-five, told the writer that Dr. Budd opened the right side of her abdomen in 1880 and evacuated a large quantity of foul-smelling pus. He did this without any anesthetic, first cutting through the skin, then introducing a needle and finally inserting his hand. His management of hysterical patients was the talk of the state during his active life and even now is referred to.

In 1881 Dr. Budd removed to Lockport, a small settlement in the same county. Both here and at Egypt he had rooms in his house at the disposal of patients. They were frequently brought on stretchers from distant neighborhoods and were sometimes on the road for two or three days. He was exceedingly kind to the poor, on more than one occasion having taken the coat off his back and given it away.

Dr. Budd was a large man, six feet tall, eccentric in dress and, though very clean in his attire, practically never wore a collar. He was known as an original and independent character.

He married Anna C. Bryan in 1875 and had four children. He died in 1891.

Six months before his death he went to Philadelphia to consult Dr. John H. Packard (q.v.) (his classmate) and Dr. William Pepper (q.v.). His friends in that city told him of the property formerly owned there by the Budd family, that just a few inches of earth sold off the top would have meant millions, and that, if he had remained there, it might all have been his. To this he replied: "Why, I would rather have fresh air, elbow room and good water than all your millions. I can't stand the Schuylkill."

HUBERT A. ROYSTER.

BULKLEY, Gershom (1635?-1713), was a clerical physician of note, who had a large consulting practice in all parts of Connecticut. He was born in Concord, Massachusetts, about the year 1635, his father being the celebrated divine, Rev. Peter Bulkeley, who was driven from England on account of his non-conformity and settled in Concord, Massachusetts.

Reared in the best of family surroundings, Gershom graduated from Harvard College in 1655 and shortly after studied for the ministry. It is unknown from whom he received his medical instruction. His first charge was in New London, but after four years there he gave it up because of his opposition to the half-way covenant, and subsequently, on June 1, 1666, received a call to the church in Wethersfield, where he labored for eleven years, resigning early in 1677, probably by reason of weakness of his voice. The rest of his life was devoted entirely to medicine, in the town of Glastonbury. During King Phillip's War he rendered important services as surgeon under Major Treat and was wounded in the thigh in a surprise attack near Wachusett Mountain. For this service he was well compensated, and also received the "hearty thanks" from the Colony's Council of War for his "good services to the country during this present war." His account books which remain bear evidence of his extensive practice, although he does not appear to have been licensed until 1686. A mass of manuscripts also survives giving many of the remedies he employed. These are now in

the possession of the Hartford Medical Society. He was well versed in chemistry, alchemy and was "master of several languages." Some of his political pamphlets have been handed down to us. He is said to have had few superiors in his time. He married Sarah, daughter of Pres. Chauncy (q.v.) of Harvard, on October 26, 1659, and had by her six children, one of whom, John, was a clerical physician, of high rank in his day. Another son, Charles, also practiced medicine. The father died in Wethersfield in 1713 and is buried in the cemetery there, back of the Congregational church.

WALTER R. STEINER.

BULKLEY, Henry Daggett (1804-1872), pioneer dermatologist of New York, the son of John Bulkley, ship captain and trader, was born at New Haven, Connecticut, April 4, 1804, and graduated from Yale in 1821. For a number of years he engaged in business in New York but tiring of this he studied medicine under Dr. Jonathan Knight (q.v.) and received his M. D. from Yale in 1830. The year 1831 was spent in Europe, most of the time in Paris, where he attended the lectures of Biett and Albert at the St. Louis Hospital. In 1833 he settled in New York City where he was immediately appointed surgeon to the department of skin diseases in the New York Dispensary. In 1837 he delivered a course of lectures on this specialty at the Broome Street infirmary for Skin Diseases, an institution founded and for many years sustained by him. These lectures were undoubtedly the first on skin diseases given in America. In 1842 he delivered a special course during the spring term of the College of Physicians and Surgeons. He was for three years editor of the "New York Medical Times" and edited the American edition of Burgess' "Translation of Cezenave," and Schedel's "Diseases of the Skin." In 1848 he was appointed one of the attending physicians to the New York Hospital, holding the position until the close of his life. He was, perhaps, the earliest writer on infantile syphilis in this country. His article of sixty-six pages on "Syphilis in Infants" appeared in 1840 and was considered a work of great importance at that time.

In the year 1867 he was president of the Medical Society of the County of New York; 1869, president of the New York Academy of Medicine; 1870, president of the New York Dermatological Society.

He died of pneumonia in New York, January 4, 1872. He was twice married, his second wife being Miss Julia Barnes of Oneida, New York. One of his sons, Lucius Duncan Bulkley, (1845 —) became a dermatologist in New York City.

J. McF. WINFIELD.

BULL, Charles Stedman (1844-1911), born in New York April 21, 1844, was a distinguished ophthalmologist in the city of his birth, a man widely known, who exercised a marked influence in the development of his specialty. He was the American editor of J. Solberg Wells's "Diseases of the Eye," 1880-1883, and an extensive contributor to the literature of ophthalmology from 1870-1910, covering in his literary activity the unusual period of forty years. He was graduated A. B. from Columbia in 1865, and A. M. in 1867, and received his medical degree from the College of Physicians and Surgeons, Columbia, in 1868. After a residency of two years in Bellevue Hospital he went to Germany and to France for post-graduate studies, returning to New York to a general practice in 1871. In that year Bull showed his special bent when he joined the American Ophthalmological Society. He began special work in the Manhattan Eye and Ear Hospital, and in the New York Eye and Ear Infirmary, and was visiting ophthalmic surgeon to the Charity Hospital on Blackwell's Island from 1875 to 1880; in 1881 he dropped all general practice for ophthalmology. In the New York Eye and Ear Infirmary he served successively as assistant surgeon, surgeon, director, and executive surgeon of the board of directors. He also held positions on the staffs of St. Luke's, the Presbyterian and St. Mary's Free hospitals. He was president of the American Ophthalmological Society from 1903 to 1907, and was corresponding secretary of the New York Academy of Medicine from 1903 to 1910. He lectured at the Bellevue Hospital Medical College and in the Cornell University Medical College. Some 120 papers relating to the eye are listed by his biographer, Dr. Wm. H. Carmalt, in the Transactions of the American Ophthalmological Society, Vol. xii, Part iii.

Bull's contributions to ophthalmic literature, while not original in the sense of recording important discoveries, were valuable from the standpoint of imparting his large clinical experience to the profession of the country. His most important and numerous papers deal with the various orbital growths and their treatment; his large experience in this

field is summarized in the well-known chapter on diseases of the orbit in "Diseases of the Eye" by Norris and Oliver, 1898. He also wrote the article on diseases of the eye for Park's "System of Surgery by American Authors." In Carmalt's list, 17 papers deal with tumors of the orbit. Bull's interest in his specialty seems to have been a catholic one, with the exception of refraction and physiological optics, which curiously enough does not seem to have interested him greatly during the period of rapid evolution of this most brilliant branch of the completest of all our specialties. He died in New York City, April 17, 1911.

HOWARD A. KELLY.

BULL, William (1710-1791), physician, judge and administrator, was born in 1710 in South Carolina. He was the son of William Bull, lieutenant-governor of South Carolina (1738-1743). After distinguishing himself in his studies at home, he went to Europe and became a pupil of Boerhaave, the famous Leyden physician, and was the first American who graduated there in medicine (1735). Van Swieten spoke of him as "the learned Dr. Bull." After his return to this country he was very active in the civil life of his state. He was assistant judge 1740-1749; brigadier-general of provincial troops 1751-1759; member of the Colonial council of South Carolina 1751; commissioner to treat with the Six Nations in that same year, having considerable knowledge of Indian affairs; speaker of the house of representatives 1763; and lieutenant-governor of South Carolina from 1764-1780, assuming government of the province from 1760-1761, 1764-1766, 1768-1771, and 1773-1775 He was one of the ablest and most popular administrators the province ever had and took a leading part in the stirring events that preceded the revolution. He was an ardent royalist, but was unmolested by the revolutionary authorities; he left for England in 1782 with the British troops and spent the remainder of his life there in voluntary exile.

He was married in 1746 to Hannah Beal; they had no children.

Dr. Bull held a difficult position in troublesome days, but adhered to the line of duty so strictly that he was loved and honored by all classes.

He died in London July 4, 1791.

BULL, William Tillinghast (1849-1909), one of New York's leading surgeons, son of Henry B. and Henrietta Melville Bull, was born in Newport, Rhode Island, May 18, 1849. His first American ancestor was Henry Bull, born in Wales in 1609 and one of the nine founders of Aquidneck (Newport), Rhode Island, and twice made governor of the colony. William was graduated from Harvard with an A. B. in 1869, received his M. D. from the College of Physicians and Surgeons in the City of New York, in 1872, and after an interneship in Bellevue Hospital and two years' study in Europe, settled in practice in New York City. He was in charge of the New York Dispensary from 1875 to 1877; of the Chambers Street Hospital in 1877 and 1878; visiting surgeon to the New York Hospital, 1883; visiting surgeon to St. Luke's Hospital from 1880 to 1883; consulting surgeon to the Hospital for the Ruptured and Crippled, to the Roosevelt, to the Woman's, and to the State Emigrants' hospitals. He was one of the first Americans to devote himself from the beginning of practice entirely to surgery. He began his teaching work in his alma mater in 1879 as demonstrator of anatomy, and was made professor of practice of surgery and clinical surgery in 1889. He was a fellow of the American Surgical Association and of the New York Academy of Medicine, and a member of many other scientific societies.

It was while Dr. Bull was at the Chambers Street Hospital, New York, that a woman with two gunshot wounds of the abdomen was brought to the hospital and died soon afterward. The autopsy convinced the young surgeon that by making an incision the intestines might have been taken out, sutured and returned to the abdomen with a life saved. Shortly afterward a man with a similar wound was made the subject of a successful operation, and Dr. Bull's method of procedure was very generally copied by surgeons, especially in emergency cases. He was highly esteemed by the medical profession of the United States, not only because of his skill as a surgeon, but for his sound judgment and the zealous application which he gave to his cases.

Dr. Bull was a frequent contributor to the medical literature, writing much on hernia, of which he made a special study. "Notes on Cases of Hernia which have relapsed after Operation," 1891; "On Three Cases of Pylorectomy with Gastroenterostomy," 1891. In collaboration with Dr. William B. Coley he wrote a treatise that was afterwards reprinted, "Results of Fifteen Hundred Operations for the Radical Cure of Hernia in Children,

Performed at the Hospital for the Ruptured and Crippled Between 1891 and 1904." (Annals of Surgery, Phila. 1893. xvii.) With Coley he wrote the chapters on hernia in "Dennis' System of Surgery," 1896, and in "The International Text Book of Surgery," 1900. In 1894 he published a valuable contribution on "Cases of Cancer of the Breast Treated by Radical Operation, with a Report of 118 cases," (Medical Record, N. Y., Aug. 18, 1894), and in 1904 he edited with W. Martin the translation of Bergmann, Bruns and Mickulicz's "System of Practical Surgery."

Dr. Bull married Marie, widow of James G. Blaine, Jr., daughter of Col. Richard Nevins. She had suffered from acute rheumatism, and, in spite of a crippled life predicted by her doctors, became well under Dr. Bull's care.

Early in 1908 he developed cancer of the neck but made a brave fight for life, using all the methods of treatment known to science, without avail. On January 29, 1909, he started for Georgia in the hope of being benefited by the milder climate, but improvement was only temporary and he gradually failed and died at Wymberly, Isle of Hope, near Savannah, Georgia, February 22, 1909.

As a memorial to Dr. Bull a fund was raised for conducting research in the surgical department of Columbia and to place a bronze bust in the Academy of Medicine.

BULLER, Francis (1844-1905), ophthalmologist, was one of the most eminent specialists Canada has produced in virtue of his extensive writings, his large practice, his strong personality, and the high standards he set and maintained for ophthalmic practice in Canada.

He was the son of Charles G. Buller and Frances Elizabeth Boucher. Born at Campbellford, Ontario, on May 4, 1844, he was educated at Peterborough High School and Victoria University, Medical Department, Toronto, where he graduated in medicine, 1868. Subsequently, in Europe, he specially studied diseases of the eye, ear and throat, under Helmholtz and von Graefe. During the Franco-Prussian War he served as surgeon in the German military hospitals and afterwards occupied a position on the staff of the Graefe-Ewers Hospital in Berlin. In 1872 he went to London, and was for four years connected with the Royal London Ophthalmic Hospital —for the last two years as chief house surgeon. He was the first to introduce in London the procedure of ophthalmoscopic examination by the "direct method." He became a member of the Royal College of Surgeons, England, and in 1876 returned to Canada where he lived till his death from pernicious anemia, October 11, 1905. He married Lillie Langlois, daughter of Peter Langlois of Quebec, and they had two children.

Dr. Buller was the first to give ophthalmology an independent status in Canada when he was appointed to the Montreal General Hospital in 1877. After seventeen years' service there he accepted the same post in the Royal Victoria Hospital and upon the foundation of the chair of ophthalmology and otology in McGill University, in 1883, he was appointed and for twenty-two years his learning and experience were freely given. He was also president of the Montreal Medico-Chirurgical Society and a member of the Ophthalmological Societies of Great Britain and of America.

The writings of Dr. Buller number some seventy-six and extend over a period of thirty years. They deal rather with the art than the theory of surgery. Most are a record of his unceasing efforts to overcome obstacles in ophthalmic practice. His first article describes the shield for the protection of the sound eye in gonorrheal ophthalmia, which has always been associated with his name. His modification of Critchett's idea of slitting the outer canthus in gonorrheal ophthalmia to apply strong solutions of nitrate of silver to the everted conjunctiva is another proof of his quickness to grasp newer developments in bacteriology. His alteration of Mule's operation was of the greatest value, as he saw that its failure was due to suppuration brought about by the pyogenic organisms of the conjunctival sac entering the interior of the sclerotic along the sutures passed through the sclerotic and the conjunctiva. By suturing first the scleral wound in the vertical direction, Dr. Buller made it impossible for organisms to produce suppuration within the sclerotic. His idea of tying the canaliculi to prevent the regurgitation of septic material from the lacrimal sac in chronic dacryocystitis was new, and his trial frame was another expression of his ingenuity in meeting certain well-known deficiencies. His writings, especially "Anomalies in the Functions of the Extrinsic Ocular Muscles," "Blindness Caused by Wood Alcohol," which he was the first to notice, and "Skin-grafting in Ophthalmic Surgery," mark him as one of the first exponents on this continent of the newer school of ophthalmology which origin-

ated with Helmholtz, Donders, and von Graefe.

In his operations and after-treatments he had infinite patience, and would frequently remain all night in the hospital observing the results of his work. For many years he was the only specialist in Canada of recognized standing, and his practice was enormous; but he took a whimsical pleasure in giving to his hospital patients his first consideration. He was a man of plain speech and frankness to rich and poor alike and so conscious was he of his good intentions that he would hear with amazement that anyone could possibly have been offended. With his patients he was affectionately gentle, though when occasion demanded he would not refrain from offering an opinion upon their conduct for the amendment of their ways. His tall shapely body was crowned by a massive well-formed head. The forehead was broad, the skin clear, the features sharply defined, and the eyes keen and penetrating. Dr. Buller had a singular instinct for diagnosis, which was quite apart from the usual process of reasoning; and in treatment he frequently obtained good results by methods which were inexplicable even to himself.

ANDREW MACPHAIL.

BULLITT, Henry Massie (1817-1880), founder of Louisville Medical College and son of Cuthbert and Harriet Willit Bullitt, was born in Shelby County, Kentucky, on February 28, 1817. His father was a direct descendant of Benjamin Bullitt, the founder of the family in this country, who, refusing to surrender his religious views after the revocation of the edict of Nantes, came with his wife in 1685 from the Province of Languedoc, France, and settled in Maryland.

At the age of seventeen Henry studied medicine with Dr. Coleman Rogers, Sr. (q.v.), and pursued his studies with rare devotion, entering the University of Pennsylvania, from which institution he graduated in 1838 with high honors. From Philadelphia he returned to Louisville and entered upon active practice. Bullitt passed the year 1845 in Europe, where he availed himself of every opportunity to advance in medical knowledge and returned home liberally equipped with the fruits of his sojourn abroad. In 1846 he was elected a professor in the St. Louis Medical College, and lectured there during the sessions 1846-7 and 1847-8. In 1849 he was called to the chair of materia medica in Transylvania University at Lexington, Kentucky, at that time the oldest and most renowned school in the Ohio valley.

In 1850 Dr. Bullitt organized the Kentucky School of Medicine, which entered upon its career in the winter of 1850-51, and in 1866 was elected to the chair of principles and practice of medicine in the University of Louisville, the next year occupying the chair of physiology in the same school. In 1868 he established the Louisville Medical College, with which he remained and co-operated several years.

Dr. Bullitt was an able writer on professional subjects. Prof. Charles Caldwell (q.v.) had said that: "None but professors practically trained in the West and South could competently lecture on western and southern diseases, hence a medical education acquired in the northern and eastern cities could not qualify for practice in the West and South," Dr. Bullitt entered an eloquent and potent protest against this heresy. His paper was published in the "Medical Examiner," Philadelphia, in 1844 or 1845. Other papers were on the "Art of Observing in Medicine," published in the "St. Louis Medical Journal." "Medical Organization and Reform;" "On the Pathology of Inflammation," published in the "Transylvania Journal of Medicine."

He was co-editor of the "St. Louis Medical Record," the "Transylvania Journal of Medicine" and "Louisville Medical Record." His great affliction, deafness, was all that prevented him from taking the foremost position among medical practitioners, teachers and writers. This misfortune he bore with singular equanimity and fortitude.

On May 26, 1841, Dr. Bullitt was married to Miss Julia Anderson and had seven children; only two lived to their majority. She died January 16, 1853. On September 14, 1854, he was married to Mrs. Sarah Crow Paradise and had six children, one son and five daughters. She died December 3, 1901.

The cause of Dr. Bullitt's death was Bright's disease. During his long and severe illness he was always cheerful. He died on February 5, 1880.

JAMES MORRISON BODINE.

BULLOCH, William Gaston (1815-1885), was born at Savannah, Georgia, August 3, 1815, and died there June 23, 1885. He was the great grandson of Archibald Bulloch, first governor of Georgia and son of John Irvine and Charlotte Glen Bulloch.

He was equally well known in his state as a surgeon, physician and ophthalmologist. He was graduated at Yale in 1835 and M. D.

from the University of Pennsylvania, 1838, afterwards studying in Paris and eventually settling in Savannah where he was an alderman for two terms. He was one of the first in South Georgia to do a successful ovariotomy and other major operations, and for a long time stood alone as an ophthalmologist. Ashhurst in his "Surgery" mentions Bulloch's splint for fracture of the lower maxilla. He had the reputation of being a good diagnostician and after the yellow-fever epidemic of 1854 in Beaufort was presented by the citizens there with two large silver pitchers.

Always active in advancing his own science, Bulloch helped to found the Savannah Medical College and was for many years professor of surgery there. His appointments and memberships included: President of the Georgia Medical Society; honorary member, Gynecological Society of Boston; surgeon in the Confederate Army during the war and an organizer of the Confederate States Hospital, Richmond, Virginia.

J. G. B. Bulloch.

BRUMSTEAD, Freeman Josiah (1826-1879), genito urinary surgeon, was born in Boston, Massachusetts, April 21, 1826, a descendant of a New England family whose ancestors came from England and settled in Boston in 1750. His father was a prosperous merchant of Boston; his mother, Lucy Douglas Willis, the sister of Nathaniel P. Willis, the poet. He was graduated from Williams College in 1847, afterwards teaching for a short time, then receiving his degree of doctor of medicine from Harvard Medical School in 1851. A few months were spent in Paris studying venereal diseases, then in 1852 he lived in New York, being appointed surgeon to the Northern Dispensary in 1855, and in 1857 to the New York Eye and Ear Infirmary as early in his professional life he devoted his time to diseases of the eye and ear.

After 1860 he returned to the specialty which had been his first choice, venereal diseases and genito-urinary surgery, being professor of that specialty in Columbia University, N. Y. from 1867 to 1871. In 1879 he received the degree of LL. D. from Williams College.

He was a contributor to medical journals on venereal diseases and the translator of the "Hunter-Ricord Treatise" on venereal diseases and Cullerier's "Atlas of Venereal Diseases" (1854); the author of "Pathology and Treatment of Venereal Disease" and co-author with Robert W. Taylor of "Venereal Diseases" (1861), his most important work.

In 1861 he married M. Josephine, daughter of Ferdinand E. White of Boston, and had five children. He died November 27, 1879.

J. McF. Winfield.

BUNNELL, Lafayette Houghton (1824-1903), discoverer of the Yosemite Valley, was born in Rochester, New York, in March 1824, the son of Dr. Bradley and Charlotte Houghton Bunnell. His mother was of the family after whom Houghton Square, London, is named. A cousin was Douglas Houghton (q. v.), the botanist and physician on the Henry R. Schoolcraft Expedition to explore the source of the Mississippi River, whose life was an inspiration to Lafayette. In 1832, Dr. Bunnell moved the family to Detroit where he had previously purchased land and had made friends with the pioneers, at this time, a small French village dependent upon furs and fish and in time upon lumber for its trade. Lafayette went to O'Brien's excellent Catholic school there, but he drew mostly on the rough and tumble school of nature. Like his father, he roamed the West in its halcyon days and weltered in the turmoil of Indian and white man,—the one struggling to hold and the other to grasp the land. The early forties found him with his brother, Bradley, out on the Mississippi. He learned several Indian languages, as well as the sign language, beginning with Chippewa at Detroit.

At sixteen, he entered his father's office to study medicine, reading for nearly two years and attending clinics and demonstrations. After further experiences of frontier life, he turned once more to medicine, studying under Dr. Scoville of Detroit. His studies were interrupted by the Mexican War. While his regiment was at Cordova, he had charge of the hospital; at the close of the war he was in medical charge of a battalion.

In 1849, he went West with the throng to seek gold in California. During the winter of 1849-50, his imagination was continually fired by the stupendous peaks of the unvisited Sierras. In the fall of 1850, some Indian brawls brought about the formation of the Mariposa Battallion on the west slope, and the mysterious valley to the east was invaded by a punitory expedition under Major James D. Savage, and Bunnell's deferred hopes of drawing near the scene of his day-dreams were realized. The eve of entry into the

valley was the occasion of Bunnell proposing around the camp fire the name "Yosemite," by which it has since been known, a name adopted from the tribe of Indians resident there. After the Mariposa Battallion was mustered out, Bunnell lingered on in California until 1856, then returned to his home in the Middle West, at LaCrosse, Wisconsin. In July, 1861, he enlisted in the United States army and was assigned the position of hospital steward; in May, 1862, he was discharged. In November, 1863, he again enlisted, this time in Company B, Second Wisconsin Cavalry Volunteers. In March, 1865, he was discharged, to accept a commission as assistant-surgeon of the 36th Wisconsin Infantry Volunteers; he became surgeon in July, 1865, and was mustered out with the regiment the same month. Meanwhile, on October 20, 1864, he received his M. D. from the LaCrosse Medical College which had made its debut in the autumn of that year,—an ephemeral institution in the early history of Wisconsin. After the Civil War, he settled at Homer, Minnesota, and married Sarah Smith, daughter of Joel and Anna Smith, early settlers; they had no children. He died at Homer, July 21, 1903, and is buried in the Woodlawn Cemetery in Winona.

To Bunnell belongs the honor of being the discoverer of the Yosemite Valley. He alone of the little expeditiary band was impressed by the magnificent spectacle; his companions were impassive or even amused by his evident exaltation. So much importance did he attach to the matter that he at once cast about for a suitable appellation, and to him we owe the euphonious and appropriate name. It does not lessen the validity of Bunnell's claim that he entered with a group of comrades, none of whom was specially impressed or realized they were about to discover anything unusual.

Bunnell's interesting book "The Discovery of the Yosemite, and the Indian War of 1851 which led to that Event" was published in 1880 (4th ed., 1911). As he grew older, he occupied himself with reading, writing, and gardening. At seventy three, he made a valuable contribution to local history in his "Winona and its Environs on the Mississippi in Ancient and Modern Days," 1897.

HOWARD A. KELLY.

BURBANK, Augustus Hannibal (1825-1895), an eccentric but able physician of Maine, was the son of Dr. Eleazer Burbank who, owing to poverty, twice walked 100 miles and back from Maine to the Dartmouth Medical School to attend the lectures. The father settled in Poland, Maine, in 1818, but in 1838 removed to Yarmouth in the same State. Whilst practicing in Poland, he married Sophronia Ricker of that town, and their son, Augustus Hannibal, was born there January 4, 1823. He prepared for college at the North Yarmouth Academy, was graduated at Bowdoin in the Class of 1843, obtained his medical degree at the Harvard Medical School in 1847, and immediately began practice in Yarmouthville, remaining there until the end of his life.

Dr. Burbank was original and eccentric, but humorous; never cross, full of genuine fun, and always young. He kept posted in medicine to the last, mastered the modern ideas of asepsis, and made extensive use of this knowledge for the benefit of his patients in his large obstetric practice. He used to say "When I go to put a woman to be delivered of a child, I say 'Show me your teeth.' If she has good teeth, she is going to have a good deliverance, and that means a good child. If she has bad teeth, I say to myself 'Poor teeth; poor bones; poor deliverance.' "

He was active in the Maine Medical Association, often taking part in the debates, and as president he would say to a member rising diffidently to speak: "Go on, Brother. I hope that you will have a good deliverance." Some of his prescriptions were odd and this is the way in which he would evade the prohibition law. "Know all men by these presents, that I, Augustus Hannibal Burbank, Doctor, do hereby command you, or your drug clerk, to draw out, measure and sell to Mrs. ——— for her dear but sick husband, one half pint of your best gin to cure him of his present terribel malady. I do."

He used to carry about with him whenever he came to Portland, some ten miles from Yarmouthville, an old fashioned lady's handbag, and on entering the office of a physician whose opinion he desired, he would put the bag carefully on the floor between his feet, and begin, "Well, Brother, I had to come and talk medicine with you. What do you know about this bad state of affairs?" From there onward he would give you a very lucid account of the patient for whom he was inquiring the best thing to be done.

Among the numerous and highly original papers contributed by Dr. Burbank to the

Cumberland County and Maine Medical Associations mention should be made of one "On the Induction of Labor" and of the Annual Oration in 1892, a charming address "On the Mutual Relations of Medical Men," replete with quaint humor and depth of thought combined.

He was twice married, first to Elizabeth Banks of Portland, November 25, 1850, by whom he had one daughter. He married again in 1868, Alice Mary Thompson of Yarmouthville by whom he had four children.

He died after a short illness, June 27, 1895, and Maine had lost a very remarkable man and physician.

He was indeed a character in medicine, and should have been known to every medical man that ever lived as a most delightful specimen of geniality combined with excellent judgment and skill.

JAMES A. SPALDING.

BURNET, William (1730-1791), Revolutionary surgeon, judge, founder of the New Jersey Medical Society, was the son of Dr. Ichabod Burnet, of Elizabethtown, New Jersey, where he was born December 13, 1730. Ichabod's grandfather was Thomas, who had migrated from Lynn, Massachusetts, about 1640, and settled in Southampton, Long Island. William was graduated from Princeton in 1749, studied medicine with Dr. Staats, of New York, and settled in Newark as a physician. He had acquired reputation and popularity in his profession when the Revolutionary War broke out, and he had helped found the state medical society in 1766. At once relinquishing a lucrative practice he assumed and maintained a conspicuous part as one of the leaders of the popular cause in Newark and in Essex County during the war, as chairman of the Committee of Safety. On one occasion in 1776, he organized and dispatched to New York a force of three hundred men. He served also as deputy chairman of the Newark Committee, and in connection with Capt. Joseph Hedden and Samuel Hays really governed the town for several years. He was first judge of the county courts.

As illustrating how much his private property suffered by the depredations of the enemy it is related that his large and valuable library was headed up in casks and carried off by the British or their allies, the refugees, and that fifty head of cattle were driven off from his farm. In July, 1776, Dr. Burnet was appointed one of three commissioners for issuing State bills of credit, and for making purchases of arms and ammunition for the public service. He was commissioned surgeon, second regiment Essex, February 17, 1776.

Dr. Burnet was elected a member of the Continental Congress in the winter of 1776. Early in this session Congress divided the thirteen states into three military districts, and it was by this same congress that he was commissioned a hospital surgeon to the army, and finally, October 11, 1777, physician and surgeon-general of the hospital department of the Eastern District. He resigned his seat in Congress and assumed the arduous duties of this responsible post, which he continued to discharge till the close of the war. It is related that he dined with General Arnold on the evening that Major André was arrested.

At the close of the war the doctor returned to his family and devoted himself to agricultural pursuits. His homestead was in what is now the lower part of Newark, on the northeast corner of Lincoln Park. Soon after his return he was appointed presiding judge of the Court of Common Pleas. We find his name signed to the "Instruments of Association and Constitutions of the New Jersey Medical Society," July 23, 1766. In November of the following year he was elected president of this first state medical society to be organized in any state of the Union, and when he was elected a second time to this office in the rejuvenated society, in 1786, he delivered the first "Dissertation" to be published in the Society's Transactions "On the origin, antiquity, dignity and usefulness of the Science of Medicine, and the qualifications necessary for a practitioner of the same."

Dr. Burnet married Mary, daughter of Nathaniel Camp of Newark, by whom he had a large family of children, several of them being eminent in war, the judiciary and in the public service. Jacob (1770-1853) was a judge of the Supreme Court of Ohio and a prominent citizen of Cincinnati. By his second marriage to Gertrude Gouverneur, widow of Colonel Philip Van Courtland, Dr. Burnet had three sons, the youngest being David G. Burnet (1789-1870), the first provincial president of Texas, in 1836.

Dr. Burnet died October 7, 1791, aged sixty.

BURNETT, Charles Henry (1842-1902), otologist, was born in Philadelphia May 28, 1842. After education in the schools of his native city he entered Yale in 1860 and graduated in 1864. After graduating from Yale he entered the University of Pennsylvania,

receiving the M. D. in March, 1867. He was soon after appointed resident physician in the Episcopal Hospital of Philadelphia, serving a full term in that capacity. Upon the completion of this service he went abroad, spending ten months in the laboratories and hospitals of Europe during the years 1868-69. Upon returning to Philadelphia he practiced medicine for a year.

He had always had his attention strongly attracted to the study of otology, and at length decided to return to Europe and devote himself to a special study of that subject. In the pursuit of this design he gave up his practice in 1870 and went abroad, where he worked for over a year, especially in the laboratories of Helmholtz and Virchow, and in the clinic of Politzer. These three eminent men became greatly attached to the American student, and in subsequent years their friendship was continued. With Helmholtz, in particular, he established most cordial relations, conducting in his laboratory his invaluable series of investigations into the condition of the membrane of the round window during the movement of the auditory ossicles and upon the various effects of changes in intralabyrinthine pressure. This research work of Dr. Burnett placed him at once among the most eminent investigators into the physiology of hearing. He returned to Philadelphia in April, 1872, and took up practice once more, devoting his work solely to diseases of the ear.

He never enjoyed robust health, and his unflagging industry was often a source of anxiety and wonder to his friends who knew how severe a physicial strain it must have been for him to bear. In spite of the arduous labor involved in his attention to his practice Dr. Burnett never ceased to pursue his investigations into the scientific side of the specialty of otology.

Of literary work of large scope I mention particularly his "Treatise on Diseases of the Ear," published in 1877; "Hearing, and How to Keep It," one of the American Health Primers published in 1879; "The System of Diseases of the Ear, Nose, and Throat," edited by him in 1893; the chapters of otology in the "American Text-book of Surgery," 1896, in the "Encyclopedia of Diseases of Children," edited by Keating, and in the "American Year-book of Medicine and Surgery." For many years Dr. Burnett edited the department of progress of otology in the "American Journal of the Medical Sciences," and the author can bear personal testimony to the diligence and assiduity with which he labored.

Of the many positions which he held the following may be regarded as the most important: In 1882 he was elected professor of diseases of the ear in the Philadelphia Polyclinic Hospital and College for Graduates in Medicine, and later emeritus professor of the institution. At various times he was clinical professor of otology in the Woman's Medical College; aural surgeon to the Presbyterian Hospital; consulting aurist to the Pennsylvania Institution for Deaf and Dumb; to St. Timothy's Hospital; to the West Philadelphia Hospital for Women; to the Philadelphia Hospital for Epileptics.

Among his contemporaries in the profession, Dr. Burnett enjoyed a wide circle of friends; his kindly disposition and warm heart held by his side many who, in the daily rush and hurry of their labors, were unable to hold as much intercourse with him as they wished.

But a few months before his death, Dr. Burnett published, in collaboration with Drs. E. Fletcher Ingals (q.v.), of Chicago, and James E. Newcomb, of New York, a "Textbook of Diseases of the Ear, Nose and Throat," which may be regarded as the most advanced work of its character in the English language. The last literary work of Dr. Burnett, aside from this book, was an article on "Scarlatinous Empyema of the Superior Squamomastoid Cells," which appeared in the "American Journal of the Medical Sciences" for March, 1902, after its author had passed away. He attended the meeting of the section of otology and laryngology of the College of Physicians of Philadelphia on the evening of Wednesday, January 15, and took an active part in the discussion of the papers read upon that occasion. A few days later he developed pneumonia and died, after a brief illness, on January 30, at his home in Bryn Mawr, Pennsylvania. His widow, who was Miss Anna Lawrence Davis, of Buffalo, New York, and four children survived him.

Dr. Burnett was a fellow of the College of Physicians of Philadelphia; president of the American Otological Society and member of the Pennsylvania State Medical and kindred societies. I have given a full list of his writings in the "Transactions of the College of Physicians of Philadelphia," 3d series, vol. xxv, 1903.

FRANCIS R. PACKARD.

BURNETT, Swan Moses (1847-1906), ophthalmologist, was born in New Market, Tennessee, March 16, 1847, and graduated in medicine from Bellevue Hospital Medical College, New York City, now the medical department of New York University, in 1870, and first settled in Knoxville, Tennessee, where he practiced for five years, in 1873 marrying Miss Frances Hodgson. The year 1875 saw him in the District of Columbia attaining prominence as a specialist in ophthalmology and otology, and well known in literary and art circles, and also as the author of a "Treatise on Astigmatism," a "Treatise on Refraction of the Human Eye" and over sixty-four distinct articles on diseases of the eye and ear, and chapters in text books. He was associated with Dr. John S. Billings (q. v.) in the production of the "National Medical Dictionary," and with Drs. Norris and Oliver in that of the "System of Ophthalmology," writing as well many magazine articles and public addresses.

In 1878 he was appointed lecturer on ophthalmology and otology in the school of medicine, Georgetown University, Washington, continuing in this capacity until 1883, when he became clinical professor, a position he filled until 1889. After that until the time of his death he had been professor in those branches. In 1879 he established a post-graduate course in ophthalmology and otology in connection with his hospital and private practice, and rendered most distinguished service as an author, teacher and clinician. He gave much of his time and skill on the attending staff of the Central Dispensary and Emergency Hospital, of which he was president. There he founded and equipped the "Lionel Laboratory," in memory of one of his sons, "Little Lord Fauntleroy." This laboratory was the first of its kind to be established in connection with a hospital for clinical, bacteriological and pathological research in the city of Washington. For many years he was ophthalmologist and otologist to the Children's and Providence Hospital, and also a member of the consulting staff of the Episcopal Eye, Ear and Throat Hospital. In 1889 he was elected president of the Medical Society of the District of Columbia, and was a member of the Washington Academy of Sciences, Philosophical Society, Anthropological Society, Historical Society, and the American Ophthalmological and Otological Society.

A degree of doctor of philosophy was bestowed on him by the University of Georgetown in 1890. During a service extending over twenty-five years in the cause of higher medical education, he was distinguished for his devotion to his calling and was unexcelled as a teacher, scholar and gentleman. His kind, open and earnest manner, his clear, concise and comprehensive lectures could not fail to impress his students.

Among his literary contributions and important writings are the following: Translation of Edmond Landolt's "Manual of Examination of the Eyes"; "A Course of Lectures delivered at the Ecole Pratique," revised edition, vii, 9-312 pp., 1 chart, 1 table, 8°, Philadelphia, 1879; "A Theoretical and Practical Treatise on Astigmatism," viii, 245 pp., 8°, St. Louis, 1882; "The Principles of Refraction in the Human Eyes based on the Laws of Conjugate Foci," 67 pp., 8°, Philadelphia, 1904; "Study of Refraction from a New View-point," Philadelphia, 1905. He made some sixty-four contributions to medical literature that may be found in the Surgeon General's Catalogue at Washington.

Dr. Burnett died from chronic myocarditis January 18, 1906, at his house, 916 Farragut Square, Washington; his second wife and his son Vivian survived him.

GEORGE M. KOBER.

BURNHAM, Walter (1808-1883), pioneer gynecologist of Lowell, Mass., the son of Dr. Walter Burnham, was born in Brookfield, Vermont, January 12, 1808. He studied medicine with his father and his brother, Dr. Z. P. Burnham, a pupil of Nathan Smith, and was graduated from the medical department of the University of Vermont in 1829. After practicing in several places he settled in 1833 in Barre, Vermont, where he lived until his removal to Lowell, Massachusetts, in 1846. For several years he was treasurer of the Vermont State Medical Society. While in Vermont he performed many major surgical operations, but it was only after his removal to Massachusetts that he devoted himself to gynecological surgery. An early advocate of the operation of ovariotomy, he removed his first ovarian tumor in August, 1851. From this time until 1882, a period of thirty-one years, he did about three hundred ovariotomies with a mortality of about 25 per cent., a good showing for those days. His first case of hysterectomy for fibroma of the uterus, the first successful case on record, was

performed in June, 1853. In 1883 the woman was still alive. Later experience with this operation—only three successes in fifteen operations—led him to doubt the propriety of doing it except in carefully selected cases. Among his successful operations in the field of general surgery may be mentioned two of ligation of the common carotid artery and one of ligation of both external carotids for malignant tumor of the jaw, done at two sittings.

Dr. Burnham was surgeon of the sixth Massachusetts Regiment of Volunteers in the Civil War from 1862 through the war and after until 1870. He became a member of the Massachusetts Medical Society in 1863. While a member of the Massachusetts House of Representatives in 1855 he was instrumental in securing the passage of the "Anatomy Act" by which members of the medical profession were authorized to obtain the bodies of dead paupers for dissecting purposes, an immense assistance to the cause of anatomy in Massachusetts. He often served as an expert witness in the courts. No less than twelve physicians were educated as pupils in his office.

Dr. Burnham died at his home in Lowell, January 16, 1883, after an illness of five weeks, the immediate cause of his death being gastritis.

WALTER L. BURRAGE.

BURRELL, Dwight R. (1843-1910), alienist, was born at Sheffield, Lorraine County, Ohio, March 1, 1843. He spent his boyhood on a farm, and after preparation in the common schools entered Oberlin College, where he was graduated in 1866. His college course was interrupted by a brief service in Company K, 150th Ohio Volunteers, during the Civil War. He received the degree of M. D. at Michigan University in 1868, and afterwards became an assistant physician in the New York City Asylum on Blackwell's Island. A year later he was appointed an assistant physician at Bloomingdale Asylum, where he remained several years.

In 1876 he became resident physician at Brigham Hall, Canandaigua, New York, where he remained until incapacitated by illness in 1908. His professional life of 40 years was devoted entirely to the treatment of the insane and 31 years of it were spent at Brigham Hall. He was a nephew of Dr. Amariah Brigham (q.v.), in whose honor the hospital had been named 21 years before Burrell's appointment, and from the first he took a peculiarly personal interest in this hospital. His wide previous experience, his attractive personality, his unfailing sense of humor and his careful attention to all details of any duty qualified him for large success at Brigham Hall. He did not spare himself in medical and administrative work; he spent much time also in the clinical instruction of nurses. Many changes in the care of the insane were made during his professional life, but he adapted himself to them. He gave much attention to the re-education and development of chronic cases as well as to the treatment of acute forms of mental disease, and in the former line of work often secured such good results as to enable patients to return to their homes, though not entirely recovered.

He was a public-spirited citizen and held many positions of trust in the village of Canandaigua. He was a member of the American Medico-Psychological Association, of the American Medical Association, of the Medical Society of the State of New York, of the County Society and of the Medical Societies of Rochester and Canandaigua.

In January, 1908, he had a stroke of apoplexy, which made him almost a helpless invalid until his death on June 18, 1910.

He was married, but left no children.

HENRY M. HURD.

BURRELL, Herbert Leslie (1856-1910), Boston surgeon, was born in that city, April 27, 1856, the son of Randall Gardner and Elizabeth Madeleine Burrell. He received his preliminary education at the English High School in that city, and graduated from Harvard Medical School in 1879. After a few years general practice, during which he gradually turned towards surgery, he began his work as a teacher in the position of demonstrator of surgical technic in his alma mater; for many years he gave a systematic course of lectures on surgery and in 1903 was made professor of clinical surgery. He was appointed surgeon-general of Massachusetts in 1893, and in 1898 saw service during the Spanish-American War as surgeon-in-charge of the Massachusetts volunteer hospital ship, "Bay State." He became surgeon to the Children's Hospital in 1893, and was made consulting surgeon to the Carney Hospital in 1899 and senior surgeon to the Boston City Hospital in 1897. Burrell was a skilful surgeon and one of the first successfully to ligate the innominate artery and the first successfully to reimplant an entire trephine button. He arranged for the meeting of the American

Medical Association in Boston in 1906 and displayed a high degree of executive ability. His society memberships included the American Surgical Association, of which he was secretary for several years; the American Society of Clinical Surgery; American Orthopedic Association; Association of Pathologists and Bacteriologists, and in 1908-9 he was president of the American Medical Association. He wrote a good deal for medical journals and also wrote "Case Teaching in Surgery" with Dr. J. B. Blake.

He married Lillie, daughter of Dr. William H. Thorndike (q.v.). She died in 1897 and he married Caroline W. Cayford in 1899; who with two sons survived him.

For a year before his death Dr. Burrell was an invalid on account of chronic disease of the kidney with cardiac complications, and had been unable to teach or to practice. He died at his home in Boston, April 26, 1910.

BURROUGHS, Richard Berrien (1833-1901), one of Florida's prominent physicians and surgeons, was born in the city of Savannah, Georgia, January 19, 1833. His middle name was derived from his maternal grandfather, John MacPherson Berrien, who was attorney-general of Andrew Jackson's cabinet. Dr. Burroughs was graduated at the University of Georgia in 1853 and at the Jefferson Medical College of Philadelphia in 1856, taking up practice afterwards at Tallahassee, Florida, and in Camden County, Georgia, prior to the Civil War. At the beginning of the struggle he entered the Confederate army as a surgeon, and was assigned to duty with the sixty-third Georgia regiment at Thunderbolt, near Savannah. Preferring a more active service he was transferred, in 1862, to the fourth Georgia cavalry, Col. Duncan L. Clinch, and with that noted command shared in the Atlanta campaign. A large portion of the war period was spent by Dr. Burroughs as surgeon with the gallant J. J. Dickison's command in Florida, and deserved tribute is paid to him in the history of "Dickison and his Men." In other fields he was distinguished. At the battle of Jonesboro, Georgia, he rode through a galling fire to where the gallant Captain Wylly had fallen, shot through the neck, placed the wounded man on his horse and on foot succeeded in conveying him to a place of safety. At the battle of Olustee, he gave his horse to Col. Smith, whose own had been killed, and continued during the rest of the fight to discharge the functions of his office unmounted. He settled in Jacksonville in 1880 and for many years was a leading physician in that city. He was appointed by Gov. Drew, in 1885, on the staff of Gen. Capers W. Bird as Chief Surgeon with the rank of major, and in 1892 was appointed surgeon-general by Gen. J. J. Dickison of the Florida Confederate Veterans.

Dr. Burroughs married, first, Ella J. Burroughs, who died on August 13, 1868, then Florida Lewis, who died April 14, 1895. At his death he left six children. Dr. Burroughs died September 11, 1901, at the home of his son, Joseph Hallatt Burroughs, in Norfolk, Virginia.

WILLIAM B. BURROUGHS.

Burton, Elijah (1794-1854), a pioneer physician of Collamer, Cuyahoga County, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 176-177.

BUSEY, Samuel Clagett (1828-1901), pioneer pediatrist of Washington, D. C., the son of John and Rachel Clagett Busey, was born July 23, 1828, on a farm known as "Stony Lonesome," a few miles west of Washington. His father's ancestors came from Scotland and settled in Maryland in 1754, while the Clagetts arrived from England as early as 1671. From 1841 to 1845 the boy Samuel attended Rockville Academy, then in charge of Mr. Wright, and in 1844 was offered a cadetship at West Point. This he had greatly coveted, but his mother, a woman of great force of character, refused consent and insisted he should enter the medical profession, so in May, 1845, he began to study medicine with Dr. Hezekiah Magruder, of Georgetown. The following winter he attended the lectures on anatomy and operative surgery at the National Medical College, but soon discovered private teaching with text-books twenty-five years old to be far from satisfactory. Although the income from his estate was quite inadequate even in those frugal days, he went to Philadelphia in the spring of 1846 and worked under the famous Dr. George B. Wood, (q.v.) and in the University of Pennsylvania where he enjoyed the teaching of such men as the elder Pepper, Wood, Gerhard, Chapman, Gibson, Horner, and Hodge. He received his M. D. April 8, 1848. The following month he began his lifework in Washington in consulting rooms on Capitol Hill, and in the following years married Miss Catherine Posey. In the struggle for existence

which confronts every beginner in a profession, he earned less than a dollar a day the first year, while the receipts from his second year's practice were only $800. Thereafter his practice, his income and his influence steadily increased. In 1853 he was elected professor of materia medica in the medical department of Georgetown University, but in 1858 symptoms of pulmonary disease appeared and drove him to take up the life of a farmer. He moved out to "Belvoir," near the site of what is now Cleveland Park, a change undoubtedly beneficial and one which added many years to a useful life. He attended professionally most of the neighboring families and kept up with the rapid advances then being made in the medical sciences. After ten years he returned to Washington, September, 1869, physically and professionally well equipped for a busy life. In that year he helped to organize a dispensary in connection with the Columbia Hospital and was placed in charge of the department of diseases of infancy and childhood. One of the blessings resulting from this connection was the establishment, November 25, 1870, of the Children's Hospital, and when in 1872 the first post-graduate school of clinical medicine in this country was established there he was one of its most successful teachers. In July 1875, he was appointed professor of diseases of infancy and childhood in the Medical School of Georgetown University. In 1880 he was one of Dr. Jacobi's coadjutors in establishing the section of diseases of children in the American Medical Association. He presided over the first meeting, read the first paper, entitled "Chronic Bright's Disease in Children caused by Malaria," and was elected chairman of the section in 1881. He was also one of the founders of the American Pediatric Society. His interest in behalf of sick children remained unabated; in 1896-1897 he pointed out the absence in Washington of suitable provisions for the treatment of contagious diseases, and thanks to his persistent efforts, pavilions were established in connection with two hospitals. He was also a founder of the American Dermatological Association. In 1875 he was elected president of the American Medical Association and in 1876 professor of theory and practice of medicine in the Medical School of Georgetown University, a position he filled until compelled by declining strength to give up active teaching. He received there in 1899 the LL. D. In 1877 he was elected president of the medical society of the District of Columbia and re-elected from 1894 to 1899, and helped largely in the founding of the Garfield Memorial Hospital, the Washington Obstetrical Society, Columbia Historical Society, and the Washington Academy of Sciences.

On the fiftieth anniversary of his graduation, April 8, 1898, Dr. Busey was tendered a banquet by the local profession. How well he deserved this evidence of respect is shown by a list of more than forty distinct contributions to medical literature, besides his miscellaneous publications. The world is indebted to him for his work on "Congenital Occlusion and Dilatation of Lymph Channels," and his masterly exposition of "The Wrongs of Craniotomy upon the Living Fetus," writings which have long since become classic.

For several years he had been in delicate health, yet his interest in the Medical Society and Academy was so great that he rarely missed a meeting and also made the Academy the beneficiary of a bequest, without conditions, amounting to about $5,000. Peacefully and quietly in the early morning hours of February 12, 1901, came the end.

He contributed many papers to the medical press, wrote an autobiographical sketch of his early life and "Personal Reminiscences and Recollections of Forty-six Years Membership in the Medical Society of the District of Columbia and Residence in this City, with Biographical Sketches of many of the Deceased Members," 17-373 pp., 8°, Washington, 1895.

GEORGE M. KOBER.

BUSH, James Miles (1808-1875), Kentucky surgeon, was born in Frankfort, Kentucky, May, 1808, and died in Lexington, February 14, 1875. His grandparents, Philip and Mary Bush, came from Germany in 1750 and settled in Winchester, Virginia. James was graduated A. B. from Centre College, Danville, Ky., and began the study of medicine in the office of Dr. Alban Goldsmith, at Louisville, but removed in 1830 to Lexington to attend the medical department of Transylvania University. He became the private pupil of Dr. Benjamin W. Dudley (q.v.), and between the two men sprang up a warm and life-long attachment. In 1833 he received his M. D. from Transylvania University and was at once appointed demonstrator and instructor in anatomy and surgery there, a place filled successfully till 1837, when he was made adjunct professor of anatomy and surgery in the same

institution, under Dr. Dudley. In 1844 he became full professor of anatomy. In 1850 the medical department of Transylvania began to give only summer courses, and Dr. Bush, with others established in Louisville a winter school, the Kentucky School of Medicine, where he filled, for three sessions, the chair of surgical anatomy and operative surgery. James Miles Bush, while distinguished as a surgeon and performing a number of times successfully the then unusual operation of lithotomy, was also a general practitioner.

His principal writings that have been preserved are reports of interesting cases. These can be found in vol. x (1837) of the "Transylvania Journal of Medicine." Two are: "An Introductory Lecture to the Dissecting Class of Transylvania University," Lexington, November 9, 1840; "Observations on the Operations of Lithotomy," illustrated by cases from the practice of Prof. B. W. Dudley.

In his surgical work, he felt deeply the necessity of hospital advantages, and it was at his suggestion St. Joseph's Hospital at Lexington was founded, the first hospital in central Kentucky.

Dr. Bush married, in 1835, Charlotte James of Chillicothe, Ohio. Two sons and one daughter were born to them, the eldest son, Benjamin Dudley Bush, inheriting his father's fondness for the study of medicine, gave great promise as a physician and surgeon. His early death was a shock from which his father never recovered.

Dr. Bush died of diabetes mellitus, and, conscious of his condition, faced the inevitable without confiding to his family the serious nature of his disease.

Three portraits of this physician are in possession of his family; one of these, by his brother, Joseph Bush, a talented pupil of Sully, shows the wonderfully keen eyes for which he was noted.

Robert Milligan Coleman.

BUSH, Lewis Potter (1812-1892), was born in Wilmington, Del., October 19, 1812, and graduated A. B. from Jefferson College in 1832 and in 1835 received his M. D. from the University of Pennsylvania. He was resident physician at the Blockley Hospital until 1837, when he went to Wilmington, and practiced till his death. He belonged to several historical societies in Delaware, Virginia and Pennsylvania and wrote on the "History of Medicine and Physicians in Delaware," on which subject he wrote the chapter in Scharf's "History of Delaware." He wrote on the "Typhoid Epidemic in Wilmington in 1847-48-49" and "Report on Climatology and Epidemics of Delaware during Twenty-five Years," 1872.

In 1839 he married Maria, daughter of Morgan Jones of Wilmington.

In 1860 he was president of the State Medical Society and read papers specially advocating sanitary reforms. He died March 5, 1892.

BUSHE, George Macartney (1793-1836), New York surgeon, was born in Ireland in 1793, and died in New York in 1836. He was brought over from Dublin to America by the faculty of the Rutgers Medical College of New Jersey in 1828, as professor of anatomy in that school, on the recommendation of Mr., afterwards Sir William Lawrence (1783-1867). According to Edward H. Dixon, editor of the "Scalpel" (1852), Charles Bell and Benjamin Brodie wrote letters of indorsement for Bushe.

Bushe gave three courses of lectures on anatomy and almost daily office lectures on surgery for three years with an immense number of operations performed on those attracted by his fame as an operator. For five years he barely escaped starvation; then fortune smiled on him. He died of consumption at the age of 43. Dixon, a pupil, says he had "a glorious eye and superbly intellectual face."

He left behind him a brilliant reputation as a bold, dashing operator, and as the author of the well-known standard monograph on the "Diseases of the Rectum and Anus," long considered the ablest work on the subject in any language (N. Y. 1837). Of this work Bushe says in the "Advertisement": "I shall make but few prefatory remarks respecting this work, and these shall be short. Many years ago, I was induced to pay particular attention to the diseases of the rectum and anus, in consequence of their frequency, and the diversity of opinion which prevailed in relation to their nature and treatment. My opportunities for investigating them have been ample, and I may safely say, that I spared neither time, trouble or expense in endeavoring to arrive at just conclusions. . . . 58 Walker Street, New York, December 1st, 1836." He published also a memoir on staphylorraphy, and was the founder and editor of the "New York Medico-Chirurgical Bulle-

tin," an able journal of brief duration and of two volumes only issued from May 1831, to April, 1832. In his journal he courteously "returns thanks to his subscribers for their support, and regrets that his professional avocations compel him to discontinue the publication." He was author of many of the articles, including clinical reports from his note-books kept for eleven years, and reports submitted by him to the Army Medical Board while attached to the General Military Hospital of England.

John D. Godman (q.v.) retired from Rutgers Medical Faculty (that brief but brilliant flurry of medical instruction) in 1828 and was succeeded by Bushe and it was recorded of Bushe that he had "proven himself eminently qualified by his talents and learning, to sustain the reputation of the School" ("Catalogue of the officers and students for the session of 1829-30 and graduates of the preceding sessions"). He was professor of anatomy and physiology.

HOWARD A. KELLY.

BUSHNELL, George Ensign (1853-1924), specialist in tuberculosis in the United States Army, author, the son of George and Mary Elizabeth Blake Bushnell, was born in Worcester, Massachusetts, September 10, 1853. He was graduated from Yale in 1876, distinguishing himself in languages, he and his classmate A. T. Hadley, afterwards president of the college, studying Sanscrit. Very soon after Bushnell had received an M. D. from the Yale Medical School (1880), while serving as an interne in a New York hospital he developed the first manifestations of pulmonary tuberculosis. Giving up his internship he was commissioned first lieutenant and assistant surgeon in the Army and was stationed at Fort Yates, Dakota and then at a series of army posts in the west. There he built up his powers of resistance in an outdoor life. During the Spanish-American war he was at the Surgeon-General's office; his health failed and pulmonary tuberculosis was definitely diagnosed. In Ashville, North Carolina Bushnell came under the care of Dr. Charles L. Minor and learned from him, a noted specialist, the principles of the rest cure of tuberculosis. He learned much also from Dr. Carroll Edson, of Denver, Colorado, another well known man in this department of medicine and at the end of six months' leave was stationed at Fort Logan, Colorado for two years. From 1904 until 1917 he was commanding officer of the Army tuberculosis hospital at Fort Bayard, New Mexico. Here he put into effect the rest cure, making the surroundings of the Fort most attractive with the aid of flowers and shrubbery. He was familiar with many of the flora of the country and took delight in cultivating the territory immediately adjacent to his hospital and in instructing his patients to appreciate the beauties of nature. Dr. Bushnell maintained that in adults active tuberculosis was caused by infection from within; that only in the young was it transmitted from person to person; he was a strong advocate of moderation in eating and drinking for those affected with the disease. His success in the management of the hospital was marked. He kept up his reading, in spare moments, read the foreign journals as well as those in English and even gave instruction in medical German to his officers.

During the World War he was of great service to his country. He introduced measures for the rapid examination of large numbers of men as to their chest conditions. In June, 1917, then holding the rank of colonel, he was placed in charge of all the tuberculosis work of the Army; by writing and speaking he did much to quell the popular alarm concerning the high incidence of tuberculosis in the Army. Although he reached the age of retirement, 64, on September 10, 1917, he kept on with active work. His "Circular No. 20," written at this time, on the diagnosis of tuberculosis, became a classic in the Army explaining clearly, as it did, how examinations were to be made, how they differed from the investigations for this disease in civil practice, and the organization of examining boards. The Colonel was an active worker. His health gave way again under the strain and in 1918 he was forced to turn over the tuberculosis work to others. When he had regained enough strength he prepared his well-known work on "The Epidemiology of Tuberculosis," and, when that was finished he collaborated with Dr. Joseph H. Pratt, of Boston, in the preparation of "Diseases of the Chest," he writing the part on the lungs and Pratt that on the heart. The book did not come from the publisher until after Dr. Bushnell's death. His last years were spent in Bedford, Massachusetts. He ended a lifelong fight against the dread disease, July 19, 1924, in Pasadena, California, where he had motored for his health.

He had returned to active duty and had delivered a course of lectures on Military Medicine at Harvard University in the winter of 1922-1923. There is a bibliograph of Dr. Bushnell's writing at the end of an obituary by "E. H. B." in the "American Review of Tuberculosis," Baltimore. 1925. xl, 275-291.

BUTLER, George Frank (1857-1921), Chicago professor of medicine, writer, was born March 15, 1857 in Moravia, New York, the son of Isaac—whose ancestors came to America in 1612—and Asenath Chase—a lineal descendant of Samuel Chase, signer of the Declaration of Independence. At the age of seventeen, George began clerking in a drug store in Pittsfield, Massachusetts, and later was taken into partnership in the drug business of a Dr. Henry Millard of North Adams, in the same state. In 1879, health failing, he sold out his interest and went to Denver, Colorado, as a manufacturing pharmacist in a wholesale drug house. The following year, he engaged in raising sheep in southwestern Kansas. Having regained health, he re-entered the drug business in 1882 as the partner of Dr. J. D. Justice of Belle Plain, Kansas, with whom he began to study medicine. In 1889 he was graduated from Rush Medical College.

Dr. Butler was lecturer in pharmacy and materia medica in his alma mater, 1889-1892; professor of materia medica, therapeutics, and clinical medicine in the Northwestern University Woman's Medical School, 1890-1896, and in the College of Physicians and Surgeons, Chicago, 1892-1906; professor of medicine in Dearborn Medical College, 1905-1906; professor of internal medicine in the Chicago Post-Graduate Medical School, 1905-1907; professor of therapeutics in Chicago College of Medicine and Surgery, 1906-1915, and emeritus professor from 1915. Also he was president of the faculty and professor of diseases of the kidneys and nervous system in the Practitioner's College, Chicago, 1910-1912. He was also director of the Alma Sanatorium, Alma, Michigan, in 1900-1905, and medical director of the Mudlavia Springs Sanatorium, Kramer, Indiana, and of the North Shore Health Resort, Winnetka, Illinois. He was a fellow of the Chicago Academy of Medicine. In 1908, the Valparaiso University of Indiana gave him the honorary A. M.

On March 21, 1882, he married Nannie Blanche Porter of Monmouth, Illinois.

Dr. Butler was the author of many books: among his medical works are "Materia Medica and Therapeutics" (Prac. Med. Series of Year Books), 1892, "Textbook of Materia Medica, Therapeutics, and Pharmacology," 1896, and "Treatment of Disease," 1913-14. Some of his non-medical books, including poetry, fiction, and essays, are: "Love and its Affinities," 1890, "The Isle of Content," 1902, "The Exploits of a Physician Detective," 1907, "Sonnets of the Heart," 1909, "Treasures of Truth," 1909, "Songs of the Heart," 1910, "Echoes of Petrarch," 1912. At the last he wrote in the realm of mental hygiene: "The Travail of a Soul," 1914, and "How the Mind Works," 1921.

He died in Chicago, of heart disease, June 22, 1921.

BUTLER, Glentworth Reeve (1855-1926), a practitioner of internal medicine in Brooklyn, N. Y. was born in Philadelphia, December 31, 1855, the son of James Glentworth and Evelyn E. Reeve Butler. Young Butler received an A. B. at Hamilton College in 1877 and an M. D. at the Long Island College Hospital in 1880, the same year getting an A. M. from his alma mater. Hamilton gave him a ScD in 1904 and Wesleyan an LL. D. in 1908. Dr. Butler settled in the practice of medicine in Brooklyn, serving as assistant physician to St. Mary's General Hospital from 1882 to 1891 and to the Methodist Episcopal Hospital from 1885 to the same year when he was advanced to be chief of the 2d medical division of the latter hospital. In 1906 he became physician-in-chief, holding the position until his death, twenty years later. He was consulting physician to several other hospitals and was pension examining surgeon and contract surgeon, U. S. A. and then lieutenant colonel in the Medical Corps, U. S. A. from September 1918 to May 1919. He was also a member of the advisory board of the New York Department of Health and was a member of the New York Academy of Medicine. Besides contributions to Buck's Reference Hand-book of the Medical Sciences and the Encyclopedia Americana he wrote a book entitled: "Diagnostics of Internal Medicine," 1901, a work which brought him considerable reputation.

He married Antoinette Wilson of Brooklyn in 1884. They had one daughter.

Dr. Butler died at his home in Brooklyn, December 6, 1926.

BUTLER, John Simpkins (1803-1890), superintendent of the Connecticut Retreat for the Insane, was born at Northampton, Mass., in 1803. He was graduated at Yale College in 1825 with the degree of M. A., and after beginning the study of medicine in the office of Dr. Hunt and Dr. Barrett of Northampton, received his degree of M. D. from the Jefferson Medical College in 1828.

Beginning in 1829 he was engaged for ten years in general practice in Worcester, Massachusetts, where he was a frequent visitor at the Lunatic Asylum, and gained from Dr. Samuel B. Woodward (q.v.) a great interest in the care of the insane. In 1839, when the Boston Lunatic Hospital was opened, as the result of the active efforts of Mayor Samuel A. Eliot, to relieve the deplorable condition of the insane confined in the House of Industry, Butler was appointed the first superintendent upon the recommendation of Dr. Woodward, and remained in charge of the hospital for three years, when he resigned. A letter written at that time by Mr. Eliot, then ex-mayor, bears explicit testimony to Dr. Butler's success in removing the insane from "shocking cells," and treating them with "mingled kindness, care and skill."

In 1843 he was chosen superintendent of the Connecticut Retreat for the Insane, at Hartford, and there he found a proper field for his marked abilities. For thirty years of continued service he kept the institution in the front rank of contemporary progress. His influence was large and useful, and was felt in the establishment of the State Hospital for the Insane in Middletown. After the Retreat had been relieved of the pauper patients which had crowded its wards, he was able to realize his cherished ideas of the "Individualized treatment of the insane," which were embodied in his book upon that subject entitled "The Curability of Insanity," published in 1886. The picturesque grounds of the Retreat, with its beautiful lawn, and the improvements initiated by him in the buildings, bear testimony to the earnestness and correctness of his belief that patients should be surrounded by attractive and homelike conditions.

He was one of the original thirteen who organized the Association of Medical Superintendents in 1844, and was its vice-president for eight years, 1862-1869, and president for three years, 1870-1872. He was an honorary member of the Medico-Psychological Society of Great Britain. In 1872 he resigned his superintendency and retired at the age of 70, continuing, however, practice as an expert and as consultant. In 1878 he was made the first president of the Connecticut State Board of Health, which published his first annual address on "State Preventive Medicine." He resigned that office after ten years, but retained his membership in the board until his death.

He died at Hartford, Conn., on May 24, 1890, of chronic Bright's disease, in the 87th year of his age.

BUTLER, Lucius Castle (1820-1888), Vermont physician and writer, was born in Essex, Vermont, March 17, 1820, and his preliminary education was obtained in public schools and at Bradford Academy. Afterwards he studied medicine with Dr. George Howe of Jericho and Dr. Leonard Marsh of Burlington, attending lectures at Dartmouth and at the Clinical School in Woodstock, graduating thence in 1843 and thirty-two years later receiving his honorary M. D. from Dartmouth.

After practicing at Clintonville, New York, for seven years, Dr. Butler settled in Essex, where he practiced nine years. In 1859 he moved to Bradford where he lived for a year, thence to Philadelphia to accept a position on the editorial staff of the "Medical and Surgical Reporter," but after two years in this position he returned to Essex and practiced the remainder of his life.

Dr. Butler was for many years a member and three years president of the Vermont State Medical Society and for eight years secretary, also he was a member of the American Medical Association. He was a prolific writer, not only upon medical but also historical subjects, publishing at various times medical papers read before the Vermont State and other medical societies, and an "Early History of the Town of Essex." Dr. Butler was active in town and state affairs; he prepared and tabulated for the secretary of state the vital statistics of Vermont for several years. In this connection it should be stated that he was instrumental in securing the establishment of the State Board of Health.

He was a most sympathetic as well as skilful physician and a man who endeared himself to his clientéle. He married in 1845 Hannah D. Page of Essex and had a son and daughter. He died at Essex, May 25, 1888.

CHARLES S. CAVERLY.

BUTLER, Samuel Worcester (1823-1874), alienist, was born at Brainard, Georgia, May 1, 1823. His father, Dr. Elizur Butler, was a medical missionary among the Cherokee Indians. Samuel W. Butler was graduated from the department of medicine at the University of Pennsylvania in 1850, and first practiced in Burlington, New Jersey, associating himself with Dr. Joseph Parrish (q.v.), the latter being editor of the "New Jersey Medical Reporter." Dr. Butler soon became its sole editor and proprietor, his natural qualifications for the post being early conceded, and he immediately transformed it into a monthly.

In spite of a growing practice he determined to remove to Philadelphia, in order to prosecute his editorial labors more successfully. The move was made in 1858, and the journal begun as a weekly under the title "The Medical and Surgical Reporter." Dr. Butler was appointed in 1859 superintendent physician of the department for the insane of the Philadelphia Almshouse. This position he held until 1866, but from this date to the close of his life he devoted himself to medical literature, continuing the "Medical and Surgical Reporter," beginning in 1867, the "Half Yearly Compendium of Medical Science" and in 1866, the "Physician's Daily Pocket Record," and in 1872 projecting the "United States Medical Directory." He died January 6, 1874, of pulmonary tuberculosis.

As a contributor to medical science, Dr. Butler's name is connected with the introduction into the materia medica of the "hydrangea arborescens," a remedy used by the Cherokees, and the value of which has been, since his introduction of it to professional notice, fully attested by many practitioners.

Dr. Butler was a Presbyterian, an ardent advocate of the temperance movement, and a citizen worth having.

FRANCIS R. PACKARD.

BUTTERFIELD, John Stoddard (1817-1849) a prominent medical teacher and journalist of Columbus, Ohio, was born in Stoddard, Cheshire County, New Hampshire, on December 2, 1817, and went as a boy to the local school. He worked under Elisha Huntington (q.v.), of Lowell, Massachusetts, took one course of lectures in the Berkshire Medical Institution at Pittsfield, Mass., and finally graduated at the College of Physicians and Surgeons, New York City, in 1841. In the latter he had as a classmate George C. Blackman (q.v.), later the famous surgeon of Cincinnati. After practicing for a brief period in Littleton, Massachusetts, Dr. Butterfield returned to Lowell and entered into partnership with his former preceptor, Dr. Huntington. In 1843, however, on the recommendation of Dr. Willard Parker, (q.v.) he was chosen professor of the theory and practice of medicine in the medical department of Willoughby University, Ohio. This medical school, disrupted by the secession of Dr. Delamater, Dr. Kirtland and other eminent teachers, who united in the organization of the Cleveland Medical College in the neighboring and larger city of Cleveland, was threatened with extinction. Largely by the exertions and influence of Dr. Butterfield, the Legislature of Ohio, in 1846, authorized the removal of the Willoughby Medical College to the city of Columbus where, in the following year, it was combined with the Starling Medical College then just organized. Dr. Butterfield retained his old chair in the new institution, and was chosen at once as dean of the faculty. Soon after, with courage and energy unabated by the manifest evidences of failing health, he founded, in the year 1848, the "Ohio Medical and Surgical Journal," in the service of which he spent the little remainder of his strength until the editorial pen fell at last from his powerless hand and he retired to Salisbury, New Hampshire, in the vain hope of recuperation by rest and change of air. Here he died of general tuberculosis, September 7, 1849, at the early age of thirty-two. He was buried in Lowell, Massachusetts, where his medical career had begun.

Dr. Butterfield took an active part in promoting the interests of his profession, and was a member of the Ohio State Convention and one of the founders of the Ohio State Medical Society in 1846. A fluent speaker, a clear and forcible writer, Dr. Butterfield bid fair to become a power in the ranks of the medical profession of the state, until untimely death intervened. In the "Transactions of the Ohio State Medical Convention" of 1846 are two papers from his pen; one, "A Report on Typhoid Fever" (pp. 19-21), the other, an excellent one, on "Obstetric Auscultation," fully abreast with the knowledge of his day. Both are interesting, even at the present time. He is also said to have been preparing, at the time of his death, a work on Physical Diagnosis.

A journalist of his days sums up the character of Dr. Butterfield as follows: "He was a

ripe scholar, a popular lecturer, a discriminating writer, a Christian without austerity and a gentleman without ostentation."

HENRY E. HANDERSON.

BUXTON, Benjamin Flint (1810-1876), was born in Warren, Maine, November 5, 1810, the son of Dr. Edmund Buxton. He studied medicine with his father, who was killed by being thrown from a horse. The son attended lectures at the Medical School of Maine where he was graduated in 1830. He then took up the loosened threads of his father's practice and soon had all that he could attend to properly. A physician who will travel ten miles on snowshoes, as Dr. Buxton did in the winter of 1837, is bound to succeed. Soon after the celebrated case of Dr. V. P. Coolidge in 1849, who was convicted of murder and supposed to have escaped from prison, Dr. Buxton became restless with the gold fever and made his way to California. The physical labor of digging for gold not agreeing with him, he bought and sold supplies, and chartered a vessel for the Gulf of California, but was shipwrecked off Cape St. Lucas. Arriving after many hardships at Acapulco, Dr. Buxton built there a wooden hospital for the benefit of the floating population of sick or disabled sailors, but after a while fell ill with Chagres fever and nearly died. After convalescence he made his way to New Orleans, practiced there a while, served as ship's surgeon on a steamer between that port and New York, and after two or three years of wanderings came back to his native town to stay.

He served with distinction as surgeon of the Fifth Maine Regiment in the Civil War, but was captured and carried within the enemy's lines. Gen. Beauregard, who had known Buxton in New Orleans, treated him with great distinction, gave him every opportunity to care for the wounded soldiers of his own and other northern regiments, and did what he could to obtain a release from prison which was secured after a few months delay.

Arriving in Maine once more, he took charge of the hospital for the wounded and convalescent at Augusta, for a few months, and regaining health returned again to his regiment as surgeon. He finally resigned in 1864, worn out by overwork. From that time onward to the end of his life he was a physician of the highest standing in Maine, president of the Maine Medical Association (1870-71), writer of papers, amongst others on "Medical Education" and "On Hypodermatic Medication," a political leader in the State Senate, a man of eloquent oratory, an ardent friend and upbuilder of the Maine General Hospital at Portland, and a practitioner and consultant most highly esteemed throughout Knox and Lincoln Counties. He also wrote medical papers of value to the profession, which were published in journals outside of the state.

Dr. Buxton married June 3, 1833, Miss Julia Seavey of Wiscasset by whom he had three children.

His one great characteristic was his downright assertiveness. He never indulged in half-way talk. When a young physician would say to him, this patient "has a kind of a fever," or "is sort of feverish," he would burst out with some remark like this, "Confound it, there is no kind of a fever or sort of a fever, the patient either has a fever or has none at all." He was so highly esteemed in medical circles that when at a meeting of the Maine Medical Association in 1876, his absence was noted, a resolution of regret at his absence and hopes for his recovery was unanimously voted. This is the only instance on record of a resolution of this sort passed by the state society.

After a long and painful illness, Dr. Buxton died October 8, 1876.

JAMES A. SPALDING.

BYFORD, William Heath (1817-1890), Chicago gynecologist, was born in the village of Eaton, Ohio, March 20, 1817, the eldest of three children. His parents were Henry T. and Hannah Byford; the former, a mechanic in straightened circumstances, died when William was only nine. At this tender age he was obliged to seek such work as he could find. At fourteen he was apprenticed to a tailor, and spent the ensuing six years in mastering his trade and acquiring such knowledge of books as was possible. When eighteen he determined to become a physician and chose as his preceptor Dr. Joseph Maddox. Not long after the termination of his apprenticeship, he was examined by a commission and granted a license to practice medicine.

His professional life began in the year 1838 in the town of Owensville, Indiana. Two years later he removed to Mt. Vernon, Indiana, where he married the daughter of Dr. Hezekiah Holland, and during his ten years in this town studied medicine in the Ohio Medical College of Cincinnati, and in 1845 was graduated from this institution. In 1850 he

was called to the chair of anatomy in the Evansville Medical College, and in 1852 was elected to the chair of the theory and practice of medicine in the same college. In 1857 Dr. Byford received a call to the chair of obstetrics and the diseases of women in the Rush Medical College of Chicago, and after serving two years he associated himself with others to found the Chicago Medical College, where he occupied a similar chair until the year 1879, when he was recalled to the Rush Medical College to fill the chair of gynecology. In 1870 he was foremost in championing the cause of medical education for women, participating eagerly in founding the Women's Medical College of Chicago, to which he ever afterwards contributed most liberally in every respect. As a worker in medical societies he was also active, being one of the founders of the American Gynecological Society and an honorary member of the Illinois State Medical Society. Medical journalism, too, owes much to him, for he was editor of the "Chicago Medical Journal" and afterwards of the "Chicago Medical Journal and Examiner."

His publications began in 1847 with a paper on "Cesarean Section," and include a great variety of medical topics, the fruit of a vast professional observation. His literary labors will be best remembered by his works on "Chronic Inflammation and Displacements of the Unimpregnated Uterus," "Practice of Medicine and Surgery applied to the Diseases and Accidents of Women," 1865, and his "Treatise on the Theory and Practice of Obstetrics," 1870.

Dr. Byford's name is familiar in connection with many important innovations in the treatment of gynecological cases. Some of these were in the nature of marked improvements upon former methods in vogue; while they in turn subsequently gave way to still better methods of treatment, others came to remain permanently. It was not in his nature, however, to call loudly for glory, and it not infrequently happened that others received the credit of discoveries of this character which were justly due to him, but which he could scarcely claim without controversy—something that he always abhorred. He was one of the first to observe that the contents of pelvic abscesses often become encysted and undergo subsequent alterations without being discharged; to advocate laparotomy for the relief of rupture of the uterus in cases of extrauterine pregnancy; to employ ergot for the expulsion of uterine fibroids; and in the enucleation of cysts of the broad ligament to advise the termination of the operation by the method of stitching the amputated cyst walls to the edges of the abdominal wound.

Of vigorous physique and temperate habits, old age had apparently done but little to exhaust his powers of mind or body; yet for several years he had been conscious of a cardiac lesion which, however, had not prevented him from actively continuing his usual labors. On the twenty-first of May, 1890, he experienced a severe attack of angina pectoris, which in two hours proved fatal. Three days before his death he performed a laparotomy, and even on the last fatal day he went to work as usual.

Dr. Byford was twice married, his second wife being Lina Flersheim, who with four children, a son and three daughters, the offspring of his first marriage, survived him. The son, Henry T., followed in the footsteps of his father.

BYRD, Harvey Leonidas (1820-1884), physician and army surgeon, was born in Salem, South Carolina, August 8, 1820, descendant of English and Scotch ancestors; his paternal grandfather was in Marion's Brigade in the American Revolution. He received the honorary degree of A. M. from Emory College, Ga., then studied medicine at Jefferson Medical College and at Pennsylvania College, receiving his medical degree from the latter in 1840; an M. D. was received from the University of Pennsylvania in 1867.

After practicing in Salem, in Georgetown, S. C., and in Savannah, Ga., Byrd moved to Baltimore, soon after the Civil War, where he practiced until his death.

He served as professor of materia medica and dean of Savannah Medical College; professor of practice and dean of Oglethorpe Medical College, and was a surgeon in the Confederate army. In 1867 he assisted in reorganizing Washington University Medical School, Baltimore, and was dean and professor of obstetrics there, 1867-72. He was one of the founders of the College of Physicians and Surgeons, Baltimore, in 1872, and served as professor of practice, 1872-73; professor of diseases of women and children, 1873-74. He was one of the founders of the Baltimore Medical College in 1881 and the first president of the Epidemiological Society of Maryland.

For three years Byrd was editor of the "Oglethorpe Medical and Surgical Journal,"

and he edited, also, the "Independent Practitioner," Baltimore.

In 1844 he married Adelaide, daughter of the Hon. John Dazier of Williamsburg, S. C.

He died at Baltimore, Nov. 29, 1884.

BYRD, William Andrew (1843-1887), early appendectomist of Quincy, Illinois, was born in Bath County, Virginia, October 3, 1843, and died in Quincy, Illinois, August 14, 1887. He was largely self-educated, his college training being limited to two years of study at the Missouri Medical College in St. Louis, Missouri, from which he was graduated in 1867. He began practice in Lima, Illinois, a village near Quincy, in the same state. After three years he removed to Ursa, a little nearer Quincy, and in 1873 began his work in the larger city. His predominant interest was in surgery and he soon limited his work largely to this, becoming surgeon to both the local hospitals and drawing patients from a radius of 100 miles to his clinic. He had unusual mechanical ability and initiative, and showed this in instituting and adopting new methods. In 1881 he recognized appendicitis as a surgical disease and made two successful appendectomies for its cure. These cases were reported to the surgical section of the American Medical Association. He became greatly interested in abdominal surgery, made many successful intestinal resections, devising an enterotome to aid in the closure of the artificial anus. He also devised an operation, known by his name, for the cure of imperforate anus in the new-born. While much of his work has been largely superseded by newer methods, he is still regarded as a pioneer in abdominal surgery. In recognition of this he was made a professor of abdominal surgery, a chair created especially for him in the Missouri Medical College where he taught this one month each year. He was also one of the founders of the American Surgical Association.

Dr. Byrd combined many charming personal traits in social intercourse, unusual originality and initiative combining a wide and deep acquaintance with the literature of his profession, especially that part of it having to do with surgical pathology and surgical practice. He died suddenly at the height of his activity when only forty-four, after having been honored by the highest offices in the gift of the local and state society and surgical section of the American Medical Association, as well as by the Mississippi Valley Medical Association, of which he was one of the original members.

Among his pamphlets are found: "Extirpation of Rectum without destroying Sphincter Ani Muscle," 1880; "Abdominal Section in the Treatment of Ulceration and Perforation of the Cecum and Vermiform Appendix," 1881; "Lumbo-colotomy in the New-born for Relief of Imperforate Rectum," 1881; Address in surgery: "Excisions of Portions of the Alimentary Canal," 1882.

EDMUND B. MONTGOMERY.

BYRNE, John (1825-1902), of Brooklyn, pioneer in the cautery treatment of uterine cancer, was born October 13, 1825, in Kilkeel, County Down, Ireland, the son of Stephen and Elizabeth Sloane Byrne. His father, a prominent man in his part of Ireland, engaged in large and successful mercantile pursuits. After leaving the primary school in his own village, John was sent to Belfast, where he received a classical education. In 1842 he began the study of medicine and was graduated from The Royal Institute in Belfast in 1844 and from the University of Edinburgh in 1846. Later he attended the universities of Glasgow and Dublin. Graduating about the time of the outbreak of the great typhus and typhoid epidemic in Ireland, he had ample opportunity for doing much to aid his afflicted and famished fellow countrymen, and at the same time gain his first experience as a practitioner. He was in charge, during this epidemic, of the fever hospital in Kilkeel, his native town, where he endeared himself to the poor by his devotion, and gained recognition and commendation from the authorities by his successful use of advanced methods. Two years after his graduation he came to New York. In 1852 he received an "ad eundem" degree from the New York Medical College. He began the practice of medicine in Brooklyn in 1848, and at once became identified with the most advanced and progressive members of his profession. He was one of the founders of the Long Island College Hospital in 1856, where he was visiting physician and later clinical professor of uterine surgery. In 1858 he was appointed surgeon-in-chief to St. Mary's Hospital for Women for the exclusive treatment of surgical diseases of women, a position he held for the rest of his life. This later grew to be a large general hospital, the active direction of which he continued up to the time of his death. Attracted by his reputation and re-

ferred to him by many physicians, there flocked to this hospital women afflicted with all kinds of uterine diseases, but especially those suffering from the ravages of cancer. It is in this field that John Byrne attained his eminence among gynecologists, by being the first to advocate and use electrocautery in the treatment of cancer of the uterus. Being a man of rare mechanical skill and a life-long student of physics he invented, after much disappointment and long experiment, a liquid storage battery that would give current enough to amputate the diseased cervix with his cautery knife. This operation of "high amputation" he perfected and continued to perform and advocate with great energy for many years. In 1872 he published a work entitled "Electrocautery in Uterine Surgery." The material which came to him was enormous, and his results, published in 1889 in a monograph, entitled, "A Digest of Twenty Years' Experience in the Treatment of Uterine Cancer," have never been equalled. His earliest complete removal of the uterus by cautery was performed in 1895. His operation attracted attention abroad and he was invited to operate and demonstrate his methods in the larger clinics of France and Germany.

Dr. Byrne was a prolific and convincing writer and contributed articles on many gynecological subjects, but his principal claim to distinction rests upon his many articles on the treatment of uterine cancer by means of the cautery knife. Dr. Byrne was active in many societies. He was a founder of the American Gynecological Society and president in 1892, a member of the New York Obstetrical Society, 1874-75, and first president of the Brooklyn Gynecological Society, 1890-91. The degree of LL. D. was conferred upon him by the College of St. Francis Xavier, New York, in 1896.

In religion Dr. Byrne was a Roman Catholic, for which he manifested the proverbial love and loyalty of the Irish race. He was married and his family life was ideally happy, being blessed with three sons and four daughters.

In 1902 Dr. Byrne made his annual visit to Europe for rest and diversion. His health had always been robust but his years were telling upon him. After a short illness he died in Montreaux, Switzerland, on October 1, 1902 at the age of 76. By his friends he will be remembered as a man of scholarly attainments, strong convictions, loyalty to friends, a cheery disposition that was infectious, a capacity for hard work seldom equalled, and an unselfishness of disposition.

VICTOR L. ZIMMERMANN.

CABELL, James Lawrence (1813-1889). William Cabell (q.v.), founder of the Cabell family in Virginia, a surgeon and citizen of the eighteenth century, had for a grandson one Dr. George Cabell, Jr., who married Miss Susanna Wyatt. To them was born August 26, 1813, James Lawrence Cabell. As a boy he went to private schools in Richmond, and to the University of Virginia, where he matriculated in 1829. An earnest and diligent student he obtained his A. M. in 1833. The following year he continued the study of medicine in the University of Maryland, and took his M. D., having taken his first course of lectures at the University of Virginia. In 1873 Hampden-Sydney College conferred upon him her LL. D. To further his studies, he went to Paris, and continued to study there until 1837, when he was called to the chair of anatomy, physiology and surgery in the University of Virginia, which he filled with eminent ability until 1856, when a chair of anatomy and materia medica was created, he continued to teach physiology and surgery, and for a time comparative anatomy, until his retirement from active work at the end of the session of 1888-89, after over fifty years of active service. He was a member of the Medical Society of Virginia, and in 1876 was elected president.

During the war between the states, Dr. Cabell was in charge of the Confederate States Military Hospital at Charlottesville, Virginia, from July, 1861, to May, 1862, and again from September, 1862, to the end of the war.

Dr. Cabell was a man of zeal and learning, both of a professional and general nature, and wonderfully well rounded in his acquirements. For half a century the greater part of his energies were devoted to teaching and it was as a teacher that he stood preeminent. An able diagnostician and possessing a vast fund of knowledge, his services as a consultant were much sought.

While by no means a voluminous writer, he was the author of a book and some valuable papers. His most notable work, entitled "Testimony of Modern Science to the Unity of Mankind," published in 1857, was called forth by Gliddon and Notts' "Types of Mankind," and in it he skilfully combated the views of Gliddon and Notts as tending to

unbelief, and showed that the Bible and science are not antagonistic. Every thing that he wrote was characterized by excellence of style, force of reasoning, and the importance of the subjects discussed.

The following are some of his contributions to medical literature: "Syllabus of Lectures on Physiology and Surgery," 1857; "Gunshot Wounds of the Head," "Richmond Medical Journal," vol. i.; "On the Treatment of Acute Pneumonia," "Ibid.," vol. iii. "Oxygen as a Remedy in Disease," "Virginia Medical Monthly," vol. i.; "Sanitary Conditions in Relation to Surgical Operations," "Virginia Medical Monthly," vol. ix.; "Defective Drainage as a Cause of Disease within the Limits of Virginia," "Transactions of American Medical Association, 1875."

He married in 1839 Margaret Gibbons, but had no children. He adopted two nieces who grew up to comfort his declining years. After some months of failing health, he passed away on the thirteenth of August, 1889, at the house of Major Edward B. Smith, in Albemarle County, Virginia.

The University of Virginia owns a portrait of Dr. Cabell, and there is another in the collection of portraits in the library of the Surgeon-General, Washington, D. C.

ROBERT M. SLAUGHTER.

CABELL, William (1700-1774), pioneer physician, the founder of the Cabell family in Virginia, was a grandson of William C. Cabell, of Warminster, England, and the son of Nicholas Cabell. He was born in Warminster, March 9, 1700. He studied medicine in London, and was a graduate of the Royal College of Surgeons. There is a tradition that he practiced for several years in London with success, and then entered the British Navy as a surgeon. He came to Virginia in 1724 or 1725, and after living for a short time in Williamsburg and in Henrico County, purchased land and settled in Goochland County. In 1726, he was deputy to Capt. John Redford, high sheriff of Henrico, and in the same year married Elizabeth Burks. She died in September, 1756, probably of pernicious malarial fever,—he says in his diary that she died of bilious fever and coma. We find him in 1728-29 one of the justices of the county of Goochland, and in the latter year appointed county coroner. In 1735 he was called to England and did not return until 1741, his wife in the meanwhile managing his affairs in Virginia. He next took up land along the James River in Nelson County, fifty miles west of any then existing settlements. This tract of land extended for twenty miles along the river and contained 8,000 acres of river bottom land. He built a home upon this estate, which he named Liberty Hall, and lived there for the rest of his life. He also established upon it a town, calling it Warminster, which became, and was for fifty years, an important point of internal commerce.

There being no field for practice of medicine in this unsettled country, he acted as assistant surveyor to his friend, Col. John Mayo, and after Mayo's death in 1744, to Col. Joshua Fry until 1753, when he turned over this business to his son, John. The country having become better peopled, he now resumed the work of his profession, and did an extensive practice in the counties of Nelson, Albemarle, Augusta, Bedford, and Prince Edward. He also maintained in his home a private hospital for patients from a distance, and performed many operations. He evidently did not hesitate to guarantee cures, as is shown in his schedule of charges. For instance, his ordinary charge for an amputation of the leg or arm was seven pounds ten shillings, but with a guarantee, twelve to fifteen pounds. He also had wooden legs made for patients, the price being ten shillings. The hospital patients paid for their board and "necessaries furnished," but professional services were contracted for, generally on the no cure no pay plan. His charges per visit were from one to five pounds, Virginia currency, according to distance. His materia medica embraced various purges, boluses, cordials, pills, blisters, drops, powders, plasters, sweats, emetics, etc., and these specifics, Turlington's balsam, Bateman's drops, Stoughton's bitters and Anderson's pills. Proprietary remedies were evidently in use even in that day. That he was practicing as late as 1770 is shown by the following entry in his diary: "Attended (September 1770) Col. John Fry's wife with dead child three nights and two days."

In person, he is described as having been tall and spare, but lithe and active, and of great powers of endurance. His face was handsome until disfigured by scars resulting from the bursting of a gun in his hands. He was, too, a man of moral and physical courage, the latter being strongly evinced when he, as he said, "was the occasion of carrying the settlements at least fifty miles

to the westward, when no other man would attempt it." A scientific man and a reader, he had a large library and constantly added to it the latest medical books. A good churchman and a warden, he was, nevertheless, a dear lover of fine horses and kept a good stable which he himself looked after, and was always ready to risk a small stake on one of his horses.

He was twice married, his second wife being Mrs. Margaret Meredith, whom he married in 1762. By his first wife he had a daughter and five sons, all of whom, except the fifth, who died young, were prominent citizens of the colony.

His health began to fail in 1772, and after a long illness, he died on the twelfth of April, 1774, at his home near Warminster.

ROBERT M. SLAUGHTER.

CABOT, Arthur Tracy (1852-1912), was born in Boston, January 25, 1852, third son of Dr. Samuel (q.v.) and Hannah Jackson Cabot. He had a stub-twist ancestry, Scotch, Irish, English, Norman French (Chabot, Isle of Jersey) blood mingling in his veins. In him the contrasted qualities of his parents were harmoniously united to a remarkable degree. Ardent and impulsive, he was yet rationally cautious. He valued the opinion of others and weighed it, but reached his own conclusions which were nearly always sound, and then fearlessly followed. If he was or seemed prejudiced, the cause was apt to lie in his hatred of injustice and moral obliquity. No form of apparent self-interest ever swayed his decision. He took his A. B. at Harvard in 1872, his M. D. in 1876, and served a year as surgical interne at the Massachusetts General Hospital. He then went abroad, giving special attention to surgical pathology, but neglecting no opportunity of laying a firm foundation in all pertaining to the healing art.

So many-sided was his life that clearness and justice alike seemed to warrant separate treatment of the man, the surgeon, and the public servant. Of Arthur Cabot, the man, I have already spoken somewhat; it remains to add that it is hard to think of a manly outdoor sport which he did not enjoy and enter into as far as he could without neglect of duty. Exercise in the saddle, riding to hounds, polo, fishing and shooting, yachting, golf, tennis, and squash. Of art he had a deep love and appreciation, collecting a few very choice pictures without the aid of experts, so-called. He sketched in water colors, was an active trustee of the Boston Museum of Fine Arts, and officially concerned with the Fogg Art Museum at Cambridge. His diversified interests, elevation of character, and real warmth of heart made him more and more sought after socially. A certain grimness of manner wore smooth in later life, unless stimulated by contact with what he deemed unworthy.

Cabot's training for professional life antedates the general adoption of Listerism, i. e., clean surgery, an outgrowth of the work of the great Pasteur. His interest in surgical pathology has been mentioned. After his father's death, he and his brother, Samuel, founded at the Massachusetts General Hospital the Samuel Cabot Fund for Pathological Research. The income of this fund provides that a pathologist be on hand operating days at the hospital, and make such examinations as the surgeon may require to determine the scope and character of his operation. If not the first, it was surely an early effort to make thorough pathological study go hand in hand with the operation. In London he heard Lister's inaugural address at King's College, and ever after kept to the crest of the advancing wave of clean surgery. On his return, in 1877, he took up general practice. The experience thus gained can be safely said to have harmed him neither as a man nor as a surgeon. Without this developmental training it may be well questioned whether he would have been able to perform the great public service of his later years, of which more below. Increasing surgical work at the Carney, Children's, and Massachusetts General Hospitals successively compelled him, after about ten years, to confine himself to surgery. He was visiting surgeon at the Massachusetts General Hospital from 1886 to 1907. Dr. Henry J. Bigelow early recognized Cabot's quality and made him his heir in bladder surgery.

It appears that Cabot did the first successful abdominal operation within the Massachusetts General Hospital in 1884 on a case of strangulated umbilical hernia. He had assisted his father in 1874 and 1875 in two abdominal operations on hospital patients, though not within the hospital walls. He became the leading genito-urinary surgeon in New England, while second to none anywhere. He always remained a general surgeon. As a general surgeon he was eminent; as a genito-urinary surgeon preeminent.

From 1885 to 1896 he was clinical instructor, and then instructor in genito-urinary surgery in the Harvard Medical School, and would undoubtedly have gone to the top on his merits had he not been chosen Fellow of the University in 1896. The President and Fellows of Harvard, generally known as the Corporation, are seven in number, including the President and Treasurer "ex officiis." They may be roughly compared to the United States Senate; the Overseers, elected by the Alumni for six year terms being the House. All important academic questions need concurrent action by the two governing boards, but the management of the funds rests entirely, and much of the initiative lies in the hands of the Corporation. The varied interests and the responsibility involved, the wisdom and devotion required go without saying. He was president of the Massachusetts Medical Society in 1905 and 1906, and did much to excite the active interest and participation of the profession in the crusade against tuberculosis. He was appointed in 1907, by Governor Guild, a trustee of the State Hospitals for Consumptives, was elected chairman, and threw himself heart and soul into the work. Three hospitals were admirably built and equipped on wisely selected sites within the appropriation, at a cost of about seven hundred dollars a bed. His interest was enlisted in school hygiene. He was associated in the Congress of School Hygiene in London in 1907, was a prime mover in the organization of the American School Hygiene Association in 1908, and in the holding of the fourth Congress in Buffalo in 1913, serving as Chairman of the Executive Committee of Arrangements. His modesty was on a par with his efficiency and devotion. In 1910 he retired from all practice that he might give himself up to wider activities. During thirty years he published over one hundred and twenty papers, the last, in the "Atlantic Monthly" for November, 1912, a plea for the prevention and treatment of tuberculosis in childhood. He was a prized member of many medical societies and of the American Academy of Arts and Sciences.

This is a meager account of the life of one foremost as a man, a surgeon, a citizen. In each capacity "totus, teres atque rotundus." A rarely balanced youth was trained professionally before scientific progress had made it nigh inconceivable that an active surgeon should lay aside his knife for the kind and quality of work to which Cabot's last years were devoted. He died November 4, 1912, leaving a widow, Susan, daughter of the late George O. Shattuck, and a memory, sweet to his friends, stamped on a grateful community.

FREDERICK C. SHATTUCK.

CABOT, Samuel (1815-1885), was born in Boston September 20, 1815, the son of Samuel and Elizabeth Perkins Cabot, and grandson of Thomas Handasyd Perkins, a merchant of the seventeenth century. He was graduated from Harvard College in 1836 and from Harvard Medical School in 1839, afterwards studying abroad from 1839-1841, being a fellow student of Nélaton in the wards of Velpeau and also studying under Louis. At the urgent request of his father, Dr. Cabot made investigation of the homeopathic system of therapeutics in the wards of Hahnemann, the founder of homeopathy. Animated by the exact scientific spirit that he had acquired under Louis, he found much to criticise in the loose diagnostic methods in the Homeopathic Hospital, and was not converted to homeopathy as his father had hoped.

Dr. Cabot was a widely known ornithologist and collected birds throughout his boyhood and early professional life. In the autumn of 1841 he went as ornithologist with the Stevens Exploring Expedition to Yucatan. The year spent in investigating the ruins of the older civilization in Central America was full of interest. The people of Yucatan, learning that he was a surgeon, flocked to him for operations and he had as patients many of the leading people of the country. He returned from this expedition in 1842 with a valuable collection of birds and notes on the birds of Yucatan, many of which were first described by him. For some years he was curator of the Boston Society of Natural History, although in those days his own collection of birds was considerably larger than that of the society.

He was one of the early opponents of negro slavery, and aiming to do practical work in limiting its spread, he joined the Emigrant Aid Society, of which he became secretary. He was for four years in close touch with the emigrants in Kansas and during the days of border warfare supplied the settlers with rifles bought by subscription.

During the Civil War he was sent twice on special missions to the army. At the request of Gov. Andrew he served as a volunteer surgeon at Camp Winfield Scott near Yorktown in April and May, 1862. He returned north with a shipload of those wounded at the

battle of Williamsburg, and in 1863 he went as inspector of army hospitals along the Atlantic seaboard.

According to the fashion of those days he had a general practice, although his interests were surgical, and he was visiting surgeon at the Massachusetts General Hospital from 1853-1884. When antiseptic methods were introduced he was nearly sixty, but still young enough to enthusiastically adopt them. As a result he had the first two successful ovariotomies in the record of the Massachusetts General Hospital, and thus ushered in the era of abdominal surgery at that institution.

June 19, 1844, Dr. Cabot married Hannah Lowell Jackson, and had eight children.

Dr. Cabot died in Boston April 13, 1885. One son, Arthur T., (q.v.) became a surgeon.

ARTHUR TRACY CABOT.

CADWALADER, Thomas (1708-1779), of Philadelphia, was the son of John Cadwalader, who came to Pennsylvania from Wales in 1689, and of Martha, daughter of Dr. Edward Jones. When nineteen or twenty years of age, his father sent him to England and France to complete his medical education. In France he is said to have studied at Rheims University and in England to have spent a year studying and dissecting under William Cheselden, the distinguished anatomist and surgeon. On his return to Philadelphia, he soon secured a large practice and became a very influential citizen. He was associated with Franklin in the establishment of the Philadelphia Library and was among the first in this country to adopt the method of inoculation as a preventive against smallpox.

According to Casper Wistar, Cadwalader, upon his return from Europe, "made dissections and demonstrations for the instruction of the elder Dr. Shippen and some others who had not been abroad." According to Dr. Charles Winslow Dulles, the date of this instruction was probably 1730 or 1731, because this was the time of his return from Europe, and the time when the elder Dr. Shippen was eighteen or nineteen years old and engaged in his medical studies. The place in which these instructions were given, Wistar says, "was in a building on the back part of a lot, on which the Bank of Pennsylvania now stands."

In 1738 Dr. Cadwalader married Hannah, daughter of Thomas Lambert, Jr., of New Jersey, and for several years spent the greater part of his time in that state, near the site of the present city of Trenton, but about 1750 he appears to have returned to Philadelphia.

In 1742 he performed an autopsy said to be probably the first scientific one in this country. The only known publication of Dr. Cadwalader's is an essay, the title-page of which reads, "An Essay on the West India Dry Gripes, to which is added an extraordinary case in physics. Philadelphia. Printed and sold by Benjamin Franklin, MDCCXLV." This was one of the earliest medical monographs published in America. Dr. Cadwalader was one of the founders of the Pennsylvania Hospital, and trustee of the Academy and College of Philadelphia. He was one of the original members of the Philadelphia Medical Society, and the first named of the three vice-presidents chosen when the American Society for Promoting Useful Knowledge was consolidated with the American Philosophical Society in 1768, of which Franklin was president. He died November 14, 1779, in Philadelphia.

The grace and attractiveness of his deportment, on one occasion, was the means of saving his life. In 1760 Lieutenant Bruluman of the Provincial militia was executed at Philadelphia for the murder of a young gentleman named Scull. The murderer was weary of life, and had resolved to shoot the first person he met and then give himself up to justice. He walked out with "a fusil in his hand." The commons, now Penn Square in Philadelphia, abounded with game. He met Dr. Cadwalader who bowed and said: "Good morning, sir; a fine day for your sport." Bruluman afterwards declared that though Dr. Cadwalader was an entire stranger there was in his manner something indescribable, which made it impossible to kill him. His resolution to kill someone, however, remained, and he killed Mr. Scull.

Dr. Cadwalader's professional services during the war of the Revolution seem to have been restricted to the occasional performance of duties laid upon him by Congress and assisting his friend and junior, Dr. Morgan, who was at that time director-general of the military hospitals. It is supposed that Dr. Cadwalader had from him some appointment, but I cannot find any satisfactory evidence of this. It is certain that Congress from time to time requested him to do for it certain things among which was one on January 30, 1775, that he inquire into the state of health of Gen. Prescott, a British prisoner,

and the sanitary conditions in which he was placed in the jail. This duty Dr. Cadwalader performed so promptly and with such judgment and humanity that Gen. Prescott undoubtedly owed his life to him. Being paroled on April 9, he carried with him so great an appreciation of the services of Dr. Cadwalader, and so high a regard for him as a man, that when his son, Col. Lambert Cadwalader, was taken prisoner at the capture of Fort Washington, in November of the same year, Gen. Prescott secured his prompt release. Another son was General John Cadwalader, a warm friend of General Washington.

FRANCIS R. PACKARD.

CALDWELL, Charles (1772-1853), physician and author of Louisville, was born in Caswell County, North Carolina, May 14, 1772. His father came to this country from the North of Ireland and Charles probably inherited from his father his tenacity of purpose and possibly a certain belligerency which characterized his whole life. His opportunities for education were very limited, yet so great was his mental ability and activity that at the age of eighteen he was elected principal of a literary academy. Having decided to make medicine his profession, he spent a year and a half with a preceptor and then went to Philadelphia where he entered the University of Pennsylvania in 1792. Here he was pupil and friend of the eminent Dr. Benjamin Rush, (q.v.) but his overweening self-confidence and self-assertiveness finally made a breach in their friendship and aroused the antagonism of Rush and also of the trustees. He was surgeon of a brigade during the "Whiskey Insurrection" and distinguished himself in the yellow fever epidemic in 1793. In 1810 he filled the chair of natural history in the University of Pennsylvania, and, on moving to Lexington, Kentucky, was professor of materia medica in Transylvania University from 1818 to 1837, the medical department of which he helped to found. His brilliancy as a writer and speaker undoubtedly did much to attract the very large classes which soon gathered at Lexington.

With the increasing facilities for travel Lexington soon felt the keen competition of the rival towns, Louisville and Cincinnati. Public-spirited citizens planned the establishment of medical schools and sought the valuable aid of Dr. Caldwell. He decided upon Louisville and, in 1837, went to that city and by his eloquence and zeal soon secured the active cooperation of leading citizens in founding the Louisville Medical Institute, afterwards merged into the University of Louisville as its medical department. With this institution he continued as professor of materia medica until within a few years of his death which occurred in Louisville on July 9, 1853.

In person, Dr. Caldwell was tall and commanding; a fluent, forcible and graceful speaker; a writer gifted with an unusual vocabulary, singularly clear and incisive. His catalogue of published writings enumerates over two hundred different essays, addresses, pamphlets and books. His bent of mind was controversial and was the cause of the many antagonisms which embittered his life. The strong self-reliance, assertiveness and egotism which perhaps offended many were the necessary elements of character which enabled him to be the "pioneer of medical schools and medical philosophy in the Mississippi Valley and premier in the founding and establishment of two of its most famous schools." A full list of his many writings is given in his Autobiography published by Harriot W. Warner, Philadelphia, 1855.

PHILIP F. BARBOUR.

CALDWELL, Eugene Wilson (1870-1918), a martyr to Roentgen-ray science, the son of W. W. and Camilla Kellogg Caldwell, was born at Savannah, Missouri, December 3, 1870, and died in New York June 20, 1918, from burns sustained the day before while making Roentgen-ray experiments.

He was graduated at the University of Kansas in 1892, with the degree of B. S. In 1905 he received his M. D. at the University and Bellevue Hospital Medical College, N. Y., subsequently being a special student of the College of Physicians and Surgeons, 1898-99.

Dr. Caldwell spent the rest of his life, after graduating in medicine, in New York, where he was always interested in electrical work. He was engaged in experiments in wireless telephony for the United States Lighthouse Establishment, 1893-95; assistant in the engineering department of the New York Telephone Co., 1895-97; after this he devoted all his time to experimental work with Roentgen-rays and their practical work in diagnosis. He invented the Caldwell Liquid Interrupter, tubes for therapeutic uses, and many other appliances used with the Roentgen-rays. He was a real inspiration to his co-workers at the New York Orthopedic Hospital and the

Neurological Institute where he was on the staff as physician and roentgenologist. Other appointments he had were: Physician to the roentgen department, Presbyterian Hospital; director of the Edward N. Gibbs Memorial X-ray laboratory, Bellevue Medical College. His appointment as major in the army came after some years as lieutenant in the M. R. C. and he was keenly interested in the X-ray treatment for the wounded soldiers, when he himself was bidden by death to lay down his arms and leave others to carry on the war against disease.

Dr. Caldwell was a member of the Roentgen Society, London; American Roentgen-Ray Society; New York Academy of Medicine, and New York Electric Society He wrote "The Roentgen Rays in Therapeutics and Diagnosis" (with William A. Pusey), 1903.

Dr. Caldwell married Elizabeth Perkins in 1913.

CALDWELL, Frank Hawkins (1857-1906), railway surgeon of Georgia, was born in Rome, Georgia, August 25, 1857, at the Rome Female College, of which his father was president. He came of clerical ancestry, for J. M. Caldwell, his father, was a native of North Carolina where his ancestors for three generations had been Presbyterian ministers and for four generations preceding had been ministers in Scotland and Ireland. His mother was C. E. Sivy (Sibby) of Wolfboro, New Hampshire, a daughter of David Thurston Sivy (Sibby), M. D.

During Dr. Caldwell's early childhood his parents were forced by the Civil War to remove to North Carolina, from which they did not return until 1871. Young Caldwell went to the University of Georgia at Athens. He studied medicine under Dr. J. B. Holmes, in 1878 matriculating at Jefferson Medical College, Philadelphia, and graduating there in 1880.

In March, 1882, he was appointed chief surgeon of the Florida Southern, a division of the "Plant System." He introduced what is known as the "hospital system" which was developed under his management to a high degree of efficiency. He was made chief surgeon of the entire group of railways and under his wise direction, what is known as the Hospital and Relief Department, was inaugurated. This not only provided medical and surgical attention in well-equipped hospitals for employés and their families but also life insurance and an endowment fund for sick and injured. In 1898 his office was removed to Waycross, Georgia, where a great central hospital was erected as a center of a system of hospitals in Georgia, Florida and Alabama, covering all the lines of associated railways.

In October, 1899, after sixteen years, he resigned his position with the Plant System and soon removed to Tampa, Florida, where, after five laborious years of hospital and private practice, he died in the early days of 1906.

He was a very active member of the Georgia State Medical Association, the New York Medico-legal Association, and president of the Florida State Medical Association.

During the great yellow fever epidemic at Jacksonville he volunteered his services and was assigned charge of St. Luke's Hospital and, owing to recognized executive ability, he was called to the head of the relief work of the entire city.

Dr. Caldwell was a man of fine personal appearance, cultured and genial.

On December 29, 1880, he married Nellie G. Word, only daughter of Dr. T. J. Word, of Rome. His first wife died soon after his removal to Tampa. After some years he remarried, July 12, 1904; this time Mary Spencer, who survived him with one son, John Word.

FRANCIS C. CALDWELL.

CALHOUN, Abner Wellborn (1846-1910), promoter of the Atlanta Medical College, was born in Newnan, Coweta County, Georgia, April 16, 1846. His father was Dr. Andrew B. Calhoun, of Newnan, and his mother Susan Wellborn.

Abner was less than sixteen when he became a soldier of the south. He went through four years' struggle as a private, and surrendered with General Lee at Appomatox. He began the study of medicine under his father and was graduated from the Jefferson Medical College of Philadelphia in 1869. After a few years' practice with his father he went to Europe to perfect himself as a specialist, having selected the eye, ear and throat as his line of work and, after two years in Europe, came home and settled in Atlanta, associating himself with Dr. Willis Westmoreland (q.v.). Shortly after becoming a specialist Dr. Calhoun was asked to become a member of the faculty of the Atlanta Medical College. At the college there was an unused basement, and this Dr. Calhoun fitted up at his own expense, and there he cared for his poor patients. It was his money which

bought provisions to be prepared by the janitor for these luckless ones.

The Atlanta Medical College was one of the father's chief interests and much of its success was due to his hard work. When steps were being taken to enlarge the college he gave $10,000 of the fund used. He contributed many articles to medical literature and was very keen on all matters of civic hygiene.

Dr. Calhoun married in 1877 Lula Phinizy, of Athens, daughter of Ferdinand Phinizy, and had four children, two sons and two daughters. Dr. Phinizy Calhoun was associated with his father in his professional work.

CALHOUN, Samuel (1787-1841), dean of Jefferson Medical College, was born at Chambersburg, Pennsylvania, in 1787 and took his bachelor of arts degree at Princeton University in 1804, that of doctor of medicine at the University of Pennsylvania in 1808. For nine years he was a member of the Jefferson Medical College faculty, holding various professorships. Among these were materia medica and medical jurisprudence. For three years he was dean at Jefferson. He appeared as expert witness in a number of important trials. He was an intimate friend of George McClellan, (q.v.) and, on the latter's exclusion from the Jefferson Medical College, assisted his old-time friend in the foundation of the medical department of the Pennsylvania College.

The spelling of his name he changed, in 1832, from Calhoun to Colhoun—a fact which has caused no little confusion in the tracing of his personality.

Dr. Calhoun, or Colhoun, was a large and handsome man, and of a genial and generous nature. He used to make excursions into the squalid portions of the city for the purpose of taking poor old men and women into restaurants and giving them hot meals at his personal expense. He never married. He died in 1841.

THOMAS HALL SHASTID.

CALLENDER, John Hill (1832-1896), editor and alienist, was born near Nashville, Davidson County, Tennessee, November 28, 1832. His father was Thomas Callender, of Philadelphia, Pennsylvania, tobacconist, merchant, political writer and founder of "The Richmond Recorder." His mother was Mary Sangster, born in Fairfax County, Virginia, January 10, 1805. In 1851 he studied law in the office of Nicholson and Houston, Nashville, and soon after in the law department of the University of Louisville. The illness of his father, followed by his death, recalled him in a short time, and his legal studies were suspended and finally abandoned. In 1853 he began to study medicine, taking his degree at the University of Pennsylvania in 1855. In December, 1855, he became joint proprietor and editor of the "Nashville Patriot," a position he held for three years when he was made professor of materia medica and therapeutics in the Shelby Medical College, Nashville, Tennessee, until the Civil War.

He was one of the witnesses summoned to give expert testimony in the celebrated trial of Charles J. Guiteau on the question of his sanity, and after a laborious investigation pronounced him not insane, though on leaving home he had a different impression. He was "facile princeps" in Tennessee as an authority in cases of insanity and diseases of the nervous system, and among the best of the alienists of the United States.

In 1868 he became professor of materia medica and therapeutics in the medical department of the University of Nashville, and in 1870 was appointed medical superintendent of the Tennessee Hospital for the Insane. The same year he was transferred to the chair of diseases of the brain and nervous system in the University of Nashville, and in 1880 held the chair of physiology and psychology in the University of Nashville and Vanderbilt University. "I have a lively recollection," said his colleague, Dr. Daniel Wright, "of his lectures, which had for their main subject the mode of action of remedies in the human system. In treating this subject he manifested a profound acquaintance for so young a man with the subjects of pathology and therapeutics, and applied that knowledge with an originality of thought still more remarkable."

He married at Nashville, Tennesee, February 24, 1858, Della Jefferson, daughter of Dr. John Pryor Ford, and had one child, a daughter.

Dr. Callender died in Nashville, Tennessee, in August, 1896, of acute colitis.

WILLIAM D. HAGGARD.

CAMPBELL, Francis Wayland (1837-1905), of Montreal, Canada, son of Rollo Campbell, was born in Montreal, November 5, 1837, graduated at McGill in 1860 and was first registrar of the medical faculty of

Bishops College, Montreal when it was organized in March, 1871. He was married in 1861 in Greenock, Scotland, to Agnes Stuart Rodgers of that town. In 1883 he was elected dean and professor of medicine, positions which he held till 1905, when the medical faculty was amalgamated with McGill University. For ten years he was secretary of the College of Physicians and Surgeons of Quebec. He received the degree of M. A. in 1871 and D. C. L. in 1895 from the University with which he was associated, and he was L. R. C. P., London, England. He was editor of the "Canada Medical Journal" from 1864 to 1872, and of the "Canada Medical Record" for thirty years more. For forty-three years he was connected with the militia of Canada and rose to the rank of surgeon-lieutenant-colonel. He died on May 4, 1905, from diabetes.

ANDREW MACPHAIL.

CAMPBELL, George W. (1810-1882), of Montreal, Canada, was born in Roseneath, Dumbartonshire, Scotland, in 1810. His father was deputy-lieutenant of Dumbarton, his mother a daughter of Donald Campbell of Ardnacross, Argyleshire. A graduate in Arts of Glasgow, he entered early on his medical studies, which he pursued in the universities of Glasgow and Dublin. After graduating with distinction at the former in 1832, he came to Canada in May, 1833, and settled in Montreal, then a very small town. He took up his residence in St. Gabriel Street close to the river bank and with singular good fortune at once took a leading position in the profession as well as in society.

In 1835 he was appointed lecturer on midwifery and professor of surgery in McGill University. He taught midwifery until 1842 and surgery until 1875, when he resigned. In 1860 he became dean of the medical faculty, a position which he held up to the very hour of his death. His term of active service as surgeon of the Montreal General Hospital extended over a period of thirty years and he died as senior member of the consulting staff and one of the committee of management. Surgery was always his forte and his great reputation was chiefly made by many successful achievements in operative work. His style of lecturing was clear, forcible and impressive. Hundreds of practitioners throughout the continent and elsewhere owe the foundations of their surgical knowledge to his early teaching. For forty years he dominated medical teaching and practice in Montreal.

He did not write much for the medical journals. "Deeds, not words," was his motto, but his work as a successful teacher and as a member of the corporation of the university, led to the bestowal upon him of the honorary degree of LL. D. in 1860. Among the cases recorded by Dr. Campbell are: "Aneurysm of the innominate artery-ligature of the common carotid;" "Osteocephaloma of the humerus—amputation at the shoulder-joint;" "Ligature of the gluteal artery for traumatic aneurysm," and "Excision of the elbow."

For some years previous to his death Dr. Campbell suffered from bronchitis and was obliged to retire from active practice. He had a touch of pneumonia when in London on a visit in 1882, but being somewhat better he went to Edinburgh, where more serious symptoms showed themselves, and he died on the thirtieth of May of that year.

CAMPBELL, Henry Fraser (1824-1891), physiologist and gynecologist, was born in Savannah, Georgia, February 10, 1824, the son of James Campbell, a native of County Antrim, Ireland. His mother, Mary R. Eve Campbell, was the only daughter of Joseph Eve, the inventor of the brush and roller cotton gin. Henry was an uncle of Dr. Paul F. Eve (q.v.).

After an academic education Dr. Campbell at fifteen began to study medicine and entered the Medical College of Georgia (later the medical department of the University of Georgia), graduating in 1842 at the early age of eighteen. The same year he began the practice of medicine in Augusta, Georgia where, except during the Civil War and during 1866-67, when he lived in New Orleans, Louisiana, he remained until his death. In the later years of his life, though having a large consulting practice, he devoted especial attention to surgery and gynecology. In general surgery he was noted as a lithotomist and for operations for the arrest of inflammation by ligation of the main arterial trunks. For lithotomy on the male he invariably performed the operation of Dupuytren and invented the grooved tampon "en chemise" which added greatly to the safety of this procedure. His contributions to the armamentarium of the gynecologist are many and valuable: the sliding-hook forceps for the operation for vesicovaginal fistula, the soft-rubber spring stem pessary for uterine flexions, the cushioned protean pessary for uterine versions, and the pneumatic repositor for the "self-replace-

ment" of uterine dislocations. As a physiologist his investigations were principally into the structure and functions of the nervous system. In 1850 he demonstrated the "excito-secretory function of the nervous system" and the priority of this discovery magnanimously accorded him by the great English physiologist Marshall Hall, gave him an international reputation and led to his election as fellow of the St. Petersburg (Russia) Imperial Academy of Sciences. See "Essays on the Secretory and Excito-Secretory, System of Nerves in their Relation to Physiology and Pathology," 1857; also "Caffeine as an Antidote to the Poisonous Narcotism of Opium," 1860; and "Premature Senile Obliteration of the Uterine Cervical Canal," 1860. His work in the line of the prevention of yellow fever, dengue, etc., justly entitles him to a prominent place among the pioneer sanitarians of this country.

Among appointments held was that of assistant demonstrator of anatomy in the Medical College of Georgia, 1854 to 1857; professor of comparative anatomy and microscopical anatomy, 1857 to 1867; professor of anatomy, 1866-67; professor of surgery in the New Orleans School of Medicine, and clinical lecturer on surgery in Charity Hospital, New Orleans, Louisiana.

The Medical College of Georgia in 1868 created the chair of operative surgery and gynecology and called Dr. Campbell to be the professor. In 1881 he became professor of the principles and practice of surgery in his alma mater. Among many appointments held, he was president of the American Medical Association in 1885; one of the founders of the American Gynecological Society and vice-president in 1881; vice-president of the American Surgical Society; president of the Medical Association of Georgia; corresponding member of the Imperial Academy of Sciences of St. Petersburg; corresponding member of the Royal Medical Society, Sweden; honorary member of the American Academy of Medicine.

During the Civil War Dr. Campbell was surgeon and medical director of the Georgia military hospitals at Richmond, Virginia. He was also one of the collaborators on the "Manual of Military Surgery," prepared by order of the surgeon-general for the use of the surgeons of the Confederate Army, contributing the section on the ligation of arteries to that work, a section said to be the most succinct and graphic presentation of this subject in the English language.

Dr. Campbell was a voluminous writer on scientific and literary subjects. His contributions are chiefly in the "New Orleans Medical and Surgical Journal"; "Transactions of the American Medical Association"; "Transactions of the American Surgical Association";"Transactions of the American Gynecological Society"; the "American Journal of Obstetrics," and in the "Southern Medical and Surgical Journal" of which he was some time editor.

In 1844 he married Sarah Bosworth, eldest daughter of Amory Sibley of Augusta, Georgia, and had one child, a daughter.

He died December 15, 1891.

JOSEPH EVE ALLEN.

CAMPBELL, Matthew (1819-1902), pioneer railway surgeon, of Irish descent, was born near Pittsburgh, Pennsylvania, on March 18, 1819. A "self-made man," he was in early life a glass blower. When twenty-four he attended the University of Pennsylvania yet did not graduate there, but graduated when in practice at Winchester (Virginia) Medical College in 1853. After practicing at Fairmont, Virginia, and Wheeling, in 1857 he became chief surgeon to the Baltimore and Ohio Railroad, attending the employés who were building the road and removing to Grafton, West Virginia, the most central point for his work. He remained in Grafton during the troublous times of the Civil War, but removed to Parkersburg in 1864. He established small hospitals along the railroad; an urgent necessity, for in three years he had 1,100 cases of injury to attend. He was in all probability the pioneer railway surgeon of the United States and known all along as the "Railroad Doctor." In 1875 he was elected president of the West Virginia Medical Society. With Dr. Sherman of the United States Army, he had in 1864 the first successful case of ovariotomy in West Virginia, and paid much attention to operations for vesico-vaginal fistula, operating successfully in several cases. During his service on the railroad he adopted the use of the cold pack for typhoid fever, with very good results. He told me he was led to it by hearing an old English blacksmith tell of its use in England.

He was married twice: first to Margaret Ellenor Axter; one son, Dr. John Campbell of Wheeling, surviving. His second wife was Ellen Carney of Fairmont, West Virginia, by

whom he had two sons and a daughter. Few medical men were better known in the state than Campbell, and his death at Parkersburg in 1902 left a blank which only a great man could fill. WESLEY H. SHARP.

CANNIFF, William (1830-1910), historian of the medical profession of Upper Canada and founder and secretary of the Canadian Medical Association, was born in Thurlow, Hastings, Ontario, in 1830, of United Empire loyalist descent. His education was received at Victoria College, Coburg, at the Toronto School of Medicine and at the University of the City of New York, where he received an M. D. in 1854. After serving as assistant surgeon to the Seaman's Retreat Hospital on Staten Island he became assistant surgeon in the Royal Artillery from December, 1855, until the close of the Crimean War, getting an opportunity to study in England and receiving there the degree of M. R. C. S. Returning to Canada he was lecturer on general pathology in Victoria University in 1858 and professor of surgery the following year, while practicing at Belleville. As acting assistant surgeon he was with the Army of the Potomac, U. S. A., in 1865. Then he succeeded Dr. John Rolph (q.v.) as dean of the medical faculty of Victoria University, took up his residence in Toronto and in 1869 became a member of the Staff of the Toronto General Hospital. He served the city as medical health officer for several years.

In 1867 Dr. Canniff was instrumental in founding the Canadian Medical Association at Quebec, becoming its secretary and later vice-president and president. He originated the United Empire Loyalist Centennial celebration, held in Toronto in 1884 and occupied the chair at the meeting in Horticultural Pavilion.

He wrote for the lay and medical press and was the author of the following books: "A Manual of the Principles of Surgery, Based on Pathology, for Students," Philadelphia, 1866; "A History of the Early Settlement of Upper Canada," Toronto, 1869; "Canadian Nationality: Its Growth and Development," Toronto, 1875; and "The Medical Profession in Upper Canada, 1783-1850; An Historical Narrative, Including Some Brief Biographies," Toronto, 1894, 688 pages. This last book is an important one in the eyes of the student of the history of medicine for it rescues from oblivion many historical facts, discusses the pioneer medical men, the steps taken to establish the profession on a legal basis, traces the growth of the profession and, best of all, the last two-thirds of the book gives a series of well-written biographies of the early physicians of the province, many of the sketches illustrated with portraits. It is a mine of information and has put under obligation every medical biographer for the past twenty years.

Dr. Canniff was twice married and had six sons and one daughter.

He died at Belleville, October 18, 1910, at the age of eighty.

Capelle, Joseph Philippe Eugene (1757-1796), surgeon of the Revolution and an incorporator of the Delaware Medical Society. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 195.

CAREY, Matthew (1760-1839), founder of the "Philadelphia Journal of the Medical and Physical Sciences," was the son of a baker in Dublin, where he was born on January 28, 1760. He made the acquainfance of Franklin in 1779; established the "Volunteer's Journal" in Ireland in 1783 and after prosecution and imprisonment as its editor he emigrated to Philadelphia the following year, and with the financial aid of Lafayette, established the "Pennsylvania Herald," later becoming connected with the "Columbia Magazine" and the "American Museum." In 1791 he married and opened a small bookselling shop. He wrote "Essays on Political Economy," 1822; "Letters on the Colonization Society," "Female Wages and Female Oppression," in 1835. In 1820, when a publisher in Philadelphia, he conceived the idea of bringing out a really good medical periodical, with Dr. Nathaniel Chapman as editor. So the "Philadelphia Journal of the Medical and Physical Sciences" was launched, and after four years Chapman took William P. Dewees (q.v.) and John L. Godman (q.v.) as associate editors. After a hundred years the journel is still flourishing, though in 1824 it was renamed the "American Journal of the Medical Sciences." Carey himself wrote "A Brief Account of the Malignant Fever which prevailed In Philadelphia in the year 1793" (Philadelphia, 1793). He died in that city September 16, 1839.

Carleton, Charles M. (1838-1886), army surgeon of Norwich, Vt. See Cyclopedia of Amer. Med. Biog. H. A. Kelly, Phila. 1912, II. 161.

CARMAN, Russell Daniel (1875-1926), roentgenologist of St. Louis, Mo., and Rochester, Minn., the son of Henry Graham and Sarah Seeley Carman, was born in Iroquois, Ontario, Canada, March 17, 1875. He came with his family to the United States in 1891 and was naturalized six years later. After premedical work at the University of Minnesota, he graduated from the Marion Sims College of Medicine, St. Louis, in 1901, and went to the Johns Hopkins Medical School and Harvard for graduate study before settling in St. Louis to specialize in roentgenology. Here he married Sadie Lyon Butler in 1904. From assistant surgeon in his alma mater, (1902), he rose to be assistant professor of roentgenology. In 1910 he became instructor in roentgenology in Washington University, holding the office until in 1913 he resigned to head the section on roentgenology at the Mayo Clinic, Rochester, Minn. At that time the diagnosis of gastro-intestinal diseases with the x-ray was in its infancy; here he could follow these cases to operation and compare findings and so contribute largely towards bringing roentgenology examinations of the digestive tract into general use. At his death his estate was bequeathed to the Mayo institution on the decease of his wife and mother, to endow fellowships in roentgenology. Dr. Carman was also professor of roentgenology in the graduate school of medicine of the University of Minnesota from 1917.

In addition to his book, "The Roentgen Diagnosis of Diseases of the Alimentary Canal," 1917 (2nd edit., 1920), written with Albert Miller, he contributed some seventy-five articles to the literature dealing chiefly with roentgenologic diagnosis. He was president of the American Roentgen Ray Society in 1925.

He had just returned from a trip to Europe with his wife when he had what he supposed to be a gastric upset and resolved to have the gallbladder out; films which his distressed associates could not withhold exposed an "inoperable cancer of the stomach" his own diagnosis. The end came June 17, 1926. A pioneer in his field, he remained a conservative leader. Carman was frank and open and a man of deep purpose and remarkable keenness of observation, with a large capacity for work.

CARNOCHAN, John Murray (1817-1887), surgeon of New York, was born in Savannah, Georgia, July 4, 1817, educated in Edinburgh, and graduated in medicine from the College of Physicians and Surgeons New York in 1836, afterwards spending several years in study in Paris, and returning to New York in 1847. Here he soon won a high reputation as a surgeon. For about twenty-five years he held the position of surgeon-in-chief to the State Emigrant Hospital on Ward's Island, then the largest hospital in this country. He did several original operations. On the twenty-second of March, 1851, he ligated the femoral artery just below the origin of the arteria profunda, for the cure of elephantiasis Arabum of the right inferior extremity, which had resisted all known methods of treatment; the patient finally recovered, and sixteen months after the operation was well. He was the first to remove the entire lower jaw at one operation, which he did on the thirteenth day of July, 1851, for bone necrosis following a severe attack of typhus fever. The patient recovered and was well in 1855. Dr. Carnochan was the first to perform the operation of exsecting the superior maxillary nerve for the cure of facial neuralgia, his operation being made on the sixteenth of July 1856. He trephined the superior maxilla just below the inferior orbital foramen, removed the nerve from its groove in the orbital plate and divided it at its exit from the foramen rotundum, at the same time removing Mackel's ganglion, which he maintained was essential to the success of the operation. During the next three or four years he did at least three similar operations. He was a bold and dexterous operator, and did not hesitate to make any operation in which there seemed to be a fair chance of success. From 1851 to 1862 Dr. Carnochan was professor of surgery in the New York Medical College. For two years, 1870-71, he was health officer of the Port of New York. He died at his home in New York City of apoplexy on October 28, 1887.

Among his surgical writings should be noted: "The Pathology of Congenital Dislocation of the Head of the Femur upon the Dorsum of the Ileum," New York, 1848. "Amputation of the Entire Lower Jaw, with Dislocation of Both Condyles," New York, 1852. "Exsection of the Entire Ulna," New York, 1854. "A Case of Exsection of the Entire Os Calcis," New York, 1857. "Contributions to Operative Surgery and Surgical Pathology," New York, 1877.

CARPENTER, Henry (1819-1887), of Lancaster, Pennsylvania, inventor of an obstetric forceps, organizer of a medical society, was born in Lancaster, Pennsylvania, Dec. 10, 1819, the son of Henry Carpenter, a surveyor.

A hanging lantern dated 1689 has been in the possession of his family since it was brought by his paternal ancestor, Dr. Heinrich Zimmermann from Switzerland to Germantown in that year. Heinrich remained two years in medical practice, then returned to Switzerland, where he married, and came back permanently to America in 1706, and removed to West-Earl Township, Lancaster County, Pennsylvania, in 1717. When the patents were issued for the land the clerk at Philadelphia, evidently wishing to render Zimmermann's name conformable to the tongue of his adopted government, anglicized it to Carpenter. The first Dr. Carpenter farmed his fields, physicked his neighbors and transmitted his professional talents to posterity. Henry's education was in the schools of Lancaster and afterwards under a tutor. In 1836 he began the study of medicine under Dr. Samuel Humes with whom he remained for five years, going in 1839 to Philadelphia to attend lectures, but undecided which college to enter, he finally settled on that of Pennsylvania. He finished his studies in February, 1841, returned to Lancaster and began practice in the office previously occupied by his father as a scrivener.

Henry Carpenter was one of the founders of the Lancaster County Medical Society in 1844, and its president in 1855, also secretary and vice-president of the Pennsylvania State Medical Society. He was a man of mechanical genius, constructed his own apparatus and drew plans for his instruments, and invented an obstetric forceps manufactured in Philadelphia by Gemrig which he used for forty-four years, and with which it is said he never failed to effect delivery. His obstetric experience covered nearly 5,500 cases, and his experience in gynecology was equally large.

He responded to the special call from the surgeon-general during the civil war on two different occasions, being first placed in charge of the "Eckington Hospital" at Washington, and at another time he went to Hagerstown, Maryland, for duty. He attended President James Buchanan and Thaddeus Stevens, for many years and in their last illnesses. Dr. Carpenter was a member of the city council of Lancaster for twenty years, and a director of several large commercial enterprises. He was three times married, but the only children were three daughters by his first wife, who was Anna Louise, daughter of Mayor John Mathiot.

GEORGE NOBLE KREIDER.

CARPENTER, Walter (1808-1892), professor of medicine in the University of Vermont, was born in Walpole, New Hampshire, January 12, 1808. His father, a farmer and tavern keeper, was Sylvester Carpenter; his mother, Lydia, daughter of Benjamin Rowker. Walter was an only child and had his early education in Halsted and at the academy at Chesterfield, beginning the study of medicine under his uncle, Dr. Davis Carpenter in Brockport, New York.

Later he studied at the Medical College in Fairfield, New York, where Dr. Amos Twitchell (q.v.) of Keene, New Hampshire was an instructor, and finally graduated from Dartmouth Medical School in 1829, settling at once in Bethel, Vermont, where he remained a year and a half, when, he moved to Randolph, in the same state and practiced there for twenty-eight years.

In 1853 he became interested with Dr. S. W. Thayer, then a practitioner in Northfield, in the re-establishment of the medical department of the University of Vermont. These two men, together with Dr. Orin Smith, started the old school on a new career of success and honor. They met many discouragements, but Dr. Carpenter's unflagging energy and perseverance did much to tide over the early years of adversity, and finally made this school conspicuous among the medical centers of New England. Dr. Carpenter was for many years professor of the theory and practice of medicine in the medical department of the University of Vermont and by his homely common sense and apt illustrations in the form of stories, made a deep impression on all the classes. He moved to Burlington in 1858 and thereafter was a familiar figure in the medical profession in northwestern Vermont.

It was mainly through Dr. Carpenter's instrumentality that the foundation of a hospital was made by Mary Fletcher. Dr. Carpenter secured the charter and assisted in the preparation of the plans and was long the president and consulting physician of the institution. He was a member of the Vermont State Medical Society, and at one time its president. He died in Burlington, November 9, 1892.

He was married three times, in 1832 to Olivia Chase Blodgett, and had a daughter and a son. His wife died in 1840, and in 1844 he married Mrs. Anne Brown Troop, who died in April, 1869. In February, 1872, Dr. Carpenter again married, this time Adeline Brown. His only son, Dr. Benjamin W. Carpenter, was surgeon of the ninth Vermont Volunteers during the Civil War.

CHARLES S. CAVERLY.

CARROLL, James (1854-1907), of the United States Army, yellow-fever commissioner, was born at Woolwich, England, June 5, 1854. He was educated at a private school, Albion House, and it was intended that he should enter the British Navy as an engineer student. When he was fifteen, however, he emigrated to Canada and there for several years lived what he described as the life of a backwoodsman. In 1874 he enlisted as a private in the United States Army and served in the campaign against the Ute Indians during the winter of 1879-1880. While acting as hospital steward at Fort Custer, Montana, he became much interested in the subject of medicine and after some difficulty he succeeded in obtaining permission to attend medical lectures at St. Paul, Minnesota. On returning to the east he continued his medical education, first at the University of the City of New York and then at the University of Maryland, receiving his M. D. from the latter in 1891. In 1892 and 1893 he attended courses in bacteriology and pathology then opened to physicians at the Johns Hopkins Hospital, and became intensely interested in these subjects.

In 1897 he was assigned, together with Dr. Walter Reed, to the work of investigating the bacillus icteroides, erroneously claimed to be the specific cause of yellow fever, and in 1898 was sent to Fort Alger to study the blood of fever patients there, and it was he who demonstrated the illness, then prevailing among the troops, to be typhoid and not malarial fever. In 1900, when an army medical commission was appointed to investigate the cause and mode of transmission of yellow fever among the American troops stationed at Havana, Carroll was appointed second in command. The work begun, the question of experiment upon human beings arose, and Carroll at once volunteered to be the subject of it. He was accordingly bitten by several mosquitos infected by yellow-fever patients and three days later developed the disease in a most severe form, from which he barely escaped with his life. The theory of mosquito transmission was then understood by only a few experts and when Carroll, in the early stage of his illness, told the nurse that he had acquired the disease through the bite of a mosquito, she disbelieved him so entirely that upon recovery he found the following note among the records of his case: "Says he got his illness from the bite of a mosquito—delirious!" When sufficiently recovered, Carroll took up the preliminary experiments,—Dr. Reed, the chairman, being then in the United States,—and carried them out to a satisfactory conclusion by the time Reed returned. He assisted most efficiently in the further investigation by which it was proved conclusively that yellow fever is transmitted by the mosquito, "stegomyia fasciata," and on its conclusion, in February, 1901, when Dr. Reed returned home, he remained for several weeks in Cuba for the purpose of determining several doubtful points connected with the work. Moreover, in August 1901, he returned to Cuba in order to carry on a final investigation necessary to the full completion of the work of the commission and it is owing to his perseverance and firmness in the face of obstacles that it was finally carried to perfection.

The points established by Carroll's special labors are:

1. The specific agent of yellow fever is present in the blood during at least the first, second and third days of the disease.

2. The specific agent is destroyed, or at least attenuated by heating it up to 55° C. for ten minutes.

3. Yellow fever can be produced by the injection of a small quantity of the diluted serum taken directly from a patient and passed through a Berkefeld filter.

4. The specific agent being capable of passing through a Berkefeld filter must belong to that class of organisms known as ultramicroscopic.

On Carroll's return to the United States he was appointed lieutenant and assistant surgeon in the medical corps, the age limit being waived in order to permit him to pass the necessary examinations. The next few years of his life were largely passed in teaching, in which he was most successful. He was professor of bacteriology and clinical microscopy at the Army Medical School and after Dr. Reed's death succeeded him as professor of pathology at the Columbian University.

He wrote a number of papers on the disease in its different phases. The first of these, on "The Treatment of Yellow Fever," was the

earliest contribution to the therapeutics of the disease after its mode of transmission was understood. The most important of his papers is, probably, the article on yellow fever in Osler's "System of Medicine."

In 1896 Carroll's name was suggested for The Noble prize and in 1897 two universities (Maryland and Nebraska) conferred upon him their honorary LL. D. He was also elected to membership in many scientific societies.

Unfortunately, he never fully recovered from his attack of yellow fever. During the height of the disease he had an attack of acute dilation of the heart which induced in the end an organic heart lesion, from which he died after an illness of some months on September 16, 1907.

He married in 1888, Jennie M. G. Lucas and left seven children, the eldest of whom had only just reached manhood.

CAROLINE W. LATIMER.

CARSON, Joseph (1808-1876), writer, professor of materia medica in the Philadelphia College of Pharmacy, 1836-1850, and professor of materia medica and therapeutics in the University of Pennsylvania, 1850-1876, was born in Philadelphia, April 19, 1808, son of Joseph Carson and Elizabeth Lawrence. His ancestry was Scotch and early members of his family were prominent in the early merchant shipping interests of Philadelphia. He attended the Germantown Academy and White's school in Philadelphia and graduated A. B. at the University of Philadelphia in 1826. He went to work in the wholesale drug house of Edward Lowber, where he acquired a strong love for botany. He soon gave up business for medicine and studied with Thomas T. Hewson (q.v.) and graduated at the University in 1830, with a thesis on "Animal Temperature."

He was resident physician at the Pennsylvania Hospital 1830-1831, then went as surgeon on an East Indiaman, "Georgian," and visited Madras and Calcutta, returning in 1832 to practice in Philadelphia. Besides the two important teaching positions named he was lecturer on materia medica at the Philadelphia Medical Institute, 1844-1848, and obstetrician to the Pennsylvania Hospital, 1849-1854. He was active as the physician to the Foster Home and the hospital of the Protestant Episcopal Church. For several years he was librarian of the Academy of Natural Sciences, building up and arranging its herbarium and publishing a catalogue of its works. He was the first botanist to describe fully and give prominence to the genus Alstroemeria as a source of edible fecula.

Carson was a member of the American Philosophical Society, and a founder of the American Medical Association, president of the Philadelphia county Medical Society, and for seventeen years curator of the American Philosophical Society. As a member of the national convention for revising the Pharmacopœia of the United States, he served in 1860 and again in 1870 as chairman of the committee on revision and as president of the convention.

He was editor of the "American Journal of Pharmacy" from 1836 to 1850, during this time contributing to it no less than seventy-six original papers.

He wrote much and with interest on various subjects, and is known especially for his "History of the Medical Department of the University of Pennsylvania," 1869; another important work is "Illustrations of Medical Botany," 1847, with one hundred plates, many colored by himself. He edited Pereira's "Elements of Materia Medica;" he wrote a careful thirty-three page review of works on puerperal eclampsia ("American Journal of Sciences," 1871, lxi, 433-466).

Carson married Mary Goddard, a sister of Dr. Paul Beck Goddard, in 1841; she died the next year, and in 1848 he married Mary Hollingsworth.

He died December 30, 1876.

CARSTENS, John Henry (1848-1920), was a Detroit gynecologist and teacher.

On the wave of emigration from Germany, following the revolution of 1848-49, John Henry Carstens, born June 9, 1848, in Kiel, was brought to America by his parents who settled in Detroit, Michigan. Many relatives had been ardent revolutionists, and his father, a participant, was imprisoned when his son was born. A public school education in Detroit was supplemented by six years at the German-American Seminary, four and a half miles distant from the home farm; the daily nine miles' walk attested his eagerness for learning. At fifteen he entered a lithograher's office and later clerked in a drug store. Finally a desire to study medicine was realized, and his was the first name recorded as a matriculant in the Detroit Medical College. In 1870 he was graduated and at once took charge of the dispensary while beginning practice in Detroit. During the entire period of his practice, he was active in propaganda work on cancer prevention and con-

trol. Carstens was a teacher almost all his professional life. In the Detroit Medical College, he was lecturer on minor surgery in 1871 and afterwards lecturer on diseases of the skin and clinical medicine; here too for some years he was professor of materia medica and therapeutics and in 1881 became professor of obstetrics and gynecology, a chair which he held in the Detroit College of Medicine and Surgery, formed by a merger of the Detroit Medical College and the Michigan College of Medicine. He was also chief of staff of the Harper Hospital and consulting obstetrician to the Woman's Hospital and the House of Providence. In 1918, when the Detroit College of Medicine became the Detroit College of Medicine and Surgery, he assumed the additional office of president of the faculty. In the early nineties, he gave up general practice to devote himself to gynecology and abdominal surgery. Active in many medical societies, he was president of the Detroit Medical and Library Society, the American Association of Obstetricians and Gynecologists, and the Detroit Gynecological Society (1891-92).

Out of over a hundred contributions to gynecological and surgical literature, including translations from German and French, Dr. Carstens' works on splenectomy, "Splenectomy for Splenic Anemia," 1904, and on the use of the stem pessary, "Stem Pessary For Dysmenorrhea," 1904, are probably the most important; his first paper on abdominal surgery was "Three Cases of Battey's Operation," 1883.

Carstens naturally turned to civic affairs. As a young man he was keenly interested in political matters and started "stump speaking" in the presidential campaign of 1868. He held several positions on political committees and assisted in securing republican control of the city and county. In 1875 he became a member of the Board of Education and was reelected in 1879. In 1877, he was elected president of the Board of Health, rendering valuable assistance in checking the spread of smallpox. He also instituted the registration of births and deaths and started compulsory vaccination in the schools. In 1892, he was made presidential elector for the first district of Michigan by the State convention. He ran for mayor but was unsuccessful,—probably because of his outspokenness. The rapidly increasing professional duties of later years checked his political work. During the last few years of his life, he served with keen interest on the City Plan Commission.

On October 18, 1870, he married Hattie Rohnert of Detroit. They had four daughters and one son, Henry R. Carstens, who was born December 19, 1888, graduated in medicine from the Detroit College of Medicine in 1911, and specialized in internal medicine; during the World War, he served in the medical corps, U. S. A., was discharged as Lieutenant-Colonel, and became Lieutenant-Colonel in command of General Hospital Number 17 (Harper Hospital). John Henry Carstens died on August 7, 1920, from carcinoma of the lung after an illness of several months.

Dr. Carstens was long the best known surgeon in Michigan and was admired not only for his surgical and teaching ability but for his rugged honesty and whimsical grim sort of humor. He refrained from allying himself with any of the medical factions, but was a good friend to all men.

HOWARD A. KELLY.

CARTER, Henry Rose (1852-1925), sanitarian, was born on Clifton Plantation, Caroline County, Virginia, August 25, 1852, the son of Henry Rose and Emma Caroline Coleman Carter. For two years after graduating C. E. from the University of Virginia (1873), he continued working there on mathematics and applied chemistry. In 1879, he took the medical degree of the University of Maryland, then entered the Marine Hospital Service, now the United States Public Health Service, as assistant surgeon, rising to be senior surgeon in 1912 and assistant surgeon-general in 1915.

Carter assiduously devoted himself to sanitation, especially in connection with the great health problems—yellow fever and malaria, studying with intense interest the impounded waters as affecting malaria. Early service took him, in 1888, to the Ship Island Quarantine Station on the Gulf of Mexico; later he had charge of several yellow fever epidemics in the southern states and in 1899-1900 inaugurated the quarantine system in Cuba. For five years, 1904-1909, he was director of the hospitals in the Panama Canal Zone; in 1916, he served on the Rockefeller Yellow Fever Commission sent to Central and South America; in 1917-1919, he was in charge of the malarial work for the U. S. Public Health Service, with special reference to antimalarial measures for cantonments; in 1920-1921, his yellow fever research took him to Peru, where he also acted an sanitary adviser to the Peruvian government. Discovery in 1900-1901 of the extrinsic incubation of yellow fever was a lead to the later discovery by

Walter Reed (q.v.) that mosquitoes are the carriers.

Carter contributed some thirty articles to public health reports and medical journals, pertaining to impounded waters, yellow fever, and malaria, and the articles on yellow fever in the "Practice of Medicine in the Tropics," "Nelson's Loose Leaf Medicine," and Abt's "System of Pediatrics." He was active on the Yellow Fever council and the International Health Board of the Rockefeller Foundation and as honorary chairman of the National Malaria Commission. In 1904, Carter's name was presented for the Noble prize by Major Sir Ronald Ross.

He was small of stature, wiry, and vivacious; too keenly interested in his work to concern himself with the question of priority.

He married Laura Hook of St. Louis, September 29, 1880.

General Carter died September 14, 1925, survived by his daughter Laura, his cherished companion.

CARTLEDGE, Abiah Morgan (1858-1908), of Louisville, Ky., who removed the largest ovarian cyst, was the son of a Baptist minister, A. Morgan Cartledge, and Louisa Haigood. He was educated by his father and in local schools. When eighteen he helped in the drug store of Dr. Thomas Marian in Richburg, who, seeing the lad had ability, advised his entering college as a medical student, so, as this counsel ran with Abiah's own wishes, he did so, and matriculated at the Hospital College of Medicine in Louisville, Kentucky, in 1880, graduating with honors in 1882. He served one year as interne at the Louisville City Hospital with marked distinction and in 1883 began to practice in Louisville. In 1885 he was made professor of surgery in the Hospital College of Medicine of his alma mater, where he taught with marked success until 1888, when he became demonstrator of anatomy in the Kentucky School of Medicine. During this time he had built up a large practice and his fame as a surgeon was beginning to extend. His especial fitness and qualities as surgeon and teacher were also recognized by the faculty of the Louisville Medical College, who tendered him the chair of surgery and clinical surgery in 1890. So he relinquished general practice and devoted his whole life to surgery. This position was filled with great credit to himself and honor to the college until 1894, when he was given the chair of gynecology and abdominal surgery, a position retained until death.

He took great interest in medical societies, and belonged to the Louisville Surgical Society, Jefferson County Medical Society, Kentucky State Medical Association, and the Southern Surgical and Gynecological Association, of which he was elected president in 1900.

Perhaps the greater number of his contributions to surgical literature were read before the last society, his last contribution being "Some Remote Symptoms and Effects of Cholelithiasis." He was also one of the editors of the "Louisville Monthly Journal of Medicine and Surgery."

Dr. Cartledge married Ella Powers Gardner in 1886, by whom he had one child, a daughter. She preceded him to the great beyond but a few months.

He had the distinction of removing the largest ovarian cyst in medical history, a report of which appears in the "Annals of Surgery" of January, 1900 with the title: "Mammoth Ovarian Tumors with Report of a Cyst weighing Two Hundred and Forty-five Pounds." He died May 4, 1908, of acute pulmonary edema.

R. LINDSEY IRELAND.

Carver, Jonathan (1710-1780), of Connecticut and Massachusetts, explorer of the Northwest. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 200.

CASSELBERRY, William Evans (1858-1916), specialist in diseases of the ear, nose and throat, the son of Jacob Rush and Ellen Lane Evans Casselberry, was born September 6, 1858, at Philadelphia, his family having lived either in or near Philadelphia since Colonial days. His grandmother was a Rush, of the family of Dr. Benjamin Rush. Casselberry received his degree of M. D. from the University of Pennsylvania in 1879 and served as resident physician and surgeon at the Germantown Hospital. After leaving this hospital he went to Vienna, Berlin and London for post-graduate work and in 1883 returned to America and settled in Chicago, accepting the position of professor of materia medica and therapeutics in Northwestern University Medical School. This chair he held until 1894, when he was made professor of laryngology and rhinology in the same school and began the development of a clinic service which

soon became a large and valuable one for teaching purposes. He was attending laryngologist and rhinologist at St. Luke's Hospital.

Dr. Casselberry was most active in the practice of his specialty and the high esteem in which he was held is indicated by the positions which were offered to him. He was a fellow of the American Medical Associatfon and once chairman of its section of laryngology and otology. He was an active member of the American Laryngological Society and at one time, its president; a member of the American Academy of Ophthalmology and Oto-Laryngology; American Clinical and Climatological Association; of the Illinois State Medical Society; the Chicago Medical Society; Chicago Laryngological Society; National Association for the Study and Prevention of Tuberculosis, Chicago Academy of Sciences; Chicago Tuberculosis Institute; the Physicians Club of Chicago and fellow of the American College of Surgeons. He took an active part in the meeting of the Ninth International Medical Congress, which convened in 1887.

In 1891 he married Lillian Hibbard and they had two sons and a daughter.

Dr. Casselberry was a most energetic man, always at work and rarely deserting his professional occupation for recreation of any kind. He was a fluent speaker and a frequent contributor of articles to the medical journals and was able to draw many of the illustrations accompanying them. At the time of his death, which occurred on July 11, 1916, from angina pectoris, he had partly finished a book upon his specialty. In his will was a bequest of $5,000 to the American Laryngological Association, the interest to be used for a "prize award, decoration or expense, to encourage advancement in the art and science of laryngology and rhinology."

CASSELS, John Lang (1808-1879), a physician and scientist, of Cleveland, Ohio, was born near Glasgow, Scotland, September 15, 1808, and went to Glasgow schools, then on to the University. During his second year financial reverses at home compelled him to resign the career which he had chosen, and in 1827 he came to the United States with an older brother, who had lived for some years near Utica, New York. After a brief visit the young man essayed to support himself by teaching school and wandered fortuitously to Fairfield, Herkimer County, New York, where was situated the College of Physicians and Surgeons of the western district of the state of New York. Apparently inspired by the "genus loci," he at once decided to study medicine, and in 1830 became pupil to Dr. Moses Johnson of Fairfield. He also attended the lectures of the college, and exhibited such energy and aptness that he was speedily appointed demonstrator of anatomy by Dr. James McNaughton, (q.v.) then professor of anatomy. Here too began his association with Dr. John Delamater, (q.v.) the professor of surgery in the Fairfield College, an intimacy which greatly influenced his later life. Graduating in 1834, in the following year he began to practice in Chenango County, New York, but was almost immediately called to the chair of chemistry in the Willoughby Medical College, Ohio, a position he occupied for eight years. In 1837 Dr. Cassels, who was an expert geologist, was appointed by Gov. Marcy first assistant geologist of the New York State Geological Survey, and succeeded to this position without interference with his college work. On the organization of the Cleveland Medical College in 1843, he cast in his lot with Drs. Delamater, Kirtland and Ackley, (q.v. to all) and accepted the chair of materia medica in the new institution. In 1856, on the resignation of Prof. St. John, Dr. Cassels was chosen his successor in the chair of chemistry, mineralogy and toxicology, and continued to occupy this position with eminent ability and success until disabled by a stroke of apoplexy in 1873. Upon his retirement he was made emeritus professor.

The popularization of science had always been one of his hobbies, and in 1839 and again in 1849 he had given popular lectures in Cleveland on chemistry. Even after his disablement, during the remaining years of his life he beguiled the tedium of confinement by the composition and publication in the journals of the day of popular lectures on various branches of science.

He was a member of the State Society in 1852, and was elected a corresponding member of the Geological Institute of Vienna in 1861. The degree of LL. D. was given to him in 1859 by Jefferson College, Mississippi.

Of his writings very few specimens have been preserved, excepting his official reports of the geological survey of New York. He was frequently called upon by the courts for expert testimony on questions of scientific interest and importance, and his opinions were always received with the utmost confidence.

He married in 1838 Cornelia Olin, daughter of Judge John H. Olin of Shaftsbury, Ver-

mont, by whom he had one child, a daughter.

Dr. Cassels died in Cleveland, June 11, 1879.

The faculty room of the Medical Department of the Western Reserve University in Cleveland contains a good portrait in oil of Dr. Cassels, and an excellent engraving may be found in the parlors of the Cleveland Medical Library Association.

HENRY E. HANDERSON.

CATHRALL, Isaac (1764-1819), a native of Philadelphia, where he was born in 1764, studied medicine under Dr. John Redman, then went abroad to add to his knowledge in London, Edinburgh and Paris. During the yellow-fever epidemics of 1793, and 1797-9 he distinguished himself by remaining in the city and doing valiant work, losing no opportunity to study also the disease scientifically and performing autopsies on some of the victims. The results of these studies were embodied in several publications, one of which, the memoir on the Analysis of Black Vomit ejected in the Last Stage of Yellow Fever, appeared in 1800. And in 1802 he, with Dr. William Currie (q. v.), published their observations on an epidemic fever prevailing that year in Philadelphia. He also wrote a medical sketch of the "Synochus Maligna or Malignant Contagious Fever as it lately appeared in the city of Philadelphia," 1794, and edited "Buchan's Domestic Medicine, adapted to the Climate and Diseases of America," Philadelphia, 1797. In 1805 Dr. Cathrall was elected a member of the medical staff of the Philadelphia Hospital, and in 1811, was transferred to the surgical staff where he served until his death. In 1816, he was appointed a member of the Board of Health of Philadelphia.

He died on the twenty-second of February, 1819, of apoplexy; and Thacher describes him as "a well-bred gentleman of rigid morality and inflexible integrity."

FRANCIS R. PACKARD.

CAVERLY, Charles Solomon (1856-1918), of Vermont, authority on public health questions and specialist on infantile paralysis, was born in Troy, New Hampshire, September 30, 1856, son of Abiel Moore Caverly, a practicing physician, and Sarah L. Goddard.

He received his early education in the high schools of Pittsford and Brandon, Vermont, and at Kimball Union Academy, Meriden, New Hampshire; graduated at Dartmouth College in 1878 and received his M. D. at the University of Vermont in 1881, having the advantage, also, of eighteen months' study at the College of Physicians and Surgeons, New York. He settled to practice in Rutland, Vermont, in 1883, and soon became interested in public health and was health officer of Rutland, professor of hygiene at the University of Vermont, and after 1891, president of the State Board of Health, and active in securing the progressive legislation which has given Vermont her high public health rating.

Dr. Caverly has written many articles on poliomyelitis and was author of the original report of the first big epidemic of infantile paralysis, published in the "New York Medical Record," December 1, 1894. Interested also in the cure and prevention of tuberculosis, he was largely instrumental in establishing the Pittsford Sanatorium and was constant in his support of the "Preventorium" at Essex Center, for children threatened with tuberculosis.

His writings include: "Treatment of Litigation Neurosis"; "School Sanitation"; "Isolation Hospitals for Small Cities"; "Relation of Milk Supplies to the Public Health"; "History of Vermont Medicine". He was collaborator for the state of Vermont for the Cyclopedia of American Medical Biography, Philadelphia, 1912, furnishing many excellent biographies.

Of Dr. Caverly it was said: "It is characteristic of the man that he died fighting, cut down by the scourge of influenza, against the epidemic of which in Vermont he was active, he assumed responsibility in the work of prevention and took personal charge, rendering wise and effective aid." But his own life paid the cost, for he died, after an illness of three days, on October 16, 1918.

Dr. Caverly married Mary Alice Tuttle, who survived him; their son, Harley T. Caverly, died in 1910 while taking a post-graduate course in medicine at the Johns Hopkins University.

HOWARD A. KELLY.

CHADWICK, James Read (1844-1905), gynecologist, medical librarian, organizer, son of Christopher Chadwick, a Boston merchant, was born in that city, November 2, 1844, and educated in the public schools and in Harvard College where he was graduated with the class of 1865. After an extended trip abroad, he entered Harvard Medical School where he took his M. D. in 1871, in this year marrying Katherine M.,

daughter of Dr. George H. Lyman, of Boston. Dr. Chadwick took his wife to Europe and pursued his medical studies in Berlin, Vienna, Paris and London for a period of two years, giving more particular attention to the study of the diseases of women. On his return to Boston in 1873 he built the house No. 270 Clarendon Street, which was his home during his lifetime.

He was the moving spirit in the selection of the men who were to compose the American Gynecological Society and at its founding in 1876 he became its secretary. In 1897 he was president and continued in later years to show a lively interest in its affairs. From 1875 to 1882 Dr. Chadwick was physician to out-patients at the Boston City Hospital and for many years conducted a private dispensary in Staniford Street, for the treatment of diseases of women where he gave instruction to the students of the Harvard Medical School, being clinical instructor in gynecology from 1881 to 1887.

One life interest of Dr. Chadwick was medical libraries. An ardent book-lover, an omnivorous reader, he believed that the library is the heart of our system of education. The formation of the Boston Medical Library in 1875 was brought about by his inspiration. It was his buoyant optimism, his contagious enthusiasm, which interested Oliver Wendell Holmes in the library. Holmes spoke of him as "the untiring, imperturbable, tenacious, irrepressible, all-subduing agitator, who gave no sleep to his eyes, no slumber to his eyelids, until he had gained his ends, who neither rested nor let others rest until the success of his project was assured." The erection of the new building on the Fenway in 1901 was the result of his initiative and never-ceasing agitation.

Dr. Chadwick was called the "Father of Cremation in New England," because he was instrumental in reorganizing and putting on a successful basis the decadent New England Cremation Society, founded in 1885.

In 1890 he organized the Harvard Medical Alumni Association and was its president for the first four years of its existence. He was a member and president of the Obstetrical Society of Boston. Among his close friends he numbered such men as Oliver Wendell Holmes, William Osler, S. Weir Mitchell, J. S. Billings and William James. His temperament was that of the poet and the artist. In him were combined versatility and constancy of purpose. Broad-minded and singularly free from narrow prejudices, he could see in an acquaintance or friend those qualities which make for distinction. He was a picturesque member of the community in which he lived, for he affected flowing neckties and noticeable clothing.

Dr. Chadwick's death occurred at his summer home in Chocorua, New Hampshire, September 23, 1905 as the result of a fall over a low railing on the roof of a piazza under his bedroom window.

Among his writings are: "The Pathology and Treatment of Child-bed," F. von Winckel, translated by J. R. Chadwick, 1876; "The Function of the Anal Sphincter, So-called, and the Act of Defecation" (Transactions of American Gynecological Society, 1877); "New Gynecological Table" (American Journal of Obstetrics, 1878); "Obstetrical and Gynecological Literature, 1876-1880" (Transactions of American Medical Association, 1881); "Medical Libraries, Their Development and Use" (Boston Medical and Surgical Journal, 1896, vol. cxxxiv); "Dr. Johann David Schoepff," presidential address at the eighth annual meeting of the Association of Medical Libraries, Boston, 1905; "Cremation of the Dead," 1905.

WALTER L. BURRAGE.

CHAILLE, Stanford Emerson (1830-1911), professor in the medical department of Tulane University, came from Huguenot stock, saw the first light in Natchez, Miss., July 9, 1830; spent his student days at Andover, Mass., graduating from Harvard in 1851 as an A. B., in 1854 consummating his A. M. degree. He studied in and graduated from the Medical Department of the University of Louisiana (now Tulane), receiving his M. D. degree in 1853, the university conferring on him her LL. D. in 1901. He served as interne in the Charity Hospital for the prescribed period, and afterwards in the Marine Hospital Service. He studied three years in Europe, working under Claude Bernard, and returning, became co-editor of the New Orleans Medical and Surgical Journal, a position he held for ten years, and demonstrator of anatomy in the medical school of Tulane, 1858-1861, when he served the Confederacy as surgeon and medical inspector for three years. After the war he returned to his duties as demonstrator of anatomy at the school and in 1867 became professor of physiology, pathology, anatomy and hygiene, filling the office for forty years, until his retirement in 1908. For the last twenty-three years he was dean of the facul-

ty of medicine. In 1878 he was a member and secretary of the commission appointed by Congress to investigate the cause of yellow fever and next year he was president of the Havana Yellow Fever Commission. From 1885 to 1893 he served as one of seven civilian members of the National Board of Health.

In addition to his report on "Yellow Fever in Havana and Cuba," published by the National board of health, he wrote "Laws of Population and Voters," 1872; "Living, Dying, Registering and Voting Population of Louisiana, 1868 and 1874," 1875; and "Intimidation and Voters in Louisiana," 1876.

One recalls an alert, energetic, active, soldierly personality, with a slightly bowed head—moving rapidly along Canal Street, New Orleans, from the hospital—or sauntering to and from lectures at the college. A quick greeting—with a half-controlled smile, endeavoring to hide itself in a brusqueness which was at times a marked mannerism of the man. Dogmatic in the teaching of principles, but broadly philosophic in his interpretation of humankind, such was Chaillé, the soldier, patroit, citizen, statesman, physician, teacher, scientist and friend.

Even if a narrow horizon prejudiced the opinion of some as to the scope of the administration of the Medical Department of Tulane University over which he presided, Dean Chaillé at all times conserved the principles of medical pedagogics, saw the future, and builded for it with a policy which at all times dictated that economy in administration was justified by a freedom from debt, and that efficiency must supersede reputation. Yet with the closing years, after his retirement, in 1908, no one could have watched more tenderly or with more concern the waxing innovations of a new regime—at places grafted on his own ideas, but in many ways divergent.

Dr. Chaillé's time of retirement after the many years of great activity was cut short by a disease of the bladder, accompanied by great pain, and of this he died, May 27, 1911, at the age of eighty.

CHALMERS, Lionel (1715-1777), physician and meteorologist of Charleston, South Carolina, was born in Cambleton, Scotland, in 1715 and emigrated to South Carolina in early life. It is not known where he obtained his degree in medicine but probably from the University of Edinburgh. He settled first in Christ Church Parish, but soon removed to Charleston, where he practiced until his death. He made and recorded observations on meteorology from 1750 to 1760. As a practitioner he won the confidence and respect of all and left behind him, "the name of a skilful, humane physician."

He wrote an "Account of the Opisthotonos and Tetanus," which was published in the Transactions of the Medical Society of London in 1754. His most important writings were: "An Account of the Weather and Diseases of South Carolina" London, 1776 and "An Essay on Fevers," London, 1768, in which, says Dr. David Ramsay, (q. v.) "he unfolded the spasmodic theory of fevers."

LINDSAY PETERS.

Chamberlain, Cyrus Nathaniel (1829-1899), organizer of army hospitals and practitioner of Lawrence, Massachusetts. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 204.

CHANCELLOR, James Edgar (1826-1896), army surgeon and anatomist, of a lineage that can be traced back over nine hundred years, was a descendant of Richard Chancellor who came to Virginia in 1682, and was the son of George Chancellor of Chancellorsville, Virginia, since the Civil War an historic hamlet. There he was born on January 26, 1826. Educated at an academy at Fredericksburg, Virginia, he then read medicine under Dr. G. F. Carmichael, and matriculated as a student of medicine at the University of Virginia in 1846. The following session he attended lectures at the Jefferson Medical College in Philadelphia, graduating in 1848. He settled in his native place, but later moved to the county seat, and by the beginning of the Civil War had a large practice.

Commissioned assistant surgeon in the Confederated States Army in 1861 and surgeon in 1862, he served throughout the war in the General Military Hospital at Charlottesville, Virginia, with the exception that in 1864 he was sent as one of the reserve corps of surgeons to the battlefields of the Wilderness, Spottsylvania Court House and other places. In October, 1865, he was made demonstrator of anatomy at the University of Virginia, and filled this position until 1872, when he resigned. He was elected vice-president in 1871 of the Medical Society of Virginia and again in 1874, and president in 1883.

In 1885 he was elected and served one term as professor of diseases of women and children in the University of Florida, but resigned and returned to Virginia.

He married in 1853 Josephine Anderson of Spottsylvania County, and had six children of whom five survived their father, the eldest son, Edgar A., becoming a physician. His wife died in 1862, and in 1876 he married Mrs. Gabriella Garth Mays of Albemarle County, but had no more children. He died at his home near the University of Virginia on September 11, 1896. Among his numerous valuable communications to medical literature were: "Iodoform as a Local Remedy in Syphilitic, Scrofulous and Indolent Ulcers" (Transactions Medical Society of Virginia, 1877); "Origin and History of Ancient Medicine" (Presidential Address, ibid., 1884); "Poisoning by Datura Stramonium" (Virginia Medical Monthly, vol. v); "Treatment of Ingrowing Toe-nail" (ibid., vol. vi); "Mineral Waters of Virginia" (ibid., vol. x); "Review of the Medical History of the Middle Ages" (ibid., vol. xi).

ROBERT M. SLAUGHTER.

CHANNING, Walter (1786-1876), first professor of obstetrics in Harvard Medical School, was born in Newport, Rhode Island, April 15, 1786, and died in Brookline, Massachusetts, July 27, 1876. He was the son of William Channing, an attorney of Newport, Rhode Island, who at one time served as attorney-general of the state and also as United States district attorney, and of Lucy Ellery, daughter of William Ellery, a signer of the "Declaration of Independence," to whom several of his grandsons were indebted in great part for their education preliminary to entering college, among them being Dr. Channing's brothers, William Ellery Channing, the Unitarian clergyman, and Edward Tyrrel Channing, professor of rhetoric, oratory and elocution from 1819 to 1851 in Harvard University.

Walter Channing entered Harvard in 1804 in the same class with his brother, Edward T., and his cousin, Richard H. Dana, the poet, but taking part with them and others in the rebellion of 1807, a somewhat famous incident in the annals of the college, failed to receive his bachelor's degree in regular course, though it was afterwards bestowed as a member of the class of 1808. He was graduated M. D. at the University of Pennsylvania (1809) when Dr. Rush was president and continued his studies under Dr. James Jackson, (q. v.) of Boston, afterwards going to Edinburgh University and the London hospitals, where he devoted himself largely to obstetrics, establishing himself in Boston as a practicing physician in 1812. In this year Harvard conferred on him the "ad eundem" degree of M. D. In 1815 he was appointed the first professor of obstetrics and medical jurisprudence in Harvard University and held this position for nearly forty years, during all the second period of the life of the Harvard Medical School while it was called the Massachusetts Medical College and was situated on Mason Street in Boston (1816-1847). He resigned, together with many other professors, a few years after the removal of the school to North Grove Street. He was dean from 1819 to 1847.

In addition to an extensive private practice he was for nearly twenty years on the visiting staff of the Massachusetts General Hospital. Soon after the introduction of anesthetics there in 1846, he became deeply interested in the use of ether in childbirth, and mainly through his influence it was successfully used in such cases in this country. He published an elaborate work upon the subject: "Etherization in Childbirth" founded on nearly 600 cases in his own practice, describing this innovation in medical treatment which at that time was considered as daring as it has since proved beneficial. He was one of the first attending physicians at the Boston Lying-in Hospital, and he and Dr. John Ware (q. v.) were editors of the "New England Journal of Medicine and Surgery" when that publication became the "Boston Medical and Surgical Journal" in 1828.

He published "Reform in Medical Science," and made addresses on the prevention of pauperism and on the necessity of introducing pure water into Boston. He was librarian of the Massachusetts Medical Society from 1822 to 1825 and an honorary fellow of the Obstetrical Society of London. In 1860 he published a remarkable paper on a severe type of functional nervous disorder in which the patient remained bedridden for years. Any attempt to leave the bed produced pain and exhaustion. This disorder he termed "The bed case," one which was not uncommon in his experience. Channing recognized that it was "wholly moral in its cause." Today the disease would be called neurasthenia. Channing should be given credit for first describing it. He was the author of one or two volumes of miscellaneous poems, and his "Physician's Vacation," published in

1856, is a readable record of an extensive European tour. He was also a Bible student and loved Shakespeare and Scott, often repeating long passages of scripture and pages of Shakespeare. He once read the part of Macbeth in public, Fanny Kemble reading that of Lady Macbeth.

Channing was an ardent temperance reformer and a zealous citizen, very charitable, devoted to the poor and always thought people honest, often leaving patients of doubtful character alone in his study. On one occasion a man he had helped forged his name, when thus left alone, on a check for $300. He refused to prosecute this man and remarked: "I ought not to have left temptation in his way. I dare say his conscience will punish him enough."

He was devoted to his family and brought up five grandchildren, sons and daughters of his son, William Ellery, after their mother's death, involving some sacrifices on his part as he had passed through a laborious life and was fond of quiet among his books.

In appearance, Dr. Channing was of medium height, of substantial build, florid complexion, with blue-gray eyes. His temper was somewhat quick when excited by anything that he considered an injustice, but was well under control.

He was a Unitarian and a great admirer of his brother, William Ellery Channing, the clergyman, and a joke which he made in connection with him has appeared in various papers even to the present time. Someone calling at his house asked for Dr. Channing and on hearing the inquiry the doctor said, "Which Dr. Channing? My brother preaches and I practice."

Dr. Channing was married twice, first to Barbara Higginson Perkins, daughter of Samuel G. Perkins, of Brookline, Massachusetts, and second to Elizabeth Wainwright, of the Boston family of that name. He had one son, William Ellery second, the poet who died at Concord in December, 1901, and three daughters. Dr. Channing died July 27, 1876 at Brookline, very peacefully, after a short illness, at the age of ninety years and three months.

WALTER L. BURRAGE.

CHANNING, Walter, (1849-1921, a leading alienist of Boston, was a grandson of Walter Channing (q. v.) the first professor of obstetrics and medical jurisprudence in Harvard University and son of William Ellery Channing, Concord poet. Walter was born in Concord April 14, 1849, his mother being Ellen Kilshaw Fuller, a sister of Margaret Fuller (Countess Ossoli). She died when Walter was nine years of age and after that he lived most of the time with his grandfather Channing, getting his education at Chauncy Hall School and Massachusetts Institute of Technology and graduating at Harvard Medical School in 1872. Then he served for a year and a half as house officer at the Massachusetts General Hospital, went to Vienna to study and returning to this country was assistant physician to the Asylum for Insane Criminals in New York and then first assistant physician to the Danvers (Massachusetts) State Hospital. Dr. Channing settled in Brookline in 1879 and opened a sanatorium for the care of the mentally diseased while an office was maintained in the city. He practiced psychiatry, served as a consultant and often appeared in the courts as an expert in insanity. He was an expert in the trial of Guiteau, the assassin of President Garfield. From 1895 to 1903 Dr. Channing was professor of mental diseases in Tufts College Medical School, Tufts conferring her LL. D. on him in 1900. He was a founder and the first president of the Boston Society for Psychiatry and Neurology; a councilor of the American Neurological Association; a member of the corporation of the Massachusetts School for the Feeble-Minded; a member of the American Medico-Psychological Association, the New England Society of Psychiatry, the American Association of Physical Education, the Massachusetts Prison Association and the National Conference of Charities.

For a series of years Dr. Channing labored to improve the status of the state institutions for the care of the insane. With the aid of a committee of the Massachusetts Medical Society the efforts to bring the Boston Insane Hospital, housing a large number of the insane of the Boston area, under the uniform care of the state department of mental diseases, came to fruition in 1908 and the Governor appointed Dr. Channing chairman of the board of trustees of the Boston State Hospital, as it was called in future. For the next six years he devoted much time to the problems of this important hospital and in favoring legislation that would benefit the insane. He often appeared in public as a speaker at medical meetings and on matters affecting education. For fifteen years he was

a member of the Brookline school committee, its chairman from 1898 to 1910; he was instrumental in causing the erection of a fine public swimming pool and gymnasium in that town. Dr. Channing was an active worker for the establishment by the state of an institution where persons showing signs of mental disorder might be sent for a brief period for observation. The campaign for this purpose resulted in the Boston Psychopathic Hospital, in Roxbury, built in 1912, which has been a model for the whole country. He established and from 1896 to 1904 was the chief of the department of mental diseases at the Boston Dispensary. Among the papers he contributed to medical literature may be mentioned "Medical Expert Testimony, Kelly Murder Trial", "Amer. Journal of Insanity," 1898; "The Significance of Palatal Deformities in Idiots", "Eng. Jour. Mental Science," 1897; "Stigmata of Degeneration," "Amer. Jour. of Insanity," 1900; "Mental Status of Czolgosz", "Amer. Jour. Insanity," 1902. His sanitorium grew into one of the leading private hospitals for the insane. In 1916 he moved it to larger and more convenient quarters in Wellesley, having taken into partnership his son-in-law Dr. Donald Gregg. His wife, who was Miss Anna K. Morse, died at about this time, leaving a family of three sons and two daughters. He died at his home in Brookline, November 23, 1921, at the age of seventy-two, having accomplished much for the improvement in the care of the insane.

WALTER L. BURRAGE.

Channing, William Francis (1820-1901), inventor, editor, of Boston: See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, Page 206.

CHAPMAN, Alvan Wentworth (1809-1899), practitioner and botanist, was born at Southampton, Massachusetts, September 28, 1809, and died at his home in Apalachicola, Florida, April 6, 1899, in his ninetieth year. The son of Paul and Ruth Pomeroy Chapman, he entered Amherst College at seventeen, graduating with honor in 1830. A few months later he became a teacher in a family on Whitemarsh Island, near Savannah, Georgia, where he spent two years; he was then elected principal of the academy at Washington, Georgia, and it was while in this town that he began the study of medicine, with Dr. Albert Reese. The study was continued at Savannah and Washington, Ga. (1830-1836). It was in the winter of 1835-36 that he entered upon the practice of his profession in Florida, first at Quincy, then at Marianna, and finally, for more than half a century, at Apalachicola. In 1846, about the time that he settled at Apalachicola, he received the honorary degree of M. D. from the Louisville Medical Institute. In 1886, the University of North Carolina conferred upon him the degree of LL. D.

Before leaving Massachusetts, young Chapman was greatly interested in the natural sciences, especially botany, entomology, and meteorology. As years passed by, he devoted more and more attention to botany, until it occupied all of the time that he could spare from his busy professional life. In 1860, after several years of hard and thorough work, he published his "Flora of the Southern United States;" this in several editions, was for nearly fifty years the only manual of the flowering plants of the southern states, and assured the reputation of its author as one of the foremost American botanists of his day. He published little else, but his correspondence was extensive, and long before the appearance of his flora he was well known to his fellow-botanists as a keen observer and an enthusiastic and scholarly worker. It was as early as 1838 that Torrey and Gray named in his honor the genus "Chapmannia;" species in at least five genera ("Aster, Liatris, Polygala, Rynchospora," and "Spermacoce") had been named for him before 1860, to say nothing of many others in later years. Speaking of "Chapmannia," a curious yellow flowered legume of Florida, A. K. Small says that Chapman was the first botanist to construct an interpretation of the flora of the South-eastern United States.

Dr. Chapman was a man of fine physique and robust constitution, retaining all of his faculties (except that of hearing) almost unimpaired until the last day of his long life. A label on a plant specimen records the fact that he walked thirteen miles to collect it, in his eighty-third year; and a companion on a day's trip along the Apalachicola river, in the almost inaccessible palmetto and cypress swamps, bears witness to the fact that then, when he was eighty-seven years old, he showed the alacrity of the botanical collector in the best years of life. In November, 1839, he married Mrs. Mary Ann Simmons Hancock, but he was a widower for the twenty years preceding his death, and left no surviving children.

JOHN H. BARNHART.

Chapman, Chandler Burwell (1815-1877), teacher of medicine at Madison, Wisconsin and at Davenport, Iowa. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 207.

CHAPMAN, Henry Cadwalader (1845-1909), physician and naturalist, was born August 17, 1845, in the home of his grandmother, Mrs. John Markoe, 1817 Walnut Street, Philadelphia, Pennsylvania. His grandfather was Nathaniel Chapman (q. v.); Henry was the son of George W. Chapman, lieutenant in the United States Army, and Emily, daughter of John Markoe and granddaughter of Abraham Markoe, first captain of the Philadelphia City Troop. From his mother, as well as from his father's family, he inherited humor and sarcasm.

He was a pupil at J. W. Faires's well-known classical school and then entered the University of Pennsylvania to graduate in 1864. He next "crossed the campus" and matriculated in the medical department, with Addinell Hewson (q. v.) for preceptor, and with Joseph Leidy, Joseph Carson, R. A. F. Penrose, Henry H. Smith, Robert E. Rogers, Alfred Stillé and Francis Gurney Smith (q. v. to all) in the faculty. In 1867 he took his M. D. with a thesis on "Generation."

He entered the Pennsylvania Hospital, first as an assistant in the apothecary shop, and later as a resident physician, but in 1869 went to Europe for three years' study with Sir Richard Owen, London; Alphonse Milne Edward, Paris; Emile DuBois Raymond, Berlin; and Joseph Hyrtl, Vienna.

On his return from Europe he prepared for publication his first work, "The Evolution of Life," 193 pages, issued in 1872. Joseph Leidy, and the naturalist, Timothy Abbott Conrad, were his warm friends, and sponsors for his election to the Academy of Natural Sciences, to the proceedings of which he often contributed. He became a director of the Zoological Society of Philadelphia in 1881, was its secretary in 1884 and corresponding secretary 1890-1904. From 1873 to 1876 he was Leidy's assistant in the University of Pennsylvania and lectured on anatomy and physiology. The next year he was a curator of the Academy, succeeding George W. Tryon, Jr., and served again in 1891, to fill the vacancy caused by the death of Leidy. From 1877 to 1880 he was demonstrator of physiology in association with James Aiken Meigs (q. v.), in Jefferson Medical College, and 1879-1880 was curator of the museum; in 1878 the college gave him his second degree in medicine, when his thesis was the "Persistence of Forces in Biology." Meigs died in the autumn of 1879, soon after starting his lectures for the term, and the course was continued by Chapman who, in 1880, was appointed to the vacant chair of institutes of medicine and medical jurisprudence. From 1878 to 1885 he served as professor of physiology in the Pennsylvania College of Dental Surgery. The University of Pennsylvania gave him the degree of Doctor of Science in 1908.

Chapman wrote much on the anatomy of the apes and was fortunate in securing a gorilla (1878) and a chimpanzee (1899) for dissection; practically all the valuable material coming out of the Philadelphia Zoological Garden passed through his hands. He records in a report that his experience as prosector showed "that the principal causes of deaths during the first six months of the existence of the Garden were improper food, badly regulated temperature and ill constructed cages." His articles on the placenta of an elephant and on the placentation of the kangaroo "are his most important contributions to original research" (Nolan). For nearly thirty years he spent his summers at Bar Harbor, Maine, where he devoted himself to its flora and fauna. Dr. Edward J. Nolan, his biographer, states that Chapman's "History of the Discovery of the Circulation of the Blood" (56 pages, 1884) is, "from a literary point of view, the author's most satisfactory work."

In 1902 he examined the collections in Florence under the guidance of Giglioli, director of the Museum, and those of the Zoological Station of Naples, where Professor Dohrn helped him secure for the Academy of Natural Sciences a collection of the invertebrates of the Bay of Naples. In 1905 he went to Egypt where he studied hieroglyphics and Egyptian antiquities. While devoting himself to science he gave time, also, to social diversions; some of us younger men watching Chapman at the Academy thought that his scientific work suffered from overdevotion to "Philadelphia Society."

He died at his home at Bar Harbor, Maine from hemorrhage, probably resulting from gastric ulcer, September 7, 1909. He was survived by his widow, who was Hannah Naglee, daughter of Samuel Megargee.

HOWARD A. KELLY.

CHAPMAN, Nathaniel (1780-1853). The Chapmans were old settlers in Virginia on the Pamunkey River, and Nathaniel was born in Fairfax County on the Potomac, May 28, 1780, and is to be remembered because of his conception of medical journalism and the impulse he gave it through many long laborious years. As a boy he went to the Alexandria Academy and when seventeen began to study medicine in the Pennsylvania School. Other than an excellent education in the classics and two years' desultory medical reading he had no advantages. Yet, although a stranger, poor, without acquaintance or introduction he had capital in a delightful personality, making powerful friends by his graciousness and holding them by his sterling qualities. The popular young fellow graduated in 1801 with a thesis on "Hydrophobia" in which he defended certain propositions of his preceptor Rush. Then he went abroad for three years and seems to have been a social lion in Edinburgh, where he was taken up by Lords Buchan, Dugald, Stewart and Brougham.

In 1804 he settled down to practice in Philadelphia and had success for a period of fifty years, commanding whatever he could attend of practice; also that same year he married Rebecca, daughter of Col. Clement Biddle. The personality of the man made a great impression on the Philadelphia of our grandfathers. He was always gay, jovial and witty, and as he grew older his habit of punning increased. His easy graceful way of treating everything appeared even in his writing when he became editor of the "Philadelphia Journal of the Medical and Physical Sciences", founded by the well-known publisher, Matthew Carey. After four years (1824) he took as his associates William P. Dewees (q. v.) and John L. Godman (q. v.) and the journal has run a successful career right up to the present time ("American Journal of the Medical Sciences"). Another important undertaking of Chapman was the founding, in 1817, of the Medical Institute of Philadelphia, which may be considered as the first post-graduate school in the United States. Dr. Edward J. Nolan said of him, "His fame endures to the present day, not only as an excellent teacher, but also as a man of great personal charm, an exuberant vitality, and an acute sense of humor." He was elected by acclamation the first president of the American Medical Association (1847).

Nathaniel Chapman did a great many other things it would be pleasant to tell. Three years before the day on which he died, July 1, 1853, he had retired from active service. Philadelphia will from generation to generation reap the fruit of his teachings and writings.

His works included: An essay on the "State of Canine Fever," 1801. Select speeches "Forensic and Parliamentary," five volumes, 1808. "Discourses on the Elements of Therapeutics and Materia Medica," 1817; Lectures "On the more important Eruptive Fevers," 1844; "On the More Important Diseases of the Thoracic and Abdominal Viscera," 1844; Lectures on the "Theory and Practice of Medicine," 1846.

His appointments included: Professor of materia medica, 1813; professor of theory and practice of medicine and clinical medicine, University of Pennsylvania, 1816. Rush had been chosen for the same chair in 1789 and except for a short occupancy by Barton, these two men, Rush and Chapman, held it for more than sixty years.

JAMES GREGORY MUMFORD.

CHAPOTON, Jean (1690?-1760), post surgeon-general, son of André Chapoton and Ann Cassaigne, was born in the village of Bagaille, diocese of Uzes, Province of Languedoc, France, about 1690. After receiving a good education, he entered the government service and rose to the rank of major in the Royal Marines and surgeon in the French Army. In 1719 he was ordered to relieve Dr. Forestier as post surgeon at Detroit (or Fort Pontchartrain). In the records of St. Anne's Church at the post, Dr. Chapoton first appears as best man at the marriage of Jean Baptiste Gouyon, and was among the first in the settlement of Cadillac to take up land for permanent occupancy. On June 13, 1734, he received a government grant of land known as private claim number 5, being two arpents in width by forty in length, the title running to Jean Chapoton (Chirurgean). Dr. Chapoton's name appears spelled variously, as "Farmer's History of Detroit," vol. i, p. 50, "Pierre Chapoton," "Jesuit Relations," vol. lxix, p. 308, "Jean Baptiste Chapoton," and plain "Jean Chapoton." Little is known of the extent and method of Dr. Chapoton's practice. Aside from his service to the soldiers and their families at the post it could not have been great, as Detroit had little resident population until the twenties and little land was taken up until the thirties. In the Jesuit Relations, vol. lxix, p. 249, it is said that on

June 13, 1742, Sieur Chapoton, Surgeon of this port, borrowed the sum of one hundred livres in raccoon and lynx skins, promising to pay in similar peltries in May, 1743. That Chapoton was a devout Catholic appears from entries in the manuscript of Fr. Pierre Portier, Jesuit priest at Assumption Mission, Sandwich, viz.: In 1748 the father says that Surgeon Chapoton arranged for offering six masses; and in 1750 Chapoton became indebted to the mission for the same, but in 1845 the father began masses for his soul. In 1752 Dr. Chapoton resigned his post and retired to his farm. He had married in July, 1720, Magdalene Frappere, whose family had lived in the same province in France with the Chapotons, but at the time of her marriage were living in Quebec. At marriage Magdalene was fourteen years old, but bore the doctor twenty-two children! Of these, four died in infancy, two in childhood, five single in adult life, and eleven intermarried with prominent families. From his sons are descended the numerous branches of the Chapoton family in eastern Michigan and lower Canada. His second daughter, Madeleine, married Dr. LeGrande, who in 1852, succeeded Dr. Chapoton as surgeon of the post.

Jean Chapoton died at his Detroit home November 12, 1760.

LEARTUS CONNOR.

CHARLTON, Thomas Jackson (1833-1886), surgeon of Savannah, was born in Bryan County, Georgia, in 1833, and died in Savannah (where most of his professional life was passed), on December 8, 1886. He was the son of Dr. Thomas Jackson and Sarah Margaret Charlton. His grandmother was Emily, daughter of Thomas Walter, the author of "Flora Caroliniana," the first considerable work on southern botany. Dr. Charlton attended Franklin College, now the University of Georgia, and graduated from the Savannah Medical College, later becoming professor of obstetrics and clinical surgery there. While yet a student the yellow-fever epidemic of 1857 occurred in Savannah and he promptly volunteered his services, as he had previously given them in the Norfolk epidemic. He received a gold medal from the grateful people. Practicing for a short time in Savannah, he received an appointment as assistant surgeon in the United States Navy, and was assigned to the sloop-of-war "Jamestown". When Georgia seceded he promptly resigned and reported for duty at home. He was commissioned surgeon in the Confederate States Navy; was sent on a secret mission to France, and on his return was assigned to the Confederate cruiser "Florida," being captured on that vessel in the harbor of Bahia, Brazil. On the voyage to Chesapeake Bay. Smallpox broke out on the United States vessel and Dr. Charlton, with the prompt manliness and humanity which characterized him, at once volunteered his services. These were gratefully accepted, and his devotion was so pronounced and so successful that after a short incarceration in Fort Warren Boston Harbor, Mass., the enemy treated him as the British had his great grandfather under similar circumstances and turned their backs while he walked out, with the understanding that he would not return south. Being a man of the highest sense of honor, he observed his parole, and went first to England and then to Halifax, Nova Scotia, returning to Savannah after the cessation of hostilities, to enjoy a large practice to the end of his life. He was attending physician to the Savannah Hospital and when the epidemic of 1876 devastated Savannah, devoted himself with entire sacrifice to his people. Practicing before the era of specialists, he nevertheless attained great reputation as a surgeon and in obstetrics and fevers. He was twice married, first to Julia Catherine Crane, daughter of Heman Averil Crane, and after her death to Julia Johnstone. His eldest son, Thomas Jackson, became a doctor in Savannah.

JAMES B. BAIRD.

Chatard, Pierre (1767-1848), ophthalmologist of Baltimore. See American Medical Biographies H. A. Kelly and W. L. Burrage, Baltimore 1920. Page 210.

CHAUNCY, Charles (1592-1672). A notice of the ancestor of all the Chauncys in the United States is not out of place because, although a clergyman by profession, he was said to be eminent as a physician—there were few in the country in the seventeenth century who could be so denominated—moreover he disseminated among his pupils a knowledge of the medicine of the day, acquired in England, at a time when such instruction was badly needed in our new civilization.

Charles Chauncy, the fifth son of George Chauncy, was born in Yardley-Bury, Hertfordshire, England, in November, 1592, coming of an old English family. He was a scholar at the Westminster school at the time

of the Gunpowder Plot and barely missed being blown up; was graduated B. A. at Cambridge University in 1613, became a fellow of Trinity College, and was professor of Hebrew, and afterwards of Greek there, leaving to become vicar at Ware, Hertfordshire (1627-1633); moving on to the vicarage of Marston St. Lawrence, Northhamptonshire (1633-1637). Cambridge conferred the M. A. degree on him in 1617 and S. T. B. in 1624. This was when he was a scholar and before his puritanical opinions had made him obnoxious to his ecclesiastical superiors. In 1629 he was brought before the high commission accused of asserting in a sermon that "idolatry was admitted into the church" and that "an increase of atheism, popery, and Arminianism" existed in that body. Again in 1834 he was charged with opposing the erection of an altar rail as "a snare to men's consciences." For this he was sentenced to suspension and imprisonment until he should publicly acknowledge his offense; in addition he was made to pay the heavy costs of his trial. His courage failing him he made a recantation in open court, a step that he never ceased to regret. A long "Retractation" written in 1637 was not published until 1641, when he was in America. A climax was reached in the fall of 1637 when Chauncy refused to read Archbishop Laud's book of "Lawful Sunday Sports" and he set sail for the land of the free, arriving in Plymouth, Massachusetts, in January, 1638. How thankful we should be for these quarrels about religion, for they gave us trained scholars and scientists with which to start our institutions of learning in America. Very likely Chauncy missed the relatively advanced civilization of his mother country, for after living in Plymouth and Scituate for sixteen years, three years in Plymouth as an assistant to Mr. Raynor, and thirteen in Scituate as pastor of a church which developed a schism and was poorly supported, he was about to sail for England, tarrying for a while in Boston, the port of departure, when he was offered the presidency of Harvard College, made vacant by the forced resignation of the first president, Henry Dunster, October 24, 1654. This he accepted in November of that year and served the college until his death, February 19, 1672. That his scholarship was appreciated appears from the statement of Cotton Mather, who said that when Chauncy had been a year or two in town "the church kept a whole day of thanksgiving to God for the mercy which they had enjoyed in his being there." While in Scituate he led a laborious and by no means a happy life. Besides his work as minister he practiced medicine, fitted his sons for college and received pupils, young men who were preparing for the ministry. His means were very scanty both while there and when living in Cambridge.

The good man was industrious, rising at four in the morning winter and summer and spending the morning hours in study and devotion; he published numerous sermons and some Latin and Greek verses. It may have been due to the regretted recantation of his views early in his career that his opinions were not subject to change, for he remained set in opposing the baptism of the children of noncommunicants, and preached constantly against wearing of the hair long, calling it "a heathenish practice." Toward the close of his life (1662) he published "Antisynodalia Scripta Americana," in opposition to the synod of 1662, which sanctioned the admission to the church of all baptized persons, even if they had not professed a "change of heart." The utilitarianism of the day is sadly illustrated by the tradition that his writings passed into the hands of his stepdaughter, whose husband, being a pieman, used them to line his pastry. His wife was Catherine, daughter of Robert Eyre of Miltshire.

He left six sons, all graduating from Harvard and all becoming preachers: Three of them Ichabod, Elnathan and Israel. were physicians. Several physicians studied with Chauncy, notably Thomas Thacher (q. v.). Chauncy did much for Harvard College and for Massachusetts and he was an early instructor in medicine. There is a portrait of him in Memorial Hall at Cambridge.

WALTER L. BURRAGE.

CHEEVER, Abijah (1760-1843), surgeon of the Revolution, was descended in the fifth generation from Ezekiel Cheever, master of the Boston Latin School, who came to Boston from Canterbury, England in 1673, and taught Latin for seventy years, dying in 1708.

Abijah Cheever was born in Saugus, Massachusetts in 1760, his boyhood being passed in farm work. On the evening before the battle of Lexington he was employed in running bullets from a mould over a fire of hickory coals for the long Queen Anne muskets of his brothers who shared in the battle the following day. He was graduated from Harvard College in 1779, then studied medicine and surgery as a profession, being a student of

Dr. John Warren. In 1785 he received the degree of A. M. from Harvard.

In 1782 he was commissioned surgeon in the Revolutionary War. Here is his commission:

"By his Excellency John Hancock, Esq., governor and commander-in-chief in and over the Commonwealth of Massachusetts.

"To Abijah Cheever, Gentleman, Greeting. Having heard of your skill in surgery and reposing confidence in your ability and good conduct, I do by these presents constitute and appoint you surgeon on board the ship "Tartar" fitted out by this commonwealth for the service thereof . . . . .

"Dated at Boston this thirteenth day of May in the year of our Lord one thousand seven hundred and eighty-two, and in the sixth year of the Independence of the United States.

Signed, JOHN HANCOCK."

In this privateer he made two voyages. In the first the "Tartar" captured four British merchant vessels. In the second voyage she was attacked by the British frigate "Belisarius," and was herself captured. Dr. Cheever was sent to the old prison ship in New York harbor and confined some time. Exchanged later, after peace was proclaimed, he settled as physician and surgeon in Boston, at the then fashionable North End, married, and practiced seventeen years. He then returned to Saugus, where he lived until his death at the age of eighty-three.

He was pensioned by John C. Calhoun, secretary of war, in 1818, as surgeon's mate in the army of the Revolution, with the rank of captain of infantry of the continental line.

He published in 1787 a remarkable case of "Encysted Dropsy" (which now would be termed a Dermiod Cyst of the Ovary) with illustrations. This was demonstrated to the American Academy of Arts and Sciences.

He was a genial and much liked physician and surgeon.

DAVID WILLIAMS CHEEVER.

CHEEVER, Charles Augustus (1793-1852), surgeon of Portsmouth, N. H., son of Dr. Abijah Cheever (q. v.) was born in Boston, December 1, 1793, entered Harvard in 1809 and took his A. B. in 1813. He had the good fortune to study medicine with Dr. John Warren (q. v.) and in 1815 with Dr. John B. Brown (q. v.) and enjoyed the benefit of his large dispensary practice, then the only clinical opportunity in Boston. In 1816 he received his M. D. and settled in Portsmouth, New Hampshire, where he was the leading surgeon for thirty-six years, until his untimely death in 1852. Previous to this he made a voyage to the West Indies to introduce there vaccination, then a new practice. His material of vaccine was embodied in an Irish lad whom he vaccinated on starting and took with him to supply the vaccine virus. This trip was entirely successful. Portsmouth, New Hampshire, was a compact town of about seven to nine thousand people. It was intensely conservative, older physicians were antagonistic and his progress in acquiring practice was extremely slow.

Although always somewhat impecunious, he lavished his scanty means in all expenses which would advance him as a physician. He bought new books, was extravagant in new instruments, and disregarded the cost of knowledge. He early attracted students, and always had from one to three under him. He formed a good library, read and catechized his students, took them to see his cases, taught them to dissect and to prepare anatomical injections, dried specimens and skeletons, so that he collected for those times an unusual though small museum. Anatomical material could be obtained only by very expensive purchase, $25 to $50, from New York and Philadelphia (no railway transportation), or by illegal means. The cadavers were obtained somehow and dissected in the attic of his house. His home was the center of anatomical and surgical knowledge for thirty miles around, and over this area he was for thirty-six years known as "The Surgeon." His work ranged from dentistry and obstetrics to the major surgical operations. Considering the limitations, ignorance, prejudice and timidity with which he was surrounded, it is remarkable that he undertook, for his first attempts, new and recently described operations.

He operated successfully for cataract, and to ensure proper care kept his patient in his own house and nursed him. He operated for strabismus, removed breasts and tumors and amputated limbs. The first asepsis of subcutaneous surgery having come to his knowledge, he operated for club-foot and tendon sections, and treated his patients by apparatus. He was among the first to follow up a trephining by laying open the dura mater for hemorrhage or for abscess. No asepsis, no ether! Nerve and audacity were required to assail these new problems; enlightened only by his own dissections and his own reading, he practiced what he had never

seen. The unaided natural senses of sight and touch guided safely a hand, trained only by dissection, to the recesses of a quivering and moving patient.

Keen insight, intuition even, made him a noted diagnostician, esteemed as such by his contemporaries. He died too early, shattered by domestic griefs which preyed on a sensitive nature.

DAVID WILLIAMS CHEEVER.

CHEEVER, David Williams (1831-1915), Boston surgeon, was born in Portsmouth, N. H., November 30, 1831, the son of Charles Augustus Cheever (q. v.), a widely known surgeon in Portsmouth and Southern New Hampshire, and his wife, of the well-known Haven family of that city. Cheever, educated chiefly at home, entered Harvard in 1848, where, as he wrote, "I studied Italian with Longfellow, who extemporized Dante into English verse; German with Bernard Rölker; Botany with Gray; modern literature with James Russell Lowell; natural history with Agassiz; and metaphysics with James Walker, who had a great influence on my life." After graduation, he went to Europe, and returning in several months, he began the study of medicine (1854) at the age of twenty-three, entering Harvard Medical School, where Oliver Wendell Holmes taught anatomy, Storer obstetrics, and Henry J. Bigelow surgery. In summer he went to the rival Boylston Medical School, taught by an ambitious group of young men without hospital or Harvard connections, where individual teaching and enthusiasm rewarded his venture. He accepted the position of student assistant at the State Penal Hospital on Rainsford Island in Boston harbor, where a profitable clinical experience in every department of medicine and to a less extent, of surgery, gave him the real capital with which he started in practice, after graduating with honor in 1858.

General medicine, obstetrics, essays on medical topics in popular vein in the "Atlantic Monthly" and the "North American Review," now engaged Cheever's attention. In 1859 the care of the smallpox hospital during an epidemic was eagerly accepted; in 1860 the winning of the Boylston Prize Essay brought reputation and a small stipend—such were the humble beginnings of a great career, as yet undirected into its final channel.

In 1860, Oliver Wendell Holmes, (q. v.) whose attention had been attracted to Cheever's industry in the dissecting room, offered him the position of demonstrator of anatomy, just vacated by Richard M. Hodges. Thus began a career of thirty-three years of teaching in the Harvard Medical School. For eight years he personally prepared the lecture demonstrations for Dr. Holmes and revolutionized the teaching in the dissecting room by the introduction of competitive student dissections and quizzes. He had the gift of teaching, perhaps inherited from his ancestor, Ezekiel Cheever, one of the earliest and most famous of the Masters of the Boston Latin School.

In 1864, the Boston City Hospital was founded and Cheever was made visiting surgeon, a rare opportunity in surgery for so young a man, who also in his teaching position had endless opportunities to practice operations on the cadaver. His colleagues, of the defunct Boylston Medical School, not connected with the conservative and established order represented by Harvard and the Massachusetts General Hospital, opened clinics, struggled for students, started novelties, and soon were rewarded by receiving appointments in Harvard. This inaugurated the present mutually advantageous relationship between hospital and school. Cheever originated or revived unusual operations, wrote and published widely, and edited the first five volumes of the Hospital reports, much of the surgical text being from his pen; he was also for a time editor of the "Boston Medical and Surgical Journal". From the position of demonstrator of anatomy (1861-1866) he was advanced to assistant professor of anatomy (1866-1868), and later adjunct professor and then, in 1875, professor of clinical surgery. On the resignation of Dr. Henry J. Bigelow (q. v.) in 1882 he attained the zenith of surgical preferment in New England—the full professorship of surgery in the Harvard Medical School—a position which he held up to his voluntary resignation in 1893, when he was made professor emeritus and received an honorary LL. D. from Harvard. In 1895 he resigned from active hospital work, but continued to serve as president of the hospital staff. He served the University on the Board of Overseers for twelve years (1896 to 1908). He performed his last surgical operation at the age of 72, but continued to care faithfully for his old patients until shortly before his death twelve years later.

Cheever's surgical work was planned with painstaking care and thoroughness and exe-

cuted with skill and despatch. He united consummate familiarity with anatomy and reasonable skill in dissection with rare surgical sagacity. He himself says: "I never thought I excelled as an operator, but rather as a painstaker." He originated or revived many bold and unusual operations: displacement of the upper jaw for nasapharyngeal tumors, removal of tumors of the tonsil by external incision, pharyngotomy, esophagotomy for foreign bodies in the esophagus, the radical cure of hernia; he performed the first two consecutive successful ovariotomies in Boston, before the introduction of antisepsis. He was one of the first, if not the first, in this region, to do Cæsarean section. He published much but judiciously—monographs, case reports, hospital reports, essays. He was the valued correspondent of Ollier, of Lyons; he attracted the attention of Reginald Harrison, in England, especially by doing Cock's operation for impermeable stricture. Holmes, of St. George's Hospital, London, was interested in his excisions of the hip for coxalgia; Billroth, of Vienna compared notes with him in the surgery of the tonsil, and John Wood, of London, in the radical operation for hernia. Cheever's work was begun in the early days of ether anesthesia, before antisepsis and asepsis, in the face of suppuration and hospital gangrene, before the introduction of the clinical thermometer, the subcutaneous syringe, or the Roentgen ray. In his prime he worked under the carbolic spray and other early forms of antisepsis; the perfection of asepsis found him still vigorous and receptive to every improvement and innovation.

Cheever was an enthusiastic teacher of surgery, and thirty-three classes of students at Harvard Medical School were his devoted disciples. At a period when the didactic lecture had not yet been relegated to an apologetic existence, Cheever's lectures in surgery were such models of brilliant condensation, lucidity, and system that they could not but be inspiring. He lectured extemporaneously in clean-cut simple words, in an easy conversational manner lacking any spectacular elements. His clinical teaching was seasoned with shrewd intuition and a dry wit which never stung. His sympathy with the patient and interest in the student created a helpful atmosphere of mutual understanding. He insisted that the opportunities of a hospital surgeon imposed the obligations, first, to succor the patient, and, second, to share his advantages with students and fellow physicians. He was a leader in medical progress and played a foremost part in the reforms of medical education at Harvard under the administration of President Charles W. Eliot.

As a clinical teacher of surgery he instituted the class conference, a weekly clinical essay by a student with criticisms and comments by his fellows and instructors. At the hospital, he established a "Concours," or competitive examination for house-officers, until then unknown in New England. He supported the high and increasing premedical requirements for admission to the Medical School, the graded four-year course, and the development of laboratory and clinical teaching.

His was a slim, slightly stooping figure: his frame was frail, but in action vigorous. His manner was reserved, preoccupied, absorbed, partly by nature and partly by a curious inaptness in recognizing faces. His mien, his words, his clothes were without pretense—the outward expression of native simplicity and dignity. Weighing about one hundred and thirty pounds, his delicate physique seemed scarcely able to bear the weight of work, responsibility, and anxiety which he carried. He loved three things completely and unreservedly—his home, his profession and Nature. For years each major case operated on (usually for charity) at the hospital was visited again in the evening. An impecunious early case of esophagotomy, slow to recover, was visited at his home daily for a year. Many years later his patient tendered him a fee of one hundred dollars. A case of ovariotomy, before the days of antisepsis, was visited every six hours—at six o'clock in the morning, at noon, in the evening and at mid-night, until her recovery.

Cheever was active in medical societies; he organized a conference of the hospital staff. He initiated and aided wise public health legislation. For years he was one of the bulwarks at legislative hearings against the measures of the anti-vivisectionists and anti-vaccinationists. He helped to overthrow the pernicious coroner system in 1877, substituting the trained medical examiner. He fought for the sanctity of privileged communications from patient to physician, under due legal safeguards. He was often sought as an expert, since judge and jury recognized his sincerity and freedom from prejudice; he gave this up because, to quote his own words: "I can almost say that I never left the court after

testifying with a feeling of honorable satisfaction, or that I had been allowed to tell the exact truth after complicated questions and having my mouth shut by technicalities."

He was president of the American Surgical Association (1889); president of the Massachusetts Medical Society (1888-1890), and of many local professional organizations. He was honorary member of various state and foreign societies. He was president of the Boston Medical Library from 1896 to 1906, during the time that the funds were raised and the Library was established in its new building on the Fenway. Urged in his old age to become a charter member of the American College of Surgeons, he hesitated, but in 1915 at the meeting in Boston, he accepted honorary membership.

He married Anna C. Nichols of Boston in 1860, and the advent of six children constituted their chief happiness. His greatest sorrows were the deaths in childhood of his first-born, a son, and in adult life of a daughter by accidental drowning. He made to the Medical School and Hospital generous gifts, and gave in private to the needy: it was his especial delight to aid poor students and worthy colleagues. At leisure during the last ten years of his life, he resumed the study of Latin and Greek with a Harvard teacher, who, when cataract dimmed the vision, became his faithful secretary. Though doubtless aware that he could not live to greet his return, he gladly urged his only son to accept an opportunity to bring surgical aid to the wounded in France. On December 27, 1915, shortly after his eighty-fourth birthday, he died after a short illness and in full possession of his faculties.

DAVID CHEEVER.

CHEEVER, Henry Sylvester (1837-1877), professor of materia medica and practitioner of Ann Arbor, Michigan, was born on August 8, 1837, at Exeter, Otsego County, New York, but in 1844 his family moved to Geneva, Illinois; in 1856 to Tecumseh, Michigan, and in 1859 to Ann Arbor. The lad prepared for college at Tecumseh and graduated A. B. from Michigan University in 1863 and M. D. in 1866, beginning practice in Ann Arbor, and quickly gaining a large clientèle. In 1867 he was appointed demonstrator of anatomy at the University; in 1868, lecturer on materia medica and therapeutics; in 1869, professor of materia medica and therapeutics. In 1872 he was elected professor of physiology at Ann Arbor and also at the Long Island College Hospital, Brooklyn, New York. During these years he continued his ever-increasing medical practice, but under pressure of superhuman work his health gave way with phthisis pulmonalis, and he went to Colorado, returning, however, in 1875 and essaying to resume the broken thread but soon went to pieces and resigned himself to his fate. He joined the Michigan State Medical Society in 1869 and remained a member till his death. He was an original worker and sought to verify book statements by experiment. His graduation thesis of "Catalysis" was based on his own experiments and brought out points not previously made. Later he conducted a series of experiments to demonstrate the influence of alcohol in modifying body temperature.

Dr. Cheever was about five feet ten inches tall, of spare build with long limbs. His face was long and thin, covered by a scanty close-trimmed beard of iron-gray color. Entirely wrapped up in his work, he gave to the uttermost to others. He was one of the best products of Michigan, and all who knew him never ceased to regret his early death. In 1863 he married Sarah E. Bissell of Tecumseh, who with two children survived him when he died at Ann Arbor, March 31, 1877, from phthisis pulmonalis.

His papers included: "An Anomalous Case of Ovarian Cyst" ("Detroit Review of Medicine and Pharmacy, vol. ii"); "Abscess of the Brain" ("Detroit Review of Medicine and Pharmacy, vol. iii"); "Puerperal Convulsion", ("Michigan University Medical Journal", vol. i); "Effects of Alcohol on the Animal Temperature" ("Michigan University Medical Journal", vol. i); "Colorado as a Sanitarium" ("The Peninsular Medical Journal", vol. ii).

LEARTUS CONNOR.

CHENEY, Frederick Edward (1862-1924), Boston ophthalmologist, was born in Rutland, Vermont, in 1862. He had his education in the schools of that town and entered Harvard Medical School, graduating in 1885, and then serving as house officer at the Massachusetts Charitable Eye and Ear Infirmary, Boston. When he had spent several months in study abroad he was appointed assistant surgeon and then surgeon to the Infirmary and finally chief of the ophthalmic staff, retiring in 1914 and becoming consulting surgeon. He was also ophthalmic surgeon to the Massachusetts General Hospital and clinical instructor in ophthalmology at Harvard

Medical School from 1891 to 1895. Dr. Cheney was much handicapped as an instructor by extreme deafness. Among his writings were: "Errors of Refraction and Insufficiencies of the Ocular Muscles as Causes of Chorea, with Cases", "Bost. Med. & Surg. Jour.", Feb. 20, 1890; "Ocular headaches", ibid, Jan. 7, 1892; "Perforating Wounds of the Eye", ibid., July 15, 1897; With G. L. Walton, "Tumors of the Pituitary Body", ibid. Dec. 7, 1899; "The Question of Iridectomy in Glaucoma Simplex", "Ophthalmology."

Dr. Cheney held membership in the American Ophthalmological Society, New England Ophthalmological Society, Boston Society of the Medical Sciences, Boston Society for Medical Improvement and in several social clubs. As an ophthalmologist he stood in the front rank; he was a good diagnostician, a skilful operator, unexcelled in the use of the ophthalmoscope and a careful refractionist. He enjoyed a large practice for many years and was active up to a few days before his death, which was due to a carbuncle of the face. He was a man of rare personal charm and one having a delightful sense of humor endearing him to a large circle of friends. In his later years he lived in Concord, coming the twenty miles to Boston daily. He died on July 2, 1924 at the Massachusetts General Hospital, Boston, where he had gone for an operation.

In 1894 he married Miss Grace Cartwright of Rochester, N. Y. One of their two sons, Robert Cartwright Cheney, succeeded his father as an ophthalmologist in Boston.

CHEW, Samuel (1806-1863), professor of medicine in the University of Maryland, was born in Calvert County, Maryland, on April 29, 1806, educated at Charlotte Hall, and graduated A. B. and A. M. from Princeton College. Afterwards he studied medicine under Dr. William Donaldson and took his M. D. from the University of Maryland in 1829, practicing in Calvert County for about five years and then moving to the capital. In conjunction with Dr. Joshua Cohen (q. v.), he established an Eye and Ear Institute in 1840, himself taking the ophthalmological work. In 1841 he became professor of materia medica and therapeutics in the University of Maryland and in 1852 he was professor of the principles and practice of medicine, a post he held until his death from pneumonia on Christmas day, 1863.

In addition to his other positions, he was dean of the Medical School, 1842-1844, and vice-president of the Medical and Chirurgical Faculty from 1859 to 1863.

Dr. Chew was a man of classical tastes and scholarly attainments. He was a frequent contributor to periodical literature, and delivered numerous lectures and addresses, many of which were published. His latest and most extensive work was a 12mo volume, published in Philadelphia in 1864, and intended chiefly for medical students; it was entitled "Lectures on Medical Education." This work was left unfinished at his death but was completed and published by his son, Dr. Samuel C. Chew (q. v.). The last words which he wrote in it were "Sic itur ad astra." He was also a co-editor of the "Maryland Medical and Surgical Journal", the official organ of the Medical and Chirurgical Faculty in 1843.

EUGENE F. CORDELL.

CHEW, Samuel Claggett, (1837-1915), teacher of materia medica in the University of Maryland, was born in Baltimore, July 26, 1837, the son of Samuel Chew, (q. v.) who held the chairs of materia medica and therapeutics in the same university. Samuel Claggett's great grandfather was Thomas John Claggett, the first Episcopal Bishop of Maryland, and the first bishop of any church to be consecrated in America. The subject of this sketch was graduated at Princeton in 1856 and three years later received the A. M. degree from the same college. His M. D. was taken at the University of Maryland in 1858 when he began practice in Baltimore. In 1841 he was appointed professor of materia medica in his alma mater, holding the position until 1852 when he was made professor of the principles and practice of medicine. This chair he filled until 1863. From 1864 to 1909 he was a member of the board of regents of the university.

Dr. Chew's teaching was characterized by varied and profound scholarship. His powers of analysis, his keen sensing of the students' needs and limitations, his fine presence and rich voice made his didactic lectures models of the teacher's art. He was an exemplar of the gentleman and scholar in medicine; he left his impress on some four thousand students during the long period that he was instructor. He had a considerable vogue as a public speaker. In 1880 he delivered an address before the Medical and Chirurgical Faculty of Maryland, the state medical society, on "Medicine in the Past and Future"; in 1896 he made the presentation of the bust of Dr. George W. Miltenberger to the same body

and at the celebration of the hundredth anniversary of the founding of the University of Maryland, in 1907 he made two addresses. He was one of the authors in "Pepper's System of Medicine", and he was the author of "Clinical Lectures on Certain Diseases of the Heart, and on Jaundice", 1871; "Papers on Medical Jurisprudence," 1879; "Notes on Thoracentesis", 1876, besides editing his father's "Lectures on Medical Education," 1864. He was president of the state medical society in 1879-1880, president of the board of trustees of the Peabody Institute, and in 1898-1899 a consulting physician to the Johns Hopkins Hospital. He held membership also in the American Medical Association, the Baltimore Academy of Medicine and the Clinical Society of Baltimore. Dr. Chew was married to Agnes R. Marshall in June, 1884.

Except for a brief visit to Europe in 1864 Dr. Chew spent his life in Baltimore and there he died, at the age of seventy seven. March 22, 1915.

CHILDS, Henry Halsey, (1783-1868), founder and president of the Berkshire Medical Institution in Massachusetts, was born in Pittsfield, Mass., June 7, 1783, the son of Dr. Timothy Childs, a surgeon of the Revolution. He was graduated from Williams College, nearby in Williamstown, in 1802 and received an A. M. from the same institution in 1805. According to the custom of the time, he studied medicine with his father, the chief practitioner of the town, but served a longer apprenticeship, for he was associated with his father until the latter's death in 1821. There were only a few medical schools in the country at this time, all of them inaccessible to a man living in the western edge of Massachusetts. It was natural that a young progressive should plan for a medical college that should be the medical department of his alma mater, Williams. He had joined with his father in introducing inoculation for smallpox into Pittsfield and then, in the face of vigorous protest, substituting vaccination for inoculation. He had revived the Berkshire Medical Society, organized in 1807 but allowed to lapse into desuetude, and had impressed on that society the importance of establishing a medical college in Berkshire county, and the advantages offered by Pittsfield as a site. He was active and forceful, a persuader of men. With Dr. Asa Burbank of Williamstown and Dr. Daniel Collins of Lenox, both graduates of Williams, he petitioned the legislature for an act of incorporation, which was granted and the doors of the Berkshire Medical Institution were thrown open, September 18, 1823, not to close until a year before the death of the founder. Dr. Childs filled the chair of the theory and practice of medicine, Burbank that of obstetrics and materia medica. The college conferred the honorary degree of M. D. on Childs in 1823, among its first official acts. During its life of forty-four years Childs was the moving factor in keeping it going—he obtained the teachers; he raised endowments for erecting the buildings and for meeting the salaries of the instructors and the general expenses. The "Institution" graduated over 1200 practitioners; at one time more than Harvard Medical School. It was of great benefit to a widely scattered population. In the year 1837 the Berkshire Medical Institution was separated from Williams College and Dr. Childs was elected president, an office he held until 1863 when advancing years forced him to resign. Besides conducting a large practice in Pittsfield and its surroundings, Dr. Childs was a lecturer at the Medical School of Maine (Bowdoin), at the medical colleges at Woodstock, Vt., and at Willoughby and Columbus, Ohio, where he gave yearly courses of lectures, according to the practice of the time, the smaller colleges having a corps of lecturers who spent several weeks every year away from their headquarters, out of term time, instructing in their special fields.

From the time that Dr. Childs delivered his commencement oration at Williams he was a Jeffersonian Democrat. He represented Pittsfield in the state legislatures of 1816 and 1827; also in the senate in 1837. He was a member of the constitutional convention in 1820 and was lieutenant governor in 1843. As an influential councilor of the Massachusetts Medical Society he was responsible for certain reforms in the laws of that body leading to direct representation by the county societies, in the different parts of the state, in the governing Council. Although latterly in poor health he lived long enough to see his beloved medical college go out of existence, in 1867, and died at the home of his son-in-law, Elias Merwin, in Boston, March 22, 1868, at the age of eighty-four.

WALTER L. BURRAGE.

Childs, Timothy (1748-1821), pioneer physician of Pittsfield, Massachusetts. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 216.

Chipley, William Stout (1810-1880), Superintendent of the Eastern Kentucky Insane Asylum. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 217.

CHISHOLM, Julian John (1830-1903), of Charleston, South Carolina, studied medicine at the medical college of the state of South Carolina and after graduating there went to Europe to perfect himself in his chosen profession. Returning to Charleston he soon displayed great skill and ability as a surgeon and was appointed professor of surgery at the Medical College. Chisholm was one of the most famous surgeons of the Confederate Army. His "Manual of Military Surgery" became the text-book of the Confederate surgeons and is a work of high merit. After the war he resumed practice in Charleston, but in 1869 removed to Baltimore, Maryland, where he was at once appointed professor of operative surgery and diseases of eye and ear in the medical department of the University of Maryland. In 1873 he abandoned surgery and devoted himself exclusively to his specialty, diseases of the eye and ear. In 1877 he founded the Presbyterian Eye, Ear and Throat Hospital of Baltimore. A stroke of apoplexy compelled him in 1894 to retire from a most active and meritorious career and he died at Petersburg, Virginia, November 2, 1903. Chisholm was a man of strong personality, unbounded energy, a teacher of great power and full of enthusiasm for his calling.

ALBERT ALLEMANN.

CHIVERS, Thomas Holley (1807-1858), poet, was born in 1807 near Washington, Wilkes County, Georgia. The exact date of his birth is not known. He came of a well-to-do family of planters and received a liberal education, although there is no record of his taking a degree in Arts. He was graduated Doctor of Medicine from Transylvania University, Lexington, Kentucky, in 1830. His thesis on "Intermittent and Remittent Bilious Fever," submitted on February 20, 1830, is preserved in manuscript in the University Library. From the poet's daughter we learn that he studied also at Yale and was known to be proficient in Greek and Hebrew. It was while in New Haven that he met and married Miss Hunt, whom he always called Isadore.

Chivers travelled extensively in the northern and eastern states and had a wide literary acquaintance and correspondence. Medicine being a secondary interest, he practiced only for charity. Of medical publications we have been able to find, "Search after truth; or a new revelation of the psycho-physiological nature of man" (New York, Cobb and Yallalee, 1848, 64 pp., 8vo.). Three lectures were delivered in Savannah, Georgia, after his call to the professorship of the Institutes of Medicine in the Oglethorpe Medical College of that city (1857): "The Dignity of the Medical Profession," "Life," "Theurgia." All appear in the "Oglethorpe Medical and Surgical Journal for 1858". He never formally assumed the duties of the chair and died in the year following his call. These medical writings show how little fitted he was for the profession; they are a mass of transcendental and mystical phraseology, not a little tinctured with Spiritism, and showing no trace of interest in the modern movement in physiology.

It is as a poet that Doctor Chivers sought to make his mark on the intellectual life of his time, and he has left a group of volumes which appeared between 1834 and 1858, in very small editions, all now excessively rare, namely: "Conrad and Eudora, or the Death of Alonzo. A Threnody" (Philadelphia, 1834, 153 pp., 16 mo); "Nacoochee; or the Beautiful Star, with Other Poems" (New York, 1837, 143 pp., 12mo.); "The Lost Pleiad, and Other Poems" (New York, 1845, 32 pp., 8vo); "Eonchs of Ruby, A Gift of Love" (New York, 1851, 166 (2) pp., 8vo); "Memoralia, of Phials of Amber, Full of the Tears of Love, A Gift of the Beautiful" (Philadelphia, 1853, 168 pp., 12 mo); "Virginalia, or Songs of my Summer Nights and Gifts of Love for the Beautiful" (Philadelphia, 1853, 132 pp., 12 mo); "Atlanta: or the True Blessed Island of Poesy. A Paul Epic in three Lustra" (Macon, Georgia, 1853, 8vo); "Birthday Song of Liberty. A Paean of Glory for the Heroes of Freedom" (Atlanta, Georgia, 1856, 15 pp., 8 vo); "The Sons of Usna, a Tragic Apotheosis in Five Acts" (Philadelphia, 1858, 92 pp., 8vo). In addition to these volumes, there are many fugitive bits of verse scattered throughout contemporary newspapers and other special periodicals.

Were it not for the controversy as to the relation of Chivers to Poe in the matter of priority of invention of the most famous of the latter poet's rhythms and strange words, it is fair to say that today Chivers would be completely forgotten. The literature of this

controversy, which began before Poe's death and was continued for several years after it, is voluminous. (See Joel Benton's, "In the Poe Circle," New York, 1899; George E. Woodberry's "Poe-Chivers Papers," Century Magazine, January and February, 1903.) Suffice it to say that Poe knew and corresponded with Chivers and knew his work and referred to it. Furthermore, there is weighty evidence to show that Chivers' "Lily Adair," "Allegra Florence," and "Railroad Lyric" did antedate "Annabel Lee," "The Raven," and "The Bells," respectively. But even if this be granted, it is equally true as Benton says that "Poe used this machinery and hypnotism better than Chivers did or could. One leaves an immortal halo around his name, and the other a nebulous mist which failed to condense into a star."

On December 19, 1858, Doctor Chivers died at Decatur, Georgia, where he is buried.

THOMAS R. BOGGS.

CHOPPIN, Samuel Paul (1828-1880). Among the descendants of the pioneer families who settled in Louisiana and owned later some of the principal sugar plantations of the golden era on the banks of the great Meschacèbè, were Paul and Eliza Sherburne Choppin, he of Creole parentage. Their son Samuel was born at Baton Rouge, October 20, 1828, and had his preliminary education at Jefferson College, Louisiana.

At an early age he began to study medicine at the University of Louisiana, and after spending two years as resident student at the Charity Hospital, New Orleans, graduated as M. D. there in 1850, afterwards taking up a post-graduate course in Paris and in Italy, spending two years in these studies. On his return he became demonstrator of anatomy in the University of Louisiana, and while there was appointed house surgeon to the Charity Hospital, soon becoming one of the ablest surgeons of the whole south.

Besides frequent contributions to medical literature, he edited the "New Orleans Medical News and Hospital Gazette". With a combative, energetic temper, he was not content to follow in beaten paths, he was a builder, a creator. And soon we see him with his colleagues, Dr. C. Beard, Dr. Cenas and others founding a new school, the New Orleans School of Medicine, and its brilliant though short career was only one of the many proofs of his energy and ability. Its success was interrupted by the Civil War. Through all the battles of the Confederacy he lent his entire time to the sick and wounded. It was after the bloody battle of Shiloh when Beauregard made his masterful retreat to Corinth, that he needed reinforcements, and naturally chose Dr. Choppin to go to New Orleans to stir up the patriotism of his people. The war over, Choppin returned to his native state beaten but not conquered. With spirits undaunted, he went back ruined and bruised, to build up again his practice and, cheered by the love and admiration of his fellow patriots, he was successful.

In 1875 he was appointed president of the board of health and it is as such that he was best remembered. The dreadful epidemic of yellow fever took place in 1878 and, though according to present knowledge he is known to be mistaken, he pursued a really intelligent campaign against the epidemic. It was believed to be due to a germ or miasma or bacillus of infection, carried along in clothes, bedding, trunks, etc., the old fomites theory as it was then called.

In 1853 he published notes on "Syphilis," translated from lectures by Ricord; and among his numerous articles two were of special interest: "Ligation of the Brachial Artery," 1854, and "Removal of Uterus and Ovary," 1866.

He married first, in October, 1857, Selinia, daughter of Daniel Roberts of Guernsey, England, and after her death, in 1862, Amelia, daughter of Dr. James Metcalfe of Adams County, Mississippi.

His energetic and positive nature made him some enemies, but his whole-souled love of the people and state caused the entire South to mourn on May 2, 1880, when he died of acute pneumonia.

LOUIS C. BOISLINIERE.

CHOVET, Abraham (1704-1790), Philadelphia anatomist, was born in England, May 25, 1704. The recorded facts concerning this learned man are all too few. Nothing is known of his parentage or education he having come into public notice first when he entered the Company of Barber-Surgeons, London, February 5, 1734. On August 15, of that year he was chosen demonstrator of anatomy by that body. Previously—in 1732—he had published "A Syllabus or Index of all the Parts that enter the Composition of the Human Body", London. In the syllabus he described models which he had made in wax both natural and artificial, sufficient to illustrate a complete course in anatomy; he described the making of corrosion specimens, such as models of the arteries made by injecting the blood vessels with colored wax

and destroying the tissues by means of caustic alkalis or acids. One must infer that Chovet had lectured somewhere before he was admitted to the Barber-Surgeons. He lived in Leicester Square, London, afterwards the home of the famous John Hunter, anatomist and surgeon, and it is likely that he enjoyed a surgical practice of some distinction. Why he left London we do not know. Dr. Physic of Philadelphia was responsible for a story that Chovet had opened the trachea of a criminal previous to hanging for highway robbery and that the robber was said to have spoken when the hangman was through with him. The government not appreciating such an experiment Chovet had found it best to travel. Be that as it may he was next heard of in Barbadoes in 1754 when it was reported that on the arrival of a prize ship brought into that port containing in its cargo a quantity of wax Chovet improved the opportunity to make some anatomical models. In 1759 he was in Kingston, Jamaica and from that port he sailed with his wife and widowed daughter for Philadelphia to escape an impending insurrection of the slaves. The exact date of his arrival in the city of brotherly love is not known. The "Pennsylvania Journal and Weekly Advertiser" and the "Pennsylvania Gazette", for October and November, 1774, advertised the time and place in Philadelphia of lectures on anatomy and physiology by Abrm. Chovet, giving also laudatory accounts of his first lecture which was attended by "his Honour the Governor, the Trustees and Faculty of the College, the Clergy, the Doctors of Physic, the Students of Medicine, and a considerable number of the most respectable inhabitants of the City."

At that time Chovet lived on Water Street. There he collected an anatomical museum and in 1777 built an amphitheater in which he gave his first lectures the following year. The museum and the lectures were a great assistance to students and to the graduates in medicine, in a new country where such facilities were few. John Adams inspected the specimens in 1774 and said they were superior to those used by Dr. Shippen in the University of Pennsylvania school. The French general and author, Marquis de Chastellux, visited Chovet in 1780 and wrote that the preparations in the museum were, in his opinion, better than those of Bologna while John Morgan, (q. v.) surgeon of the Revolution and founder of the first medical school in the country, praised the wax models. This collection formed the basis of the Museum of the University of Pennsylvania, having been acquired by purchase from Chovet's executors in 1793. It was described by Dr. Thomas G. Morton in his history of the Pennsylvania Hospital, as "A very remarkable collection of anatomical preparations including, dried, injected and painted specimens, together with a series of beautiful wax models by Dr. Abraham Chovet." As luck would have it the entire collection was destroyed by fire in 1888.

Chovet acquired a considerable reputation as practitioner and surgeon. He is described by contemporaries as "a very popular physician" and as "a man skilled in all things pertaining to medicine, and especially in anatomy and surgery." In stature he was below the average height; he wore a small cocked hat closely turned up behind and carried a gold-headed Indian cane dangling from his wrist by a black string. He walked rapidly and seemed to be always in a hurry. When over eighty years old he was made one of the senior founders of the College of Physicians of Philadelphia, the only one of foreign birth, an unusual honor for a man of his years. According to Thomas G. Morton "he was possessed of professional acquirements which entitled him to a high rank among the medical profession, and with them to respectful remembrance." He died "of an acute disease" March 24, 1790, in the eighty-sixth year of his age and was buried in Christ Church Cemetery, Philadelphia.

CHRISTIAN, Edmund Potts (1827-1896), who practiced chiefly as an obstetrician, came of old Philadelphian Quaker ancestry and was born at Friendsville, Susquehanna County, Pennsylvania, on April 23, 1827. Educated at a Detroit academy, he was graduated A. B. from Michigan University in 1847 and A. M. in 1850. To get his money for his medical course he served as clerk on various steamers during the summer and spent the winter studying, taking his M. D. at Buffalo Medical College, New York, in 1852. Five years of private practice in Detroit followed, then he went to Wyandotte, Michigan, and stayed until he died.

From 1855-58 he was assistant editor of the "Peninsular Journal of Medicine" of Detroit, a founder of the second epoch of the Michigan State Medical Society, and president of the third; also a member of the Detroit Medical Society; the Wayne Medical Society, and the Detroit Gynecological

Society. Unlike most physicians, he kept, in a scholarly manner, careful clinical records of cases and from time to time laid these studies before his fellow doctors. He was one of the first to recognize milk as a potent factor in transmitting typhoid; while his fellow practitioners were tardy in accepting the correctness of these observations, he continued their teaching and practice till accepted. Dr. Christian was about five feet seven inches tall, slenderly build, with short beard, keen blue eyes, with a kindly expression. He was nervous in movement, an indefatigable worker, absolutely honest and without guile in all his relations. In 1854 he married Mary H. Foster, who with two sons survived him; one, E. A. Christian becoming a physician. The father himself died in Wyandotte November 17, 1896, of arteriosclerosis with special involvement of the cerebro-spinal vessels.

His writings numbered about twenty titles and are to be found in the Surgeon General's Catalogue at Washington, D. C.

LEARTUS CONNOR.

CHRISTOPHER, Walter Shield (1859-1905), pediatrician and educator of Chicago, was born at Newport, Kentucky, March 14, 1859, and died of heart disease at Chicago, March 2, 1905, thus not having quite completed forty-six years of life. His father was Charles H. Christopher, a mechanical engineer, native of Cincinnati, of Scotch descent, and his mother was Mary A. Shield, of New York City. Walter attended the schools of Newport and then when his parents moved to Cincinnati, the Woodward High School of that city, fitted him for the Medical College of Ohio, where he took his M. D. in 1883, after serving a year as interne at the Cincinnati Hospital. He became demonstrator of chemistry in his alma mater and consulting chemist to the Rookwood Pottery, perfecting there some of the glazes that have enchanced the fame of Rookwood ware. At the same time he was on the staff of the children's clinic of the Medical College of Ohio. In these duties Dr. Christopher continued until 1890 when he was called to the chair of theory and practice of medicine in the University of Michigan.

When Christopher had been in Ann Arbor a year he was appointed professor of diseases of children at the Chicago Polyclinic and moved to Chicago. The following year a similar position was offered him in the College of Physicians and Surgeons, Chicago, and from this time he devoted himself to pediatrics. He was especially interested in the intricate and obscure chemical problems associated with nutrition in infants and he contributed many articles on this subject to the literature. Already a member of the American Pediatric Society in 1889 he became president in 1902. In 1898-1900, he was a member of the Chicago Board of Education, and was instrumental in establishing a system of medical inspection of public schools and a child-study department. Of the latter he wrote largely for the medical journals and the pediatric society. Of his work on the board of education, one of his fellow members said: "We may think of him as a searcher after truth; as possessing the genius of industry; as a painstaking investigator; as having a mental equipment which leads straight to the gist of things; as having the qualities of the explorer and in some degree the pioneer; as beliving that few situations in life are so serious that a hopeful view of them is not more sane than a hopeless view."

On Christmas day, 1884, he married Henrietta Wenderoth and they were subsequently blessed with two children, a girl and a boy, the latter, Frederick, becoming a Chicago physician.

CHURCH, Benjamin (1734-1776), the first surgeon-general of the American Army, was born at Newport, Rhode Island, August 24, 1734. He was a great grandson of Col. Benjamin Church (1639-1718) who was distinguished in the early Indian wars of New England. After graduating at Harvard College in 1754 Benjamin studied medicine in London and established himself in Boston, where he rose to eminence as a physician and as a skilful operator. James Thacher said "He possessed a brilliant genius, a lively fancy, and was an excellent writer." In 1773 Church was the orator at the "Commemoration of the Boston Massacre." When the war began he was appointed physician-general to the army with the title, "Director-General and Chief Physician," with a stipend of four dollars a day. He was a member of the Provincial Congress in 1774. His duties in the army were to "furnish medicines, bedding and all other necessaries, to pay for the same, and receive orders from the commander-in-chief."

Church tried to raise the low standard of the medical corps but was hampered by friction between the hospital and the regimental

surgeons; an investigation was ordered. Suddently it was discovered that he was in communication with the enemy, as revealed by a cryptic letter intercepted through the agency of a woman whom he kept. He was arrested and held in prison for some four months when he was convicted unanimously by a council of war presided over by General Washington. He was expelled from Congress and confined in jail at Norwich, Connecticut, by order of that body. Finally in May, 1776, he was released on account of failing health and allowed to sail with his family to the West Indies. He was never heard of again and it was supposed that his ship was lost at sea. His family was pensioned by the crown.

Drake says, "He was an elegant orator and poet, and the best of the contributors to the "Pietas et Gratulatio". He wrote "The Choice," a poem; "The Times," 1760, a satire on the Stamp Act and its abettors; an elegy on Dr. Mayhew, 1766; an elegy on Dr. Whitefield, 1770; "Address of a Provincial Bashaw, by a Son of Liberty," 1769, and the oration, above referred to, delivered March 5, 1773.

CLAIBORNE, John Herbert (1828-1905), the son of John G. and Mary E. Weldon Claiborne, was born March 16, 1828, in Brunswick County, Virginia, and educated in local academies and at Randolph-Macon College, graduating A. B. in 1848, and receiving his M. A. in 1851. He entered the University of Virginia in 1848 and graduated in medicine in 1849, then attended lectures at the Jefferson Medical College, Philadelphia, and took his M. D. from that school in 1850.

Claiborne began to practice in Petersburg, January 1, 1851. In 1855 he was elected to the lower house of the State Legislature, and in 1857 was elected a state senator, and served in that body until the beginning of the Civil War, when he was eventually commissioned major and surgeon, and assigned to duty with the twelfth Virginia Infantry. In May, 1861, while in the field, he was elected to the senate, and on December 1, 1861, was ordered by the secretary of war to take his seat. This he did, but immediately resigned and was given the duty of organizing and equipping general hospitals, chiefly in Petersburg, Virginia. In June, 1864, being the senior surgeon of the post, he was appointed executive officer and chief surgeon of all the military hospitals in Petersburg and vicinity.

He was a member of the Gynecological Society of Boston; a fellow-elect of the Victoria Institute of Great Britain; and was one of the founders of the Medical Society of Virginia and its president in 1878. He was also a member of the Southern Surgical and Gynecological Association and of the Tri-State Medical Association of the Carolinas and Virginia.

He made some valuable contributions to medical literature; besides he published an interesting and valuable book of reminiscences entitled, "Seventy-five Years in Old Virginia." A valuable publication of his having a professional character is "Clinical Reports from Private Practice," 1873, a record of 144 cases of all kinds taken from his daily note book, exhibiting methods of practice.

He married Sarah J. Alston, of North Carolina, in May, 1853, and had four daughters and a son, John H. Claiborne, Jr., who became a physician and practiced in New York City as an opthalmologist. In November, 1888, he married his second wife, Anne L. Watson, of Virginia, and had one son and a daughter. After a sudden illness of a few days' duration, he died on February 24, 1905, in Petersburg.

He was a very able man. Not only was he a most skilful physician, but a man of broad general information and experience.

ROBERT M. SLAUGHTER.

CLAIBORNE, John Herbert (1861-1922), the son of John Herbert (q. v.) and Sarah Alston Claiborne, was born in Petersburg, Va. June 29, 1861. After graduating in arts in 1883 from the University of Virginia he took his M. D. from the same institution entered the New York Polyclinic and Bellevue Hospital Medical College and upon completing his course became the private assistant of Emil Gruening (q. v.). During 1885-86, he studied in Europe and returned to settle in New York City to practice. He was instructor in clinical ophthalmology at Cornell University Medical College, surgeon to the New Amsterdam Eye and Ear Hospital, professor of ophthalmology at the New York Polyclinic, and instructor in ophthalmology at Columbia University. He enlisted in the Spanish-American War as second lieutenant and advanced to line captain, writing a brochure on his experience, "Three Months in Camp Thomas, Spanish-American War, 1899." Among Dr. Claiborne's notable contributions to medical literature are, "Some Experiments on Rabbits made with a View to Obtaining a Stump for the Accurate Fitting of Glass Eyes," 1896, "The Effect of the Extrinsic Poisons on the Eye," 1897, "Causes,

Prevention, and Management of Myopia," 1903, "A Chart for the Axis of Astigmatism," 1904, and Cataract Extraction," 1909.

He died in New York from heart disease, May 27, 1922. There is a protrait of Dr. Claiborne in the Transactions of the American Ophthalmological Society for 1923.

CLARK, Alonzo (1807-1887). Two little incidents give the key to the character of this New York physician who had an inward assurance of his own powers. His father, not rich, offered him $1,000 to complete his education, but the boy said he would work his own way through. When growing old he was asked to retain the presidency of the College of Physicians and Surgeons, New York, but firmly declined, showing the same resolution in leaving off as in beginning. The father who offered his savings was one Spencer Clark, a leather merchant of Chester village, Vermont, which he had founded and where Alonzo was born March 1, 1807. The boy got his education at the village school in Worthington, the Hopkins Academy at Hadley, and under Parson Hallock of Plainfield, finally taking his bachelor's degree in 1828 from Williams College, Massachusetts. The discipline of teaching school fell to his lot as to that of many young doctors in order to pay the way. In 1835 he took his M. D. from the College of Physicians and Surgeons of New York. After visits to London and Paris he was back in New York keen on pathology and microscopic studies, the microscope being then rarely used for professional purposes.

Some years spent in the wards and dead house of Bellevue Hospital gave him a power of diagnosis and knowledge of morbid processes; his opinion gradually came to be valued by the physicians of the city and country. In the class-room his knowledge of his subject, his scholarly methods, commanded attention. Among his contributions to the advancement of medicine may be mentioned: verification of percussion, his management of typhus fever, and his treatment of peritonitis by opium. The idea of the first originated with Dr. Camman and he with Clark and Dr. C. T. Mitchell set to work to prove the principles of percussion by post-mortem experiments. Upon the dead body success was complete and in his papers Clark gives instances of their results in diagnosing rare cases of disease.

His management of typhus fever in his ward at the Bellevue Hospital, by removing the window sashes even in winter, by heating the incoming air and by maintaining the strictest cleanliness rapidly diminished the mortality. Then, as to peritonitis he dismissed venesection, leeches and mercurials and came to the conclusion that "a kind of saturation of the system with opium would be inconsistent with the progress of the inflammation and would subdue it," a conclusion demonstrated in his article on "Peritonitis" in "Pepper's System of Practical Medicine," vol. ii.

Among his writings are found: "A New Mode of Ascertaining the Dimensions, Form and Condition of Internal Organs by Percussion" (written with Dr. G. P. Camman, 1840); "On the Treatment of Puerperal Peritonitis by Large Doses of Opium," 1855; Lectures on "Typhoid Fever," 1878; lectures on "Cholera," 1866-7; on "Localized Peritonitis," 1878; on "Eruptive Fevers," 1880; on "Diseases of the heart," 1884.

He held the professorships of materia medica at the Berkshire Medical Institution, 1843-1854, and of the theory and practice of medicine at Woodstock, Vermont, thirteen years; the chair of physiology and pathology, College of Physicians and Surgeons of New York, 1848-1855, and practical medicine 1855-1885 at the same institution, where he was also dean and president of the faculty from 1875 to 1885. He was visiting physician, Bellevue Hospital; president of the New York State Medical Society; member of the Pathological Society of New York, and of the New York Academy of Medicine. Dartmouth conferred an A. M. on him in 1844 and the University of Vermont an LL. D. in 1853.

The disease from which he finally died dated back several years, a degeneration of the cerebral circulatory system. He did not leave his house for six months before his death on September 13, 1887.

Clark, Andrew Gibson (1809-1902), of Winchester, Va. See Cyclopedia, Amer. Med. Biog. H. A. Kelly, Phila. 1912, 182-183.

CLARK, Daniel (1835-1912), alienist of Ontario, was born at Granton, Inverness-shire, Scotland, August 29, 1835. Accompanying his parents to Canada in 1841, his early years were spent upon his father's farm. In 1850 he went to California, where he had some stirring experiences during the year or more he remained there. On his return to Canada he attended the Simcoe Grammar School, and subsequently studied classics, mathematics and philosophy in Toronto. His

medical studies were pursued at the Toronto School of Medicine and at Victoria University, Cobourg, where he was graduated in 1858. Later, the University of Toronto bestowed on him the degree of M. D., "ad eundem." After leaving college, he went to Europe and studied in Edinburgh, London and Paris. Returning to Canada in 1859, he began practice in Princeton, Ont., but, when the Civil War broke out in America, joined the Federal army of the Potomac, under General Grant, as a volunteer surgeon, gaining much valuable experience. In 1872 he was elected a member of the Ontario Medical Council for four years, and afterwards was re-elected for a second ferm. He was twice elected president of the College of Physicians and Surgeons, Ontario, and at one time was vice-president of the Medico-Legal Society of New York. In 1891 he became president of the American Medico-Psychological Association, and in 1906 was made an honorary member of that body. He was immensely popular with the Scottish societies of Toronto, occupying many positions of honor with them. In December, 1875, he was appointed medical superintendent of the Toronto Asylum for the Insane in succession to Dr. Charles Gowan, who had filled this position for a short time after the retirement of Dr. Joseph Workman (q. v.). The appointment caused a good deal of feeling at the time among certain members of the medical profession, who felt that politics were being made to play too important a part in institutional affairs. On the other hand, the Medical Council strongly urged Dr. Clark's claims, and the government, which had been severely heckled because it had imported a psychiartist from England, the experiment turning out badly, was glad to accept the suggestions of the Council. Dr. Clark, beginning as he did the work of governing a large institution at middle age without previous experience, did admirably and proved a sound and efficient administrator. He was fair-minded and popular with his officers, interested in his patients, and had the happy knack of knowing how to deal with the troublesome public that always tries the patience of the asylum superintendent. Having a fondness for metaphysics and the Scotchman's penchant for philosophical discussion, he was not inclined to look with favor upon localized pathological conditions as playing any important part in the causation of the different psychoses, and various papers by him, such as the "Animated Molecule," made clear his mental characteristics and his bent on this subject. Dr. Clark's point of view never coincided with that of the psychiatrist of the present day, and he belonged to a school pretty largely his own. He was particularly opposed to the theory of brain localization, and was able to keep up his end of the argument with great credit to his powers as a debater. It was unfortunate that he should have commenced his psychiatric studies when well up in middle life, because he had qualities which would have made him brilliant had he been trained in this specialty in his youth. As it was he did excellent work, and was frequently called as an expert witness in medico-legal cases. In these he gained a well-earned reputation, being self-possessed, keen-witted and fully aware of the fact that the average lawyer, no matter how well crammed, is easily put on the rocks by one who has a technical command of the situation. The doctor was of commanding presence, and was in every respect an ideal witness, never appearing as a partisan, although he delighted in leading a cross-examiner into metaphysics and psychological definitions. On such occasions he appeared at his best. Dr. Clark was a delightful companion, possessed of a pawky humor that made him acceptable in any company, while his literary style made his writings welcome additions to the library. Besides frequent contributions to periodical literature, both medical and general, he was the author of "Pen Photographs" (1873); of a novel called, "Josiah Garth," dealing with the Canadian Rebellion of 1837 (1878); of the "Public and the Doctors in Relation to the Dipsomaniac" (1888); and of "Mental Diseases," a synopsis of 12 lectures delivered at the Hospital for the Insane, Toronto, to the graduating medical classes (1894). Dr. Clark continued in charge of the Toronto Asylum up to 1905, when he retired to a well-earned rest, living in Toronto until his death in September, 1912. He was also for many years an extramural professor of mental diseases in the University of Toronto.

CLARK, John (1598-1664), the progenitor of a family of seven physicians, was born in England in 1598, and was probably of Scottish lineage, although little has been learned of him previous to his settling in Newbury, Mass., except that he was the younger son of a good family in the North of England, had a collegiate education, and a diploma as a practitioner of medicine. He came to America unmarried, returned and brought over a

breed of cattle in several vessels. In the first division of the town lands of Newbury after its incorporation, May 6, 1635, the name of Dr. Clark appears on the town records. Again in November, 1637, it is stated in these records that Dr. John Clark was granted a farm "of 400 acres, next to Mr. Sewall's at the mouth of carte Creeke." At a town meeting held in Newbury, September 28, 1638, the following record was made: "It was granted that Mr. Clark in respect of his calling, should be freed and exempted from all publick rates either for the town or the county so long as he shall remain with us and exercise his calling among us." From this we gather that he was held in good repute by his fellow townsmen. In Coffin's History of Newbury, the statement is made "that he (Dr. Clark) was the first regularly educated physician who resided in New England." He was admitted a freeman May 22, 1639. In the year 1649 he executed a deed of land in Newbury. Probably shortly after this time he moved to Boston and was physician to some of the leading families there as shown by the family records. He married Martha Saltonstall, sister of Sir Richard Saltonstall of Boston, and left one child, John. His grandson, the Hon. William Clark, Councillor (1670-1742), wrote a brief family history for private use in 1731.

This first John Clark of the Clark family of seven physicians, had a reputation for cutting for stone, holding for this a separate English diploma, which his grandson, in the above history, said he had seen in parchment with its seal, as well as his medical diploma. He maintained a large farm at Plymouth, Mass., where he bred fine horses and cattle. Some of the breeds of horses he introduced were long known in New England as "Clark's breed." He died in November, 1664, leaving in his will among other things, stoves specially constructed to save firewood, for which the General Court had given him a patent for life in 1652. James Savage remarks: "How much these anticipated Dr. Franklin's invention of a hundred years later, I suppose can never be learned." In his will he left to his son, John, besides his books and instruments, "horses, mares, and colts, both in this colony of Massachusetts and in Plymouth colony."

A quaint oil painting of Dr. John Clark is now in John Ware Hall in the Boston Medical Library, having been presented to the Library by Sarah W. Pickering and Hepsie S. Howard, of Boston, sole heirs of John Clark Howard, M. D. (1805-1844). The portrait is referred to in the wills of the Clarks. It must have been one of the earliest portraits in oils made in America.

WALTER L. BURRAGE.

CLARKE, Almon (1840-1904), army surgeon of Vermont and physician of Wisconsin, was born in Granville, Vermont, October 13, 1840. When he was three years old his parents removed to Rochester, Vt., where he attended local schools, was a teacher himself when fifteen, and at nineteen read medicine with the Huntingtons, who practiced continuously in Rochester for a hundred years. He attended lectures at Castleton, Vt., and lastly at Ann Arbor, Michigan, where he was graduated in 1862. Returning to Vermont, Dr. Clarke began practice near Montpelier. The country was then astir with the excitement of war, and in August, 1862, he found himself in camp in Brattleboro, as assistant surgeon of the tenth Vermont Infantry Volunteers. When the army was reorganized, Dr. Clarke's regiment was reorganized, his regiment being transferred to the first brigade, third division, sixth corps. In this famous corps commanded by Sedgwick, and afterward by Wright, he served through the great battles of The Wilderness, Spottsylvania, North Anna, Cold Harbor, many of the fierce struggles before Petersburg (notably the last one, in which Richmond and Petersburg were captured), Sailor's Creek, Winchester, Fisher's Hill and Cedar Creek. While in Burksville Dr. Clarke received his commission as surgeon of the first Vermont Cavalry.

In April, 1866, he settled in Sheboygan County, Wisconsin. The roads were rough, the weather exposure severe in day and night service, and he found that his physical powers, impaired by army life, were not equal to the large demands that were made upon him, but he struggled on doing the best he could. For thirteen years he was physician to the County Insane Asylum. In 1877 he was employed by the Pension Bureau to do special work in four different states. He practiced in Sheboygan until 1895, when he was appointed, by Gen. Franklin, surgeon of the Northwest Branch of the National Soldiers' Home.

In 1868 Dr. Clarke married Emma Josephine Adams who survived him. They had no children.

During the last years of his life he spent

his winters in the south and his death (from dysentery) occurred there, but his body was taken to Sheboygan. EMMA J. CLARKE.

CLARKE, Edward Hammond (1820-1877), Boston physician, was born in Norton, Massachusetts, February 2, 1820, the ninth and youngest child of the Rev. Pitt Clarke, a Congregational minister of Norton, descended from one of the early colonists who came from England and settled in the north of Wrentham. His mother, Mary Jones Stimson, his father's second wife, was very fond of literature and wrote many poems. Some of those preserved show, as Dr. O. W. Holmes says, a cultivated taste as well as warm affections. On the death of Pitt Clarke his widow moved to Cambridge, Massachusetts, where Edward was fitted for Harvard College, entering with the class of 1840. An attack of hemorrhage from the lungs when he was in his junior year compelled him to give up study, and this same weak health proved a hindrance for some years. He received his A. B. in 1841. In spite of his ill health he was buoyant and optimistic in temperament and took up the study of medicine in Philadelphia because of the less harsh climate of that city. The M. D. was conferred upon him by the University of Pennsylvania in 1846. Upon graduation he accepted an offer to travel in Europe. Here he began the study of otology, a specialty to which he devoted himself in the early years of practice. Upon establishing himself in Boston he soon assumed a prominent position. His health was much improved though never rugged. He is described by Dr. O. W. Holmes as having "all the qualities that go to the making of a master in the art of healing; science enough, but not so much in the shape of minute, unprofitable acquisition as to make him nearsighted; very great industry; love of his profession and entire concentration of his faculties upon it." In 1855 he was chosen professor of materia medica in the Medical School of Harvard University, succeeding the distinguished Jacob Bigelow. (q. v.) This office he resigned in 1872 and was chosen a member of the board of overseers. He continued in active practice until assailed by cancer of the intestine, of which he died November 30, 1877, after three years of almost constant suffering borne with extraordinary fortitude.

As a writer he contributed various articles on materia medica to the "New American Cyclopaedia." In conjunction with Dr. Robert Amory he published, in 1872, a small volume on the "Physiological and Therapeutical Action of the Bromides of Potassium and Ammonium," and in 1876, "Practical Medicine,' a brief and clear account of the progress of medical knowledge in the century just finished. His essay on "Sex in Education" provoked sharp antagonism and was much discussed and read. Another essay, "The Building of a Brain," was widely read but called forth less comment. In his later years he gave himself more and more to literature.

He married Sarah Loring, daughter of Jacob H. Loud, of Plymouth, in 1852. She died a year before him. They had two children, Mary Stimson, who died in infancy, and Elizabeth Loring, who married Dr. Reginald Heber Fitz (q. v.), Shattuck professor of pathological anatomy in the Harvard Medical School from 1879 to 1892.

WALTER L. BURRAGE.

CLAYTON, John (1693-1773), botanist, was born in England in 1693, educated there, came to Virginia in 1705, and for the rest of his life lived in Gloucester County, though it is said by Jefferson that he was a native of Virginia. Some say that he was not a physician, but we have it on the authority of Dr. J. M. Toner that he was educated to the medical profession, and was eminent in it. He was one of the leading botanists of his day, giving much time to botanical research and correspondence with Linnaeus. Laurence Gronovius did him the honor to name a genus of plants, "Claytonia Virginica," the "Spring Beauty," after him.

He had a noted botanical garden and prepared for the press a work of two volumes on botany and a "hortus siccus" of folio size, with marginal notes and directions to the engraver in preparing the plates for the proposed work. These were left in the charge of the county clerk of New Kent, and were unfortunately burned, together with the county records, at the beginning of the Revolution. His long life was spent chiefly in botanical explorations and in the description of the plants of the colony. As a practical worker he was probably without superior in his day, and is supposed to have added more to the catalogue of plants than anyone before him.

The fact that he was assistant, and later for fifty years clerk of Gloucester County, would indicate that he was not a practitioner. His father was an eminent lawyer, and for a time attorney-general of the colony, which is an argument in favor of Jefferson's claim that he was a native of Virginia. At the great age

of seventy-seven Clayton made a botanical exploring tour of Orange County, then largely a wilderness, and he is said to have visited almost every part of the colony in botanical research. This old naturalist was a pious member of the Church of England. It was impossible, he declared, that a botanist could be an atheist, seeing, as he did, the infinite wisdom and contrivance displayed in the structure of the smallest plant. A scientist of world-wide reputation and a citizen of sterling integrity, after a long and useful life, he passed away on the fifteenth of December, 1773.

Numerous articles descriptive of the plants he discovered were published in the "Philosophical Transactions," London. Several of these treated of medicinal plants discovered, and others, of the different species of tobacco and their cultivation. His chief work was his fine "Flora Virginica," editions of which were issued from the press at Leyden in 1739, 1743, and 1762, and is referred to by all writers who treat of North American plants. John Frederick Gronovius, the celebrated Swedish naturalist, and the Dutch naturalists of the same name collaborated with Clayton on the book.

ROBERT M. SLAUGHTER.

CLAYTON, Joshua (1744-1798), soldier of the Revolution, Governor and U. S. senator of Delaware, was borne at Dover, Del., July 20, 1744, the son of John and Grace Clayton, and a lineal descendant of Joshua Clayton, who was one of the immigrants who came over with William Penn in 1682.

He became one of the leading physicians of the state. At the outbreak of the Revolution, thinking he was living on the Maryland side of the state line, he assisted in organizing the Bohemia battalion of the Maryland regiment and was commissioned major in that battalion, January 6, 1776. On the disbandment of the Bohemia battalion as a separate organization, he entered the Continental Army and took part in the battle of Brandywine as aide de camp to General Washington with rank as colonel. He likewise served through the winter at Valley Forge. During the encampment at this place, the Army fell short of quinine and Col. Clayton devised a substitute from a mixture of oak and poplar bark, which was used with good effect throughout the war.

After the war, Dr. Clayton sat in the Delaware House of Representatives; became its state treasurer in 1786, and in 1789 was elected to fill the unexpired term of President Collins. He later became Governor and in 1796 was elected U. S. Senator, a position he held until his death from yellow fever Aug. 1, 1798. During the presence of this epidemic fever in Philadelphia in 1798, Dr. Clayton was frequently called in consultation by Dr. Benjamin Rush and other leading physicians, and it was from contact with his patients that he contracted this fatal disease.

In 1776 he married Rachel McCleary, and from the union left three sons, Richard, Dr. James Lawson, and Thomas, the last of whom became Chief Justice of Delaware, and U. S. Senator.

DOUGLAS F. DUVAL.

CLEAVELAND, Charles Harley (1820-1863), early eclectic physician, was born at Lebanon, New Hampshire, in 1820. He went to the common schools, then studied medicine at Dartmouth College, graduating in 1843, having R. D. Mussey (q. v.) for preceptor. He began to practice in Waterbury, Vermont, and at this time contributed articles to the "Eclectic Medical Journal." In 1854, while agent for a manufacturer of patent trusses, braces and the like, G. W. L. Bickley, professor of materia medica, therapeutics and medical botany in the Eclectic Medical Institute, Cincinnati, suffered from amaurosis and resigned, recommending Cleaveland as his successor; this appointment was not satisfactory in its results, as Cleaveland was not well grounded in eclecticism and moreover was "turbulent and ever ready for a disturbance." He was a controversialist and not in harmony with the teaching of the other professors. Dissensions grew until finally Cleaveland and his adherents were expelled. They organized the College of Eclectic Medicine in which Cleaveland held the chair of materia medica and therapeutics until the College was merged in the Institute in 1859. He remained in Cincinnati and at the beginning of the Civil War enlisted and received an order to fit out hospitals in the Southwest. He did valuable work in Memphis, Tennessee, transforming the city into an immense hospital to meet the needs of the great number of sick soldiers; arranging a special hospital for officers, and taking personal charge of the hospital for the purpose of stamping out gangrene, which had appeared in all the hospitals.

At the time this temporary hospital closed Dr. Cleaveland fell ill with pneumonia and died December 2, 1863.

Dr. Cleaveland wrote a "Pronouncing Medical Lexicon"; and booklets on "The Care of Soldiers in Camp and Field." He was a founder and editor of "The College Journal of Medical Science."

He was married.

CLEAVELAND, Joseph Manning (1824-1907), alienist of New York State, was born in Newbury, Massachusetts, on the twenty-second day of July, 1824. He had his early education at schools in Lunenburg, Mass., and New Haven, Conn., and graduated B. A. from what is now Princeton University. He took his M. D. at the College of Physicians and Surgeons, New York, in 1850, retaining his connection with the old New York Hospital on Broadway for three years. While resident there an epidemic of ship fever occurred. Fifteen of the doctors were stricken with the dread malady; thirteen of them died, Dr. Cleaveland and one other being the only ones who recovered. After leaving the hospital he was examining physician for the commissioners of immigration and during this time over nine thousand immigrants passed through his hands with hardly a case of mistaken diagnosis. About this time Dr. Henry Grinnell offered him the post of physician to the relief expedition which was going out to search for Sir John Franklin. This offer he declined and after engaging for a year or two in private practice in New York City, he and Dr. Cornelius R. Agnew (q. v.) were appointed physicians to the Great Cliff Mine on Lake Superior, where they had some fifteen hundred miners under their charge for a year or more.

Dr. Cleaveland's work as an alienist began when he became first assistant under Dr. Gray at the Utica Asylum, where he occupied a very responsible position and did able service. He is, however, best known for his work in connection with the Hudson River State Hospital, at Poughkeepsie, New York. He was instrumental in getting the bill for such a hospital through the Legislature, and there was no part of the work of construction or organization after he was appointed superintendent in March, 1867, that did not come under his untiring supervision. Dr. Cleaveland was the first to suggest that the old-time designation of asylum should be changed to that of hospital, and the one offense against the rules of the institution which Dr. Cleaveland with all of his well-known kindness of heart could not be persuaded to overlook in employé or staff officer, or anyone else under him, was that of unkindness to a patient.

The story is told of a contractor who once approached him with an offer of several thousand dollars as a commission. He was asked by the doctor if he could really afford to give all that out of his contract, and when told that arrangements had been made by which it could be done, Dr. Cleaveland replied, "Very well, take that amount from your contract and let the state have the benefit of the saving. I am paid for my work and it is my place to see to it that you are not overpaid for yours."

For twenty-five years he remained in charge of the hospital, rarely taking even a day's vacation, but resigning in March, 1893, he passed the remainder of his days in the quiet of his own home in the city of Poughkeepsie, New York, where he died on January 21, 1907.

JAMES E. SADLIER.

Cleaveland, Parker (1780-1858), chemist, mineralogist and geologist. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 228.

CLEAVES, Margaret Abigail (1848-1917), electro-therapeutist, was born in Iowa in 1848, daughter of John T. Cleaves, M. D., and Elizabeth Stronach. She was educated at Iowa College and graduated in medicine at the Medical Department, Iowa State University, in 1873. She began to practice in her native State in 1873; in Illinois in 1876; in Pennsylvania in 1880; and in New York in 1890; she had the benefit of hearing lectures and attending clinics in Paris, Leipsic, and Berlin. She was assistant physician at the State Hospital for the Insane, Mount Pleasant, Iowa, 1873-1876; and was a member of the Board of Trustees; she was physician-in-charge of the Woman's Department of the State Hospital for the Insane, Harrisburg, 1880-1883.

Dr. Cleaves was founder and chief of the Electro-Therapeutic Clinic Laboratory and Dispensary, New York City; she was president of the Woman's Medical Society, New York. She was author of "Light Energy: Its Physics, Physiological Action and Therapeutic Application," and American editor of the "Journal of Physiological Therapeutics," London. Dr. Cleaves died in a hospital in Mobile, Alabama, November 7, 1917.

CLENDENIN, William (1829-1885), professor of anatomy in Cincinnati, the son of William and Mary Wallace Clendenin, was born in Cumberland County, Pennsylvania, his people originally coming from Dumfries, Scotland. He had the hard fight which falls to the lot of many a student; he worked on his father's farm, was clerk in a dry-goods store, and finally attained his wish by being able to study medicine under Dr. John Gemmiel and, in 1848, to enter the Medical College of Ohio, graduating therefrom in 1850. When he settled in Cincinnati to practice he became intimate with Dr. Reuben D. Mussey (q. v.) and his son and was partner with young Dr. Mussey when the father retired.

During the Civil War he held various positions, serving under Gen. Mitchell and Gen. Rosecrans and as medical inspector of hospitals. The consulship at St. Peterburg was offered him, but he had just accepted and wished to keep the professorship of the principles of surgery and surgical anatomy in the Miami Medical College. He was also professor of descriptive and surgical anatomy and of operative and clinical surgery in the same college, and on the surgical staff of the Cincinnati Hospital.

In January, 1866, he married Sabra A. Birchard of Cambridge, Pennsylvania, and had two children.

He died of acute pulmonary tuberculosis May 3, 1885, in Cincinnati.

M. S. Mussey.

Clendenin, William Alexander (1819-1849), of Baltimore, who died early. See Cyclopedia American Medical Biography H. A. Kelly, Phila. 1912, vol. i, p. 186.

CLEVELAND, Emmeline Horton (1829-1878), first woman ovariotomist, professor of obstetrics in The Woman's Medical College, Philadelphia, was born at Ashford, Connecticut, September 22, 1829. As a child she showed hereditary tendency to phthisis. She was possessed of much personal beauty. Her father dying when she was nineteen it was largely owing to her own efforts in teaching that she made enough to go on studying. She entered Oberlin College, Ohio, in 1850, graduated in 1853, and at once entered the Woman's Medical College of Pennsylvania with the intention of fitting herself to be a medical missionary with her husband, the Rev. Giles Cleveland, whom she married in March, 1854. In the autumn she continued her medical studies and received her M. D. in 1855. Mr. Cleveland's health proved a barrier to their missionary hopes, and in 1856 the position of demonstrator of anatomy was accepted by Dr. Cleveland in her alma mater. Thenceforward her rare gifts were used untiringly to the honor and uplift of her profession. The death of her husband in 1857 laid a heavy burden of sorrow upon her, left a widow with a little son to rear.

Intense prejudice then existed among the profession against the Woman's Medical School of Pennsylvania, and its non-recognition by the Philadelphia County Medical Society made the problem of securing adequate teachers very difficult; so in 1860 with the assistance of the founders of the Woman's Hospital of Philadelphia, Dr. Cleveland went abroad to fit herself as lecturer on obstetrics, and found in Europe the instruction and inspiration her own country could not afford, entering and graduating at the school of obstetrics, connected with the Paris Maternité. Some idea of the quality of her work is gathered from the fact that in addition to her diploma and in spite of the difficulties of study in a foreign language, she carried off five prizes, two of them firsts, credentials which gave her ready access to any European hospital. Availing herself of this she afterwards returned to Philadelphia, where the post of resident physician to the newly chartered hospital awaited her. From the chair of anatomy she was called to that of obstetrics, a position she held until death. Her surgical work in gynecology was brilliant, and history records her as the first woman ovariotomist. So good was her work, that only a few counter votes kept her out of the Philadelphia Obstetrical Society, but the year before her death a paper written by her was accepted and printed in their "Transactions."

Not in the fullness of years, but of achievement, Dr. Cleveland died of consumption at the age of forty-nine. When the end drew near she asked to be buried beside her friend Dr. Ann Preston (q. v.); together they had wrought, together they would rest, and the desire was fulfilled in Fair Hill Cemetery.

Alfreda B. Withington.

CLEVELAND, Thomas Gold (1825-1873), a physician of Cleveland, Ohio, and one of that well-known family from which the city received its name, was born in Madison County, New York, May 21, 1825. His father, Daniel Cleveland, a prosperous merchant of Madison, who had married Julia R.

Gold, having experienced a financial reverse, migrated in 1835 to Cleveland, Ohio. About the year 1843 the father with his family returned to New York, and settled in Utica, where his son worked under Dr. P. B. Peckham, with whom he studied medicine for three years. During this period (probably in 1845-6), he attended a course of medical lectures in New York University, and eventually in the Cleveland Medical College, from which he received his M. D. in 1847. He began at once to practice in Cleveland, and soon made himself known as a physician of ability and promise. In 1854 he married Miss Harriet A. Wiley, of Watertown, New York, by whom he had nine children.

Dr. Cleveland was city physician of Cleveland in 1855-6, and served also upon the city board of health for a considerable period. From the later position he is said to have been removed in consequence of his firm and persistent advocacy of the pollution of the water of the city wells as the cause of an epidemic of typhoid fever. He was a member of the Ohio State Medical Society, and was professor of materia medica in the University of Wooster at the time of his death. No writings are known.

On the outbreak of the Civil War he was appointed assistant surgeon to a regiment of "three months' men", and subsequently became surgeon to the one hundred and forty-first regiment, Ohio Volunteer Infantry, under Col. Hazen. In spite of failing health, Dr. Cleveland persisted, almost to the day of his death, in performing his duties, and it was lack of physical strength only which compelled him, though too late, to claim a few days of rest. He died of cardiac disease, December 3, 1873, greatly mourned.

HENRY E. HANDERSON.

CLEVENGER, Shobal Vail (1843-1920), versatile reformer, and psychiatrist of Chicago, was born in Florence, Italy, March 24, 1843, the son of the distinguished sculptor, Shobal Vail, a descendant of the John Clevenger who in 1690 signed a petition for better government in east New Jersey, also of the Revolutionary Captain Job Clevenger. His mother was related to John Hancock. Bringing the family home from Italy, his father died at sea of tuberculosis. Shobal's education began in the Jesuit College at New Orleans, from which he ran away. There during the historic epidemic of yellow fever in 1853, the whole family was prostrated and attended by Josiah Clark Nott (q. v.). When the Civil War broke out, Shobal enlisted at the age of nineteen as a private in a Kansas City regiment, rose to a lieutenancy, and was made captain by appointment, the order remaining unsigned by Johnson. At Nashville, he joined the United States Engineering Corps, building bridges and railroads. Here he met Mariana Knapp, whom he married later. After the war, he became the chief clerk of a claim agency and, having married, went to Montana—a ninety day trip. At White Tail Deer he was justice of the peace; at Fort Benton, Mrs. Clevenger organized the first public school while her spouse acted as hotel keeper, probate judge, court commissioner, and revenue collector, and made meteorological observations for the Smithsonian Institution, using rain gauges furnished by Joseph Henry. He qualified as a civil engineer and soon had a contract to survey the military reservation. He also built the first telegraph line in Dakota. Anxious to do creditable scientific work by erecting permanent monuments on boundaries and loaded with evidence against the devious ways of the Land and Indian Departments in the West, he went hopefully to Washington, only to find that the boodlers of the West were graduates of the Washington school and he made no headway. General Alfred J. Meyer, however, the head of the United States Weather Bureau, gave him the observatory at Fort Sully, Dakota, with the instruction to wire the weather indications to Washington three times daily. While here, his interest turned to medicine. He secured the available textbooks, including Holden's anatomy, and this made the possession of a skeleton a fundamental necessity. To the consternation of the Indians, this was obtained in the silent watches of the night from their cemetery where the bodies were raised on poles. The part of the graveyard visited was that of the smallpox victims; an immediate demand for vaccine was created; the vaccine arrived a month later. Ap Morgan Vance (q. v.) of Louisville recounted to the writer a grave-robber experience of his own which inaugurated a notable smallpox epidemic, radiating from Louisville, Kentucky.

After graduating from the Chicago Medical College, March 4, 1879, Clevenger devoted himself to neuro-pathological studies, and performed autopsies at the asylum, taking brains for special study, and thus laid the foundation for his life's best work. Quite naturally, then, when a pathologist was to be appointed to the asylum at Dunning, he was

selected, with the approval of "King Mike", who ruled politics in downtown Chicago. In the asylum, he threw into his work the pent up energies of his forty years and an enthusiasm never before manifested in this neglected field. By degrees it became evident that the asylum management was rotten with politics; when bad milk caused a fatal epidemic in the dement. ward, he found that all the cream had been skimmed off to feed King Mike's dogs; patients were assaulted, women were raped, and mechanics had keys to the women's ward; the drug store was only a whiskey shop; a protest to Warden Harry Varnell brought the reply, "To hell with the cranks, they are cattle to me, I am here for boodle". Whiskey, wine, and cigars were bought and charged as drugs and consumed in Saturday night frolics; when it grew dark, gangsters and their women arrived to inaugurate night-long orgies that made the inmates furious for want of sleep. Philadelphia at this very time was suffering from a similar infliction in the person of Major Phipps in Blockley Asylum. Because Clevenger knew so much and was obviously out of sympathy with the gang, it was discovered that autopsies were contrary to religion, so he was given a holiday which became permanent. An "Appeal to Physicians," written by Clevenger; detailing the outrages that politicians had been committing against the patients for years, found a place in the "Chicago Inter Ocean." That night a bullet crashed through his room narrowly missing his wife and child. Jewell (q. v.), Brower (q. v.), and Lyman (q. v.) also had their experiences in the asylum but escaped from the situation quietly, lacking the courage to stand up against the gang. Clevenger went further and approached the Union League, but the director "was just going away on a vacation." The Chicago Citizens' Association sent their copy of the abuses to Mike McDonald! Pink teas listened to Clevenger's talks, business men were interested, and ministers heard but felt sure that the pulpit was not the place to discuss politics. Somehow, finally, there came the turning of the tide in a series of trials, which resulted in the sudden departure or conviction of the boodlers. In 1893, Governor Altgeld chose Clevenger superintendent of the asylum at Kankakee. To meet this call, he left a growing practice and his connections with the Michael Reese and the Alexian Brothers' Hospitals, and entered upon the new work. Here at last he apparently had abundant opportunity for the desired scientific investigations; here he found Della E. Howe and Effie L. Lobdell; here too he started Adolf Meyer of Zurich as a neuro-pathologist. He introduced specialists from the outside to care for the patients' eye and ear diseases, hernias, tumors, and bad teeth, but stupid trustees soon checked the innovation. The devil's agents got busy again, politicians rampant, a brewer supplied beer to Sunday crowds which visited the asylum, to drink, and to make sport of the inmates. Thus it came about a second time that Shobal Clevenger was given a permanent holiday.

From now on, his fortunes were never bright. In 1883 he lectured on artistic anatomy at the Chicago Art Institute; in 1887, on physics at the Chicago College of Pharmacy; in 1889, on medical-jurisprudence at the Chicago College of Law. He also lectured on electro-diagnosis at the Electro-medical School and in 1900 was professor of neurology and psychiatry at the Harvey Medical College. Several years later, he entered the autopsy room of the Chicago College of Medicine and Surgery. About this time, he invented a simplified book and an electric typewriter, which stuck in the patent office.

On several occasions in Tennessee and in Dakota, Clevenger was an editor; he conducted the Saturday Science column in the "Chicago Tribune," contributed to "Science," the "Open Court," the "Scientific Amercian," and "Van Nostrand's Engineering Magazine," and assisted E. C. Dudley in editing the first number of the "Chicago Medical Gazette," later the "Chicago Medical Review," securing Fenger (q. v.) to aid in pathology and J. B. Murphy, (q. v.) interne at the Cook County Hospital, for surgery. His "Cerebral Topography" (1879) for the "Journal of Nervous and Mental Diseases" was based on the study of about one hundred brains; Burt Wilder, (q. v.) finding a new sulcus, called it Clevenger's Fissure. In 1880 Clevenger vigorously opposed Benedict's idea that the brains of criminals differed obviously from the normal and suggested cerebral homologies based on the speculations of Oken and Goethe on the vertebral elements in the component parts of the skull,—a barren vein. In April of that year, he wrote on the sulcus of Rolando as an index to the intelligence of animals. This was a fruitful year, and Clevenger acquired standing. Some of his contributions are, "A Treatise on Government Surveying" (1874), which passed through several editions; "Comparative Physiology and Psychology" (1885);

"Concussion of the Spine"; "Lectures on Artistic Anatomy"; "The Medical Jurisprudence of Insanity" (1898), two volumes; "Evolution of Man and his Mind" (1905), a popularization of his more technical "Comparative Physiology and Psychology"; "Therapeutics, Materia Medica, and Practice of Medicine"; and "Fun in a Doctor's Life" (1909), an autobiography. In 1891-92, he was one of the founders and the first secretary of the Chicago Academy of Medicine.

Worn out by the turmoil of the city, he moved to Park Ridge, about fifteen miles from Chicago. Here in 1910, his wife died of gastric carcinoma. The problem of caring for a young ward, an ill-treated orphan who had been invited to live with the Clevengers, was solved by their marriage with happy results. Chafing under inactivity, Clevenger started the Park Ridge Vocation School, the occasion of some heartaches until it went the way of his school of biology, which had failed to materialize. His great delight was the celebrity of his daughter, Martha Clevenger Kimmit, a recognized musical leader. Starved intellectually, he returned to Chicago and announced his readiness to receive patients, but other neurologists now occupied the field. A small pension abetted by the frugality of his wife provided for his last years. On March 24, 1920, he died from cerebral hemorrhage. The hypocritic complacency of the successful business and religious world burned deep into his soul, and he declares, "I would instruct ministers and prominent merchants in atrocities, only I find that sermons are filled with meaningless platitudes and that merchants are in with the grafters."

HOWARD A. KELLY.

CLYMER, Meredith (1817-1902), pioneer neurologist, editor, was born June 6, 1817, in London, England, while his parents George Clymer and Maria Gratiot O'Brien, of Philadelphia, were traveling abroad. He came of distinguished ancestry. His grandfather, George Clymer (1739-1813), born in Philadelphia, was an alderman in 1774, member of the Committee of Safety in 1775, of the Continental Congress in 1776 and a signer of the Declaration of Independence.

Meredith Clymer entered the sophomore class of the University of Pennsylvania in 1832 and in his junior year was transferred to the medical department, and graduated in 1837 with a thesis on "Lateral Curvature in the Female." From 1839 to 1841 he studied under physicians of London, Paris, and Dublin; returning he practiced in Philadelphia, and in 1843 became lecturer on physiology in the Philadelphia Medical Institute, and in 1845 professor of practice of medicine in Franklin Medical College (organized, 1847; extinct, 1852); he held the same chair in Hampton-Sidney College, Virginia, 1848-1849. In 1851 he was professor of practice of medicine in the University of the City of New York, and 1871-1874 was professor of nervous and mental diseases in Albany Medical College. He was physician to the Philadelphia Hospital 1843-1846, when he became consulting physician until 1851. He served as surgeon in the Civil War, 1861-1865, as major and lieutenant-colonel. He was president of the Army Medical Board, 1862-1863, and was a member of the Neurological Society of New York (president, 1874-1876), and of other medical societies.

Dr. Clymer edited Aitken's "Science and Practice of Medicine," (Philadelphia, 1866 and 1872); Williams' "Principles of Medicine" (Philadelphia, 1844), and Carpenter's "Principles of Human Physiology" (Philadelphia, 1843-1845 and 1847). He was editor of the "Medical Examiner," 1838-1839, and in 1843; and associate editor of the "Journal of Nervous and Mental Disease," 1878-1880.

Dr. Clymer was twice married, first in 1842 to Virginia M., daughter of J. P. Garesche, of Wilmington, Delaware, who died in 1849, and, second, in 1856, to Eliza L., daughter of Andrew Snelling, of New York.

He died in New York, April 20, 1902.

COAN, Titus Munson (1836-1921), physician, surgeon, and author, was born in Hilo, H. I., September 27, 1836. He was the son of Titus Coan, the eminent missionary to Patagonia and Hawaii, and Fidelia Church Coan; his ancestors on both sides had been New Englanders for seven generations, Thomas Munson having been one of the founders and the first governor of New Haven. Tituses' early education was obtained in the Royal and Punahow Schools of Honolulu. Coming to America, he completed his freshman work at Yale and then entered Williams, receiving his A. B. in 1854 and his A. M. in 1859. He immediately entered the College of Physicians and Surgeons in New York and was graduated in 1861. After two years intern service in the Randall's Island, Bellevue, Blackwell's Island, Central Park, and David's Island military hospitals, he

entered the army as acting assistant surgeon but was transferred to the navy with the same rank. During his professional life in New York following the close of the Civil War, his inclination toward a literary career grew insistent. Finally, in 1880, he gave up the major part of his practice and founded and became managing director of the New York Bureau of Revision organized to give skilled aid to authors in perfecting and publishing their work.

Dr. Coan's work first secured recognition through his essays in the "Galaxy" in 1869-77. He wrote on mineral waters and springs, going to Europe a number of times to study the various mineral springs and baths; in 1887, he read a paper on "American Mineral Waters with some Remarks on American Climates" at the ninth International Medical Congress in Washington. He was the author of "Ounces of Prevention," a book of essays on hygiene, 1888; "Hawaiian Ethnography," 1889; "Polynesian Charm," 1901; and "Climate of Hawaii," 1901; contributed poems and critical and technical papers to various literary and medical periodicals; and compiled the "Universal Gazetteer," supplemental to Webster's Dictionary, 1885.

He became a Fellow of the New York Academy of Medicine in 1861 and was a member of various literary clubs. He died, May 8, 1921, in New York.

HOWARD A. KELLY.

COATES, Benjamin Hornor (1797-1881), a man of broad culture, an eminent practitioner and teacher, writer and philosopher, closely connected with the development of Philadelphia medicine in the first half of the 19th century, was born November 14, 1797, at the northwest corner of Front and Walnut Streets, Philadelphia, the son of Samuel Coates, the close friend of Stephen Girard, and for over forty years on the board of managers of the Pennsylvania Hospital; for thirteen years its president. His mother was great-granddaughter of John Hornor, who aided in establishing Princeton College, and great-great-granddaughter of Isaac Hornor, the first person in New Jersey to emancipate slaves.

Benjamin attended Friends' Grammar School, later entering the University of Pennsylvania as a medical student, and graduating in the spring of 1818, with a thesis on "Blisters." Before his graduation he was for several years a "medical apprentice" at the Pennsylvania Hospital. Such apprentices were indentured to hospitals for five years to learn "the art and mystery of medicine," often graduating before their term expired. They were the pupils of all the attending physicians. Coates was thus indentured to George Fisher, Z. Collins, and Thomas P. Cope for five years to serve and obey them. He was bound not to commit fornication, nor to marry, nor to play at cards, dice or any other unlawful game; nor to haunt ale houses, taverns or playhouses. If he absented himself, he was to pay one hundred pounds a year for every year absent. He was further to provide himself with a feather bed, which he was to leave in the hospital when he quit it. He was also to care for the books in the Library and the Museum. He was to be instructed in the trade or mystery of an apothecary and physician.

Coates began practice at Front and Walnut Streets and met with much success. He was elected attendant physician of the Pennsylvania Hospital in 1828, and continued there as physician and clinical lecturer until 1841. Dr. Thomas S. Kirkbride (q. v.) was an intern under him, and says that he delivered the address at the laying of the cornerstone of the Pennsylvania Hospital for the Insane, June 22, 1836. Coates became Fellow of the Philadelphia College of Physicians in 1827, and was president of the Philadelphia County Medical Society; he was, also, a member of the Academy of Natural Science, and was one of the "Tea and Toast Club" with Bache, Bond, Hodge, Wood, and Meigs (q. v. to all). He was active in the American Philosophical Society and long its senior vice-president; vice-president of the Historical Society of Pennsylvania, as well as, conjointly with Dr. Casper Wistar (q. v.) and five others, its founder. Altogether he held his membership for 57 years. He belonged to the Society of Friends.

He was a ready and prolific writer, and his knowledge seemed to his friends encyclopedic. He was a contributor to "Chapman's Medical Journal," 1819-26, and co-editor of the "North American Medical and Surgical Journal," 1826-31, of which he was a founder. Courses of lectures on physiology, the practice of medicine and clinical courses in medicine were given by him in the Pennsylvania Hospital (1828-1841); physiological experiments on the absorbing power of the veins and lymphatics were made with Doctors Lawrence and Harlan. He devised a mechanical bed for fractures, wrote on gangrene of

the mouth of children, also a "Biographical sketch of the late Thomas Say," the naturalist, and a description of a hydrostatic balance.

He issued a report of the committee on the epidemic of cholera in 1832. He wrote also on the larva of the Hessian fly, and on effects of secluded and gloomy imprisonment on individuals of the African variety of mankind in the production of disease.

Dr. Coates never married. He died October 16, 1881.

HOWARD A. KELLY.

COATES, Isaac T. (1834-1883), surgeon and explorer, was born in Chester, Pennsylvania, March 17, 1834, the son of Moses Coates. Determining to study medicine, but without means, he taught school in Delaware County, accumulated funds, and in 1858 received his M. D. from the University of Pennsylvania. Shortly after graduation, he made several voyages to England as surgeon on a packet-ship. Subsequently he settled in Louisiana, but on the breaking out of the civil war came north and tendered his services to the Government. He was appointed surgeon on the steamship "Bienville" of the South Atlantic Blockading Squadron; in 1864 he was transferred to the frigate "St. Lawrence," and later to the Gunboat "Peasta." The next year he served as assistant surgeon of the 77th Pennsylvania Infantry, and from April to July of 1866 was contract surgeon of the U. S. Army at the Hospital of Refugees, Freedman and Abandoned Lands, Atlanta, Georgia. While surgeon of the Seventh Cavalry in Custer's first western expedition, he also acted as correspondent at the seat of the war for the "Philadelphia Press" and the "New York Tribune." In 1872, he became medical director of the Chimbate and Henazaz Railroad, being carried over the mountains by Henry Meiggs. While at Arequipa, in 1873, Coates made the first ascent of the Mistic Volcano. In Peru, he studied earthquakes, recording thirty six for the Smithsonian Institution. Leaving Peru, in 1876, he took the river route to Para, running 150 miles in a canoe, 600 on a raft, and 2800 by steamer down the Amazon, and then sailed for home. He practiced for two years in Chester, during which time his wife, Mary, daughter of Peter Penn-Gaskill, a descendant of William Penn, died. He returned to Brazil in 1878 as surgeon of the ill-fated Collins Expedition undertaken to construct a railroad around the rapids of the Madeira River into Bogota, taking with him his only child, Harold. Many hardships were endured by the members of the expedition in the wilderness, a great number dying from the tropical fevers. In an effort to regain his health, Dr. Coates spent several years traveling in Colorado, California, and New Mexico. On his way home to enter his son in Swarthmore College, he was taken ill at Socorro, New Mexico and died June 23, 1883.

Dr. Coates crossed the Andes ten times; he was a fellow of the American Geographical Society, and a member of the Historical Society of Pennsylvania and of the Academy of Natural Sciences of Philadelphia.

HOWARD A. KELLY.

COATES, Reynell (1802-1886), physician, writer, of Philadelphia, son of Samuel Henry Coates, was born in that city December 10, 1802. His grandfather, Samuel Coates, was a Friend, and a philanthropist of social position and of fortune. Reynell's brother was Benjamin Hornor Coates (q. v.). Young Coates's early education was had in Philadelphia and at West Town near Philadelphia. He graduated in Medicine at the University of Pennsylvania in 1823 with a thesis on "Fractures of Inferior Extremities." A few months later he was appointed surgeon to an East Indiaman and made a voyage to India, being in Calcutta when the Burmese war broke out; he returned in 1824 and began practice in Philadelphia.

In 1829 he was made professor of natural science at Alleghany College at Meadville, Pennsylvania, but a year later went to Bristol in the same state, practicing for two years, then returning to Philadelphia, to give up general practice and take to writing. He was connected with the publication of Hays's "American Encyclopedia of Practical Medicine and Surgery," 2 vols., 1834-36, contributing several articles; he wrote "Popular Medicine or Family Adviser" . . . 614 pp., Phila., 1838; his "First Lines of Physiology" . . . (6th edition, 340 pp., 1847), was used in public and private schools. His writings were not confined to medical subjects, his poem, "The Gambler's Wife" was widely known; he contributed largely to the "Philadelphia Medical Journal," formerly "Chapman's Journal," and to other medical journals. He wrote a monograph on "Hereditary Haemorrhage." He was associated with his brother, Benjamin Hornor Coates, Franklin Bache, Henry Bond and others in the "Philadelphia Medical Academy," which continued fifteen months. Coates was appointed comparative

anatomist of the South Sea expedition, but the undertaking was broken up and he had no connection with the new expedition which sailed. He carried on several courses of lectures on physiology, human and comparative, which were delivered in a number of the principal Atlantic sea-coast cities, including Boston.

In 1828 Coates married Margaretta, daughter of William Abbott; there were two children, who died early, and he lost his wife in 1835.

Personally he was rather above the middle height, "with broad shoulders and limbs to match; a front like Jove himself; a voice rather rough, and a manner quiet and contemplative." He liked "good living" and was fond of reciting poetry.

In 1845 Dr. Coates moved to Camden, New Jersey, where he died of pneumonia, April 28, 1886, at the age of eighty-four.

HOWARD A. KELLY.

COBB, Jedediah (1800-1860), pioneer professor in the Medical College of Ohio, was born on February 27, 1800, at Gray, Maine. He entered Bowdoin College, Brunswick, Maine, in September, 1816, graduating in 1820. Of his family nothing is known. Later he went to Boston, where he became a private pupil of Dr. George C. Shattuck (q. v.). He took his M. D. at Bowdoin College September, 1823, then went to Portland, Maine, with the intention of practicing but had been there only a few months when he was appointed professor of theory and practice of medicine in the Medical College of Ohio at Cincinnati.

His journey was long and tedious, for when he reached Pittsburg no steamer could be found small enough for the low stage of water in the Ohio, consequently he was obliged to take passage with several other gentlemen in a common flatboat. A part of their duty consisted in rowing their little craft and cooking their own food. After nearly two weeks of hard work they reached the "Queen City." His first course of lectures in the Medical College of Ohio was delivered in the winter of 1824-5, and the second the following year, when he was transferred to the chair of anatomy. This he held until his removal to Louisville, Kentucky, in 1837, to take the chair of anatomy in Louisville University. In 1838 Dr. Drake was added to the faculty. In 1852 Dr. Cobb resigned and re-entered the Medical College of Ohio with an entirely new faculty of which Dr. Drake was a conspicuous member. The session had hardly begun before Drake died; and towards spring the health of Dr. Cobb failing, he considered it his duty to resign, bidding a final farewell to medical teaching. In the spring of 1854 Dr. Cobb settled on a small farm at Manchester, Massachusetts.

In consequence of not being engaged in practice, Dr. Cobb acted for many years as dean of the several faculties with which he was connected, and his accuracy as an accountant was proverbial. In 1830 he visited Europe, partly at the instance of the Medical College of Ohio, to make purchases for its museum and library. In 1836-37 he delivered two courses of lectures on anatomy at Bowdoin College. He had the greatest aversion to writing, hence has left nothing literary.

He married in 1826 Ann Maria Merrill, and had two sons and a daughter. He died in Manchester, Massachusetts, November 16, 1860, of ulcer of the stomach.

A. G. DRURY.

COCHRAN, Jerome (1831-1896), medico-legal expert, of Alabama was born at Moscow, Tennessee, December 4, 1831, and graduated from Nashville University in 1861. During the war he was surgeon in the confederate army. In 1865 he settled in Mobile, where he practiced for a number of years, for the last fifteen years of his life in Montgomery. Dr. Cochran was an energetic worker in the field of forensic medicine and public hygiene. In 1873 he was appointed chairman of the Committee on Public Health of the Medical Association of the State of Alabama and in that capacity did a large amount of excellent service. He drafted in 1875 the "Act to Establish Boards of Health in the State of Alabama," and in 1877 the "Act to Regulate the Practice of Medicine in the State of Alabama." In 1868 he was elected professor of chemistry in the Medical College of Alabama, and in 1873 his professorship was enlarged to that of "chemistry, public hygiene, and medical jurisprudence," which he held until death, after a long illness on August 17, 1896.

Dr. Cochran was a man of many friends. Odd as he was in many of his ways, his eccentricities only the more endeared him to those who knew and loved him, and these were many because of his never-ceasing energy and ever watchful vigilance in his care for the public health.

THOMAS HALL SHASTID.

COCHRAN, John (1730-1807), born in Chester County, Pennsylvania, September 1, 1730, director-general of the military hospitals of the Continental Army, was the son of a farmer, James Cochran, and received a careful general education under Dr. Francis Allison and studied medicine under Dr. Thompson of Lancaster. At the outbreak of the French and Indian War he enlisted as surgeon's mate in the hospital department where he did creditable service and acquired that skill and experience which stood him in good stead during the war of the Revolution. At the close of the war he settled in Albany, New York, where he married Mrs. Gertrude Schuyler, and removing from there he practiced medicine in New Brunswick, New Jersey. At the outbreak of the war of Independence he offered his services to the colonies and was employed in the hospital department. On the personal recommendation of Washington, Cochran, in 1777, was appointed physician and surgeon-general to the army of the middle department. He displayed such marked ability that he was elected director-general in 1781, when Shippen resigned that office. At the close of the war Cochran retired and resumed practice in New York City. Soon after Pres. Washington appointed him commissioner of loans for the state of New York, an office he held for several years. He died April 6, 1807, at Palatine, New York.

ALBERT ALLEMANN.

Cochran, Joseph Plumb (.....-1905) missionary of Persia. See Cyclopedia American Medical Biography H. A. Kelly, Phila. 1912, vol. 1, 233.

COCKE, James (1780-1813), medical teacher and anatomist, was a native of lower Virginia and came from a wealthy and influential family. He was born about 1780 and enjoyed superior advantages in being a pupil of Sir Astley Cooper, at Guy's Hospital, London. He graduated M. D. at the University of Pennsylvania in 1804, when his thesis was "An attempt to ascertain the causes of the extraordinary inflammation which attacks wounded cavities and their contents." This attracted considerable attention from its bold and original views. In it he ably defended the propriety and practicability of ovariotomy, the first advocacy of this operation in America, according to Quinan. It was published a second time in 1806. He settled in Baltimore about the close of 1804, and entered into partnership with Dr. John B. Davidge (q. v.) early in 1807, lecturing on physiology to the private class of medical students founded by the latter. With Drs. Davidge and John Shaw (q. v.) he assisted in founding the college of medicine of Maryland, and later in advancing it to the rank of a university, in which he held the chair of anatomy from 1807 to his death in 1813. He died of fever October 25, at the very hour at which he was to have delivered the opening lecture of the course in the new building of the university. He was buried in Kent County, Maryland. He was a young physician of rare virtues and promise, and his loss was a most serious one to the Maryland profession and her rising university. In 1805 he reduced a dislocation of the humerus of seventeen weeks and three days' standing, a feat that gave him great éclat. He possessed also marked business capacity and devised the ways and means for carrying on the work of the college. He married Elizabeth Smith of Kent County, Maryland.

EUGENE F. CORDELL.

COCKE, William (1672-1720), was born in Sudbury, Suffolk, England, of "reputable parents" in 1672 and educated at Queen's College, Cambridge, but it is not known in what year he came to Virginia. He was probably a practitioner in Williamsburg in the early years of the eighteenth century, for he acquired the reputation of being "of undisputed skill in his profession and of unbounded generosity in his practice."

For several years in the latter part of the reign of Queen Anne, and in the first of those of King George I (say, from 1710 to 1720) he was a member of the Colonial Council and secretary of state for the colony. He was "learned and polite" and was held in high esteem by the gentlemen of the colony, and by Alexander Spotswood, the Governor. He died suddenly in 1720 while sitting as judge in the General Court in the Capitol, and he was buried at the west side of the alter in Bruton Church at Williamsburg, in which is a tablet to his memory, from the inscription on which the facts here related are derived.

ROBERT M. SLAUGHTER.

COFFIN, Nathaniel (1716-1766), pioneer among medical men of Maine was descended from Tristram Coffin, born in 1605, in Brixton County, Devon, who came over with his wife, Dionis Stevens, and his mother,

and settled in Salisbury, Massachusetts. Ultimately he and his family moved to Nantucket for agricultural purposes. He became chief magistrate of that island in 1671 and at his death left seven children and sixty grandchildren.

Nathaniel Coffin was born in Newburyport, Massachusetts, in the year 1716, was educated in the common schools there, studied medicine under the guidance of Dr. Tappan, and went to Maine to practice medicine in 1783. In the year 1739 he married Patience Hale, by whom he had eight children, one of whom, Nathaniel, Jr. (q. v.), became as celebrated in medicine as his father before him. Dr. Coffin, Sr., before long obtained a large practice, covering Wells and Kennebunk on the west, to the Kennebec River settlements on the east, so that what with bad roads and endless miles of travel, his medical life was difficult beyond imagination. He was often called to operate upon patients who had been scalped by the Indians during the French wars, but who had partially recovered. By the Indians also, in return for professional services rendered them gratuitously when injured, wounded, or torn by wild beasts, he was universally respected, so that when he was compelled to pass through their territory on his way to white patients in the outlying settlements they always provided him with a safeguard and the best possible conveyance through almost pathless forests.

Carrying on his work amid discouraging surroundings and far distant from opportunities to freshen his mind by study, he kept in touch with the progress of medicine by inviting to his hospitable home the young ship surgeons just out from England. Many of these had lately graduated from the famous London hospitals, and from them Dr. Coffin eagerly imbibed everything new. In return for this, he took them to see his patients, so that they could study something more than the diseases occurring on board ship. Excellent at the bedside, Dr. Coffin was better still as a surgeon, in accidents, and emergencies.

The year of 1763, which found him but forty-seven, brought with it a slight stroke of paralysis. Never knowing but that he might die any day, he persisted in sending to London his son Nathaniel, destined to become in later years a prominent practitioner. This foresight was well rewarded, for the son went and returned well equipped and when the father was unable to do much work he handed it over to him. He died early in January, 1766, not quite fifty-five, and the name of Nathaniel Coffin, Sr., deserves perpetual remembrance in the annals of Maine, for he was a pioneer, skillful far beyond the average, and a man of extraordinary self-reliance.

JAMES A. SPALDING.

COFFIN, Nathaniel (1744-1826), the distinguished son of the first Nathaniel Coffin, (q. v.) was born in Portland, in the district of Maine, May 3, 1744, and after such education as the schools then afforded, studied the rudiments of medicine with his father. When nineteen he was sent to England where he walked the London hospitals under Hunter, Akenside, and others of medical fame, and returning home after nearly three years abroad, began to practice. On the retirement and death of his father he was well qualified, although still very young, to succeed to his extensive and difficult practice. As the population increased, and physicians settled in the outlying towns, young Coffin had to ride on horseback over the bad roads. He had ever more and more to do as consultant in his native town.

In 1770 he married a daughter of Isaac Foster, of Charlestown, Massachusetts, and had eleven children.

He early inhaled the spirit of independence, and was very active in the war of the Revolution. When Portland was threatened with bombardment by Mowatt, Coffin was sent on board his ship as one of the town commissioners to remonstrate against the outrage, but all in vain, for the bombardment took place with frightful results. Dr. Coffin went into the country with the exiles, and did his best to alleviate their sufferings during that inclement season of the year. He also worked vigorously the entire winter among the numerous sick. During the war he took care of all the wounded and sick who were brought into Portland on men-of-war or Privateers. Coffin was soon at the head of his profession; prompt, always ready, steady of hand, bold as an operator, and doing things that no other doctor in those days dared to attempt. He was an excellent surgeon. Some of his operations were done in his eightieth year. It may be remarked that he was ambidextrous with the knife, so that his operations were performed rapidly and skillfully. He was also a forceful and diligent practitioner. His advice was greatly sought not only as a physician, but as a man of honor and as one well versed in business

affairs. An honorary M. D. was given him by Bowdoin College (1821), and he was a member of the Massachusetts Medical Society, president of the Maine Medical Society, and for a long series of years, hospital surgeon for all the marine patients in the Portland district.

In the papers of Dr. Jeremiah Barker (q. v.) we find him mentioned as the most skilful surgeon east of the Massachusetts Bay Colony. He had large success in tapping for dropsies, and in fractures. He did many trephinings and in one instance performed this operation twice on the same individual with a final perfect recovery. He also performed what we now call Chopart's amputation of the foot in a case of tetanus with fortunate results. . . . He suffered considerably with gout in the later part of his life, and it is stated in one old letter that he often used to walk in the grass when the dew was on it with good results. This would antedate Father Kneipp's treatment by some eighty years! A fine-looking man, with polished manners, urbane, healthy, captivating in his behavior to everybody, his services, owing to his exceeding good health and his long experience, were valuable to the last. In 1823 and 1824 he had attacks of asthma, which terminated in a general breaking up of his constitution. He remained in the same condition for another year, then failed rapidly and died October 18, 1826, at eighty-two, passing away on the fifty-first anniversary of the destruction of Portland, which he survived so long yet remembered so clearly to the last. He had practiced sixty years.

JAMES A. SPALDING.

COGGIN, David (1843-1913), ophthalmologist of Salem, Massachusetts, was born in West Hampton, in the same state, August 4, 1843, the son of Rev. David Coggin and Ella Kidder Coggin, but losing his parents at an early age he was taken by relatives to Lowell, Massachusetts, where he was educated in the public schools. He began the study of medicine with Dr. Savory, of Lowell, in 1865, and also attended a first course of lectures at the Harvard Medical School. In the following year he went abroad, where among other celebrities he met Sir James Simpson, who, in his presence showed Gosselin how to utilize acupuncture, then very much in vogue. After his return, Dr. Coggin studied at the Long Island College Hospital Medical School, and finally obtained his degree from the Harvard Medical School in 1868. In memory of his father, who was a Dartmouth graduate of 1835, Dr. Coggin received from that college the honorary degree of A. M. in 1878. He practiced a while at Lowell and at Hingham, but finding country practice too wearisome he removed to St. Louis, where he made the acquaintance of Dr. John Green (q. v.), was his assistant in the eye and ear hospital and became a member of the state medical society, and contributed a number of excellent papers to the "St. Louis Medical and Surgical Review." Wearying of the West, he returned to Massachusetts, settled at Salem, and went abroad to prepare himself to be an ophthalmic and aural surgeon. After his return, the rest of his life was devoted to these specialties. He early advocated a cottage hospital, and when it was finished, he was appointed ophthalmic and aural surgeon. Dr. Coggin abandoned otology in 1895 but continued in ophthalmology the remainder of his life, and not only enjoyed an excellent practice but communicated to the profession the results of his labors. For more than thirty years he wrote brief "Notes of Cases" for the "Boston Medical and Surgical Journal"—items of every day practice, atropine, astigmatism, iritis, glaucoma, trachoma, and new remedies. He was also an editor of the "American Journal of Ophthalmology," and wrote for its columns papers on glioma and nosology. For Dr. Knapp's "Archives" he wrote on evulsion of the eyes and on exophthalmos. He was elected to the American Ophthalmological Society in 1875, and contributed to that society papers on accommodation and on other topics. Taken all in all, he wrote as many as sixty meritorious papers on ophthalmology in the course of his career. No account of Dr. Coggin's life would be complete without emphasizing his famous suggestion for the detection of alleged unilateral deafness by means of the binaural stethoscope, as presented by him to the American Otological Society in 1879.

Late in 1890 he suffered from an attack of hemianopsia, and read an account of it, unknown to his hearers as a report of an unusual case, before the Essex South District Medical Society.

After the hemianopsic attack, Dr. Coggin resigned his hospital position and practice, but as he improved, he took up work again, and kept on until his last attack. He spent a good deal of time during the last of his life in annotating and arranging his cases

and operations and in recovering and arranging chronologically all of the medical papers which he had written.

On August 7, 1911, he was affected with right hemiplegia from which he never recovered. Several months before his death intense pain set in and persisted to the end.

In 1880, at Jamaica Plain, Massachusetts, he married Miss Elizabeth Eames Williams, daughter of Jeremiah and Emmeline Childs Williams, and she, with her four children, survived him.

JAMES A. SPALDING.

COGSWELL, Charles (1813-1892), organizer of the first medical society in Nova Scotia, was born in Halifax, Nova Scotia, May 12, 1813, a descendant of ancestors who had come from Massachusetts and settled in Cornwallis, Nova Scotia, about 1761. Educated at King's College, Windsor, he was graduated in arts in 1831, and took his professional course at the University of Edinburgh, where he received an M. D. in 1836, subsequently studying in London and Paris. He then settled in his native city, where he was a valued member of the profession for many years. Later he went to London, England, where he became a consulting physician and lived till his death in 1892.

He was elected an extraordinary member of the Royal Society of Edinburgh in 1839, and was president of the Medical Society of Nova Scotia in 1864. Possessing ample means, Dr. Cogswell did not engage in general practice in Halifax, but devoted his time and talents to improving the status of the profession, to promoting the construction of hospitals, and to works of charity. It was said of the family that they were noted for piety, talent and benevolence. He was chiefly instrumental in the organization of the first medical society in Nova Scotia and also contributed many standard works and provided a liberal endowment for what is known as the Cogswell Medical Library, now in the Halifax Medical College. Dr. Cogswell was also a strong advocate of athletics, especially favoring aquatic sports. He presented the city of Halifax with the land for a small park, and devoted considerable wealth to the endowment of King's College, Windsor, and to improvements in his native city.

In the early part of his career he gave much time to original research and in 1839 was awarded the Harveian prize in London for the best dissertation on "The Physiological Action and Medicinal Properties of Iodine and its Compounds." This essay was published and was for many years regarded as the best authority on the subject; in 1851 he contributed a valuable paper to the Medical Society of London on the "Endosmotic Action of Medicines."

He married Frances Mary Goodrich in 1848 but had no children.

DONALD A. CAMPELL.

Cogswell, George (1808-1901), physician of Bradford, Massachusetts. See American Medical Biographies H. A. Kelly and W. L. Burrage, Balto. 1920, page 236.

COGSWELL, Mason Fitch (1761-1830), prominent physician of Connecticut was born at Canterbury, in that state, September 17, 1761. His father was the clergyman of his native parish, and his eldest brother, Dr. James Cogswell, lived some years at Stamford and then removed to New York. His mother was the daughter of Jabez Fitch of Canterbury. Mason took an A. B. at Yale College in 1780 and immediately after leaving college began the study of medicine with his brother. At that time a portion of the army of the revolution was stationed at Stamford. Among these soldiers Dr. Cogswell began his professional observations; to them his earliest efforts as a surgeon were directed, and he frequently referred to the experience which he there gained as particularly serviceable to him in his subsequent practice. In the capacity of pupil and assistant, Mason continued with his brother till the year 1789, when he removed to Hartford, having been nine years engaged in the study and practice of his profession. He received the degree of M. D. from Yale in 1818, previously having taken an A. M., in 1788. It was in November of the last year that he returned from a visit to New York and put down in a diary, which was presented to the Yale Library in 1926, a quaint account of the many social events during his stay in New Haven and visits to neighboring towns. From the time of his removal to Hartford to the day of his death, he was constantly engaged in an arduous practice. Some years after his removal to Hartford, Dr. Cogswell married Mary Ledyard, daughter of Col. Austin Ledyard who was killed at the fort at Groton when it was captured by the British. His children, five in number, were the delight of his eye, and the family circle, of which he thus became the head, was one of the most attractive in the community. His daughter Alice was, during

her infancy, deprived of the faculties of speech and hearing. The interest which was excited in the mind of her father by the privations of his mute child caused him to look around for the best mode of giving her instruction. It led him also to make inquiries respecting the number of deaf and dumb persons in the State, and the result of those inquiries created surpise throughout our country. To his interrogatories respecting the best mode of educating this class of our population, no satisfactory answer was forthcoming, for the subject had not been thought of. At length he accidentally met with the work of a distinguished French abbé on this subject, and being convinced that the plan there suggested was the best that could be adopted, he appealed to his friends to aid him in the introduction of that system of instruction into this country. The appeal was successful. A gentleman peculiarly well qualified for the undertaking visited France, acquired the needful information, and returned to found "The American Asylum."

Dr. Cogswell was one of the original members of the Connecticut State Medical Society, and continued its faithful and ardent friend till the close of his life. In 1796 he was appointed its treasurer, fulfilling the duties of the office for four years. In the year 1807 he was elected vice-president, and on the resignation of Dr. Watrous, in the year 1812, he was chosen its president. The latter office was conferred upon him ten times in succession, an appointment which indicates with what respect he was regarded by his brethren. According to the catalogue of Yale University the degree of M. D. was conferred on Cogswell by the Connecticut Medical Society in 1810.

The proposition to establish an asylum for the Insane originated in the Connecticut Medical Society; and though Dr. Cogswell was not the original mover, he was one of the early advocates, and a warm friend of the "Hartford Retreat for the Insane." He was known throughout Connecticut as an able surgeon and accoucheur, devoting a large share of his time to these branches of medical practice. It was said of him that he amputated a thigh in forty seconds, such was his dexterity in the use of instruments. According to Dr. S. D. Gross, Mason Cogswell was the first on this continent to secure the primitive carotid with a double ligature in 1803, the operation having been rendered necessary by the extripation of a "scirrhous tumor" of the neck, in which that vessel was deeply embedded. The ligature came away at the end of two weeks, and the man lived until the twentieth day, when he died exhausted by general debility, hastened by slight bleeding from a small vessel near the angle of the jaw.

Dr. Cogswell continued to be active and assiduous in the performance of his professional engagements till the December 12, 1830, when he developed pneumonia and died the next night.

COHEN, Joshua I. (1801-1870), pioneer otologist, was born in Richmond, Virginia, in 1800, graduated at the University of Maryland in 1823, and after having been a student in Dr. Nathaniel Potter's office soon devoted himself to the study of ear disease. He was an intimate friend of George Frick (q. v.), the oculist, and, like him, had wide interest in science beyond the domain of medicine. Thus for a time he became professor of mineralogy in the academic department of the University of Maryland. He was much interested in her Medical and Chirurgical Faculty, was the treasurer from 1839 to 1856, and president from 1857-58; also an active member of the Maryland Academy of Sciences. He practiced until about 1851, devoting himself almost exclusively to otology, and his reputation as an aurist was considerable.

In 1840 he established, in connection with his friend, Dr. Samuel Chew (q. v.), an eye and ear institute in Baltimore. Dr. Cohen was one of the earliest, perhaps the first aurist in this country. He has left us but one publication which pertains to diseases of the ear. It is entitled "Postmortem Appearances in a Case of Deafness," "American Medical Intelligencer," July, 1841, to July, 1842, p. 226, vol. i. He died in Baltimore in 1870.

HARRY FRIEDENWALD.

COIT, Henry Leber (1854-1917) founder of the Medical Milk Commission, and originator of the term "certified milk," was born in Peapack, New Jersey, March 16, 1854, son of the Rev. John Summerfield Coit, and Ellen, daughter of Colonel Francis Neafie of Fairfield, New Jersey. His ancestors came from Wales in 1632 to Salem, Massachusetts, afterwards moving to New London, Connecticut; the family were among the early Methodists. His grandfather, Nathaniel Coit, was a pioneer of the town of Bloomfield, New Jersey; an uncle, George W. Coit, was a surgeon in Iowa. His father having died, the subject of our sketch with his mother and

her other children moved to Newark, New Jersey, and here received his early education in the public schools. He was graduated at the College of Pharmacy, New York, in 1876, and was valedictorian of his class; he became chemist with Tarrant and Company, New York, but several years later took up the study of medicine and graduated M. D. at the College of Physicians and Surgeons, New York, in 1883. He began to practice in Newark, and soon specialized in pediatrics, which became his life work. His interest in this branch was aroused when in seeking to procure pure milk for a little son, whom he lost, he saw the filthy condition of the farm of the dairyman who sold milk to the residents of Newark, dipping it from a forty-quart can. In 1890 he tried to obtain legislation but failed; then presented a plan to the Practitioners' Club, that was heartily endorsed; and on December 5, 1890, read a paper before the Club outlining a plan providing for chemical, bacteriological, and veterinary standards with medical supervision of dairy hygiene as well as the health of employees—this plan in all essentials remains unchanged. In 1893 the Medical Milk Commission of Essex County was formed, the first to be established in the United States; in 1896 a commission was formed in New York, in 1897 one in Philadelphia, and at the time of Dr. Coit's death over sixty commissions were operating in the United States, two in Canada, several in Europe and two or three in Asia. Dr. Floy McEwen, secretary of the Medical Milk Commission of Essex County, New Jersey, says: "To Dr. Coit's untiring labors, generous expenditure of time and strength and steadfastness of purpose are in largest measure due the development and success of the Medical Milk Commission."

In 1896 the Babies' Hospital, the second in the United States, was established in Newark, the outcome of Coit's efforts; the New York Babies' Hospital was the first. His work in preventive medicine was known in Europe as well as in this country. Dr. Coit was twice president of the American Association of Medical Milk Commissions which followed the local organization; vice-president of the International Society of Goutte de Lait (milk dispensaries) with headquarters in Brussels. He went abroad four times to attend medical congresses.

Dr. Coit's published papers include: "The Feeding of Infants" (1890); "The Care of the Baby" (1894); "Causation of Disease by Milk" (1894); "The Public School as a Factor in Preventing Infant and Child Mortality" (1912); "Certified Milk" (1912). His definition of "certified milk" is lucid. He says: "Certified milk is a product of dairies operated under the direction of a Medical Milk Commission, which body is appointed for voluntary service by a medical society. The milk is designed to fulfill standards of quality, purity and safety to insure its adaptability for clinical purposes and the feeding of infants."

In 1886 he married Emma G., daughter of John M. Gwinnell of Newark; she survived him with three daughters, Jesse, Eleanor and Edith and one son, Henry Gwinnell.

After an illness of twenty-four hours of pneumonia with heart complications, Dr. Coit died March 12, 1917, at his home in Newark.

HOWARD A. KELLY.

COLE, Richard Beverly (1829-1901). Among the pioneers of medical education in California, Beverley Cole is well worthy of remembrance. He was born in 1829 in Manchester, Virginia, his parents removing to Philadelphia soon afterwards. After graduating at Jefferson Medical College (1849) before reaching his twentieth year, he married Miss Eugenie Bonaffon of Philadelphia, and started practice in that city. A year or two later the new gold fields of California began to attract the world's attention, and among the eager westward throng was young Beverley Cole. He reached San Francisco by way of Cape Horn in 1851, opened an office there, and quickly acquired a prominent place in both medical and civic circles. The Vigilance Committee made him surgeon-general of their forces in 1852. In 1858 he became professor of obstetrics and gynecology in the University of the Pacific, the beginning of an unbroken career of successful tutorial work. In 1866 he accepted the same chair in the faculty of Toland Medical College, retaining it after that institution became the medical department of the University of California, in 1873 and until his death, in 1904. Throughout this long sequence of years as a teacher of obstetrics, Dr. Cole maintained a position in the front rank. His practice was for many years limited to gynecology, always keeping pace with the rapid development of this science.

Dr. Cole was a member of the Royal College of Surgeons, England, and a fellow both of the Obstetrical Society of London and the British Gynecological Society, also president of the American Association of Obstetricians

and Gynecologists, 1895, and editor of the "Western Lancet," 1873-6. In matters relating to public health he took an active interest, serving repeatedly on the city Board of Supervisors and on the municipal and state Boards of Health. It was mainly through his initiative and effort that a new city and county hospital was built to replace the unhygienic structure at North Beach.

He succumbed to arteriosclerosis on January 17, 1901, two daughters surviving him. His three other children died in infancy.

WILLIAM HENRY MAYS.

COLDEN, Cadwalader (1688-1776). This physician, "a truly great philosopher and a very great and ingenious botanist," who came to be lieutenant governor of New York, was the son of the Rev. Alexander Colden, minister in Duns near Edinburgh. He was born there February 17, 1688, and took his M. D. from Edinburgh University in 1705. Attracted by the fame of William Penn's colony, he came over to America and practiced in Pennsylvania for seven years (1708-1715), then returned to England. While Colden was in London Dr. Edmund Hally was so pleased with a paper of his on "Animal Secretions" that he read it before the Royal Society and introduced the writer to many learned men who became Colden's intimate friends. From London he made a short visit to Scotland, long enough, however, to marry Alice Christie, November 11, 1715, then he returned to Pennsylvania but eventually settled in New York (1718), and became a public character, holding in succession the offices of surveyor-general, master in chancery, and lieutenant governor, an office he filled for the rest of his life. Yet he never lost his hold on science and in 1751 published his most readable but least scientific work, "History of the Five Indian Nations of Canada, 1727," (second edition 1747), followed ten years later by his "Account of Diseases prevalent in America," and his essay on the "Cause and Remedy of the Yellow Fever," so fatal in New York in 1743.

He must have worked hard even in those comparatively leisured days, for he translated the letters of Cicero, wrote a purely scientific "Treatise on Gravitation," 1745 (afterwards enlarged into "The Principles of Action in Matter") and devoted all the remaining time to be spared from official duties to his well-beloved study of botany, maintaining withal "with great punctuality" a correspondence with learned friends such as Linnaeus, Gronovius, Fothergill, Collinson, Franklin, Bard and Garden; delighting to write to Franklin about electricity and suggesting, according to Franklin, the idea and plan of the American Philosophical Society. The Linnaean System was introduced by him into America only a few months after its publication in Europe. To the author himself he sent a description of some three or four hundred American plants and Linnaeus gracefully acknowledged the gift by publishing the record in his "Acta Upsaliensa" and naming a genus of boraginaceous herbs of the tribe Ehreticae after him (Coldenia), though a prettier version is that Miss Jane Colden sent him a specimen and he named it after her, a compliment he was fond of paying ladies. Lady Ann Monson had the same perpetuation in the Monsonia. This same Miss Jane taught Dr. Samuel Bard to love botany when he stayed with her as a boy, an obligation he gratefully refers to.

Colden retired in 1755 to a large grant of land called Coldenham, near Newburgh, where he wholly bent himself to science, especially botany and mathematics. His home was a rendezvous for all learned men.

While in charge of the Government in 1775 Colden made up his mind that the stamped paper made necessary by Grenville's stamp act should be used, but the official distributor of stamps refused to receive it, so Colden went off to Fort George with a garrison of marines. When the New York populace protested he ordered the marines to fire. They would not and the people seized Colden's carriages and burned them along with Colden and the devil in effigy. On the return of Governor Tryon, Colden retired to his seat on Long Island, near Flushing, and there, on September 28, 1776, he died, leaving a son who distinguished himself as a mathematician and philosopher.

HOWARD A. KELLY.

Coleman, Asa (1788-1870), pioneer physician of Miami County, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Baltimore 1920, page 240.

COLEMAN, Robert Thomas (1830-1884), army surgeon and obstetrician, of Virginia, was born in Hanover County, in that State September 3, 1830, studied medicine at the University of Virginia, taking the degree of M. D. and then going to the Jefferson Medical College in Philadelphia, where he took another M. D. in 1852. He next served for

three years in Blockley Hospital, returning to Virginia, in 1855, and settling in Richmond. Soon afterwards he was elected lecturer on clinical medicine in the Blockley Hospital Medical Institution, but declined the position. He practiced in Richmond until the beginning of the Civil War, then entered the service of the Confederacy as surgeon of the twenty-first Virginia Regiment, and upon the organization of the famous "Stonewall Brigade" was appointed its surgeon-in-chief.

His army record was excellent, and at one time he is said to have been the highest ranking officer in the medical corps of the Confederacy.

After the war he returned to Richmond and resumed practice, and upon the reorganization of the Medical College of Virginia, was elected professor of obstetrics, a position he held until his death. He was a charter member of the Medical Society of Virginia and a member of the Richmond Academy of Medicine.

He married a Miss Irvine and had a son and a daughter. The son, Burbage Coleman, was a physician, but died of consumption early in his career, and the father died in Richmond after an illness (chronic nephritis) which confined him to the house for several months, on March 4, 1884. He made few contributions to medical literature. So far as we can find the following are the only articles: "Management of Labor in Presentations of Head and Hand." "Virginia Clinical Record," vol. i; "Puerperal Convulsions," "Virginia Medical Monthly," vol. v.

ROBERT M. SLAUGHTER.

COLEMAN, W. Franklin (1838-1917), a pioneer Canadian-American ophthalmologist was born at Brockville, Ontario, January 6, 1838, received his liberal education at the Potsdam, New York Academy, and his medical training at McGill University, Montreal, and at Queen's College, Kingston. At the latter institution he received the degree with honors in 1863. For about six years he practiced general medicine at Lyn, Ontario, then, turning his attention to ophthalmology and oto-laryngology, he studied the eye for about one year at Moorfields, London. For a time he was a student at the London Hospital, and in 1870 became an M. R. C. S. Settling in Toronto, Canada, he practiced there as ophthalmologist and oto-laryngologist for six or seven years, during all of the time being surgeon to the Toronto Eye and Ear Infirmary. Later, however, he studied at Heidelberg and Vienna, and, having practiced again in Canada (at St. John, N. B.), till 1885, he removed to Chicago, where he soon had a very large practice and became a leader in American ophthalmology. He was one of the founders of both the Polyclinic and the Post-Graduate Medical School, and was widely known for original and long-continued investigations into the subject of the use of electricity in eye, ear, nose and throat diseases. He published in 1912 an extensive treatise entitled "Electricity in Diseases of the Eye, Ear, Nose and Throat," and, in fact, wrote the articles on this subject in Wood's "System of Ophthalmic Therapeutics" and in the "Encyclopedia of Ophthalmology," Casey A. Wood. His journal articles on various subjects connected with the eye were very numerous. He was for a long time president and professor of ophthalmology in the Post-Graduate Medical School, and professor of ophthalmology in the Illinois School of Electro-Therapeutics, and he was long a member, and once the president, of the Chicago Ophthalmological Society.

Dr. Coleman married, in 1882, at St. John, N. B., Canada, Miss Mary Winniett Hartt. He died at Federal Point, Florida, whither he had gone on a short vacation, January 22, 1917.

Dr. Coleman was a small, lean man, with a ruddy complexion, and, in the later portion of his life wore a mustache and short chin beard. His rich brown dancing eyes made, in his later years, a striking contrast with his snow-white hair. He was very brisk in manner, optimistic and enthusiastic. He was a Republican, an Episcopalian; reverent, charitable, affectionate.

THOMAS HALL SHASTID.

COLES, Abraham (1813-1891), physician and hymnologist, was born in Scotch Plains, New Jersey, December 26, 1813, the son of Dennis and Katrina Van Deursen Coles, and a descendent of the James Coles who landed at Plymouth in 1630, and had Coles' Hill named for him, a bluff just back of Plymouth Rock, being a part of a grant of seven acres to said James. Abraham had a good public school education and was well versed in Latin and Greek. His mental horizon was expanded, too, by visits to Europe. At eighteen he began to study law but forsook it for medicine, attending the College of Physicians and Surgeons of New York and

Jefferson Medical College, at the latter taking an M. D. in 1835. Upon his return home, he confessed his Christian faith and in 1836 settled to practice in Newark, New Jersey.

In 1848, while abroad for study, he was in Paris during the insurrection and saw much surgery, which he described in a series of letters to the Newark Advertiser. Six years later, he returned to Europe for seventeen months. Home again, he associated with him in practice Dr. Bethuel L. Dodd, a former pupil. The influenza epidemic of 1891 left him with a bronchitis which necessitated a trip to California, where he died May 3, 1891.

Dr. Coles was president of the New Jersey Medical Society in 1866 and at this time wrote "The Microcosm" and other poems. Rutgers College gave him an M. A., Lewisburg, a Ph. D. in 1860, and Princeton an LL. D. in 1871. His civic interests were education, the Academy, the Public Library, and the Historical Society. He wrote many poems, hymns, various reviews, and papers—literary, medical and scientific. He is particularly known for his rendering of "Dies Irae," 1847, of which he made seventeen original versions. Among other works are "Latin Hymns with Oriental Translations" and critical notes, 1859 of which J. G. Whittier said that his "All the Days" and "Ever with Thee" are immortal songs and that "no man living or dead has ever so rendered the text and the spirit of the old and wonderful Latin Hymns." In his latter years, he prepared "A new rendering of the Hebrew Psalms into English Verse" and "The Evangel." Washington Park, Newark, has a fine monument to his memory, with a bust by J. Q. A. Ward, and there is an excellent steel engraving of him by A. H. Ritchie in a volume prepared by his son, which contains an account of the families on both sides, with coats of arms.

In 1842, he married Caroline E. Ackerman of New Brunswick, New Jersey, who died August 23, 1845, leaving a son, Jonathan Ackerman, and a daughter, Emilie S.

Following his father's profession, Dr. Jonathan A. Coles studied at the College of Physicians and Surgeons of New York and was a student under T. Gaillard Thomas (q.v.). In 1867, he took the Harsen medal. During 1877-78, while in Europe, he was the guest of Sir James Y. Simpson and of J. Marion Sims.

HOWARD A. KELLY.

Colhoun, Samuel (1787-1841)

See Calhoun, page 195.

COMEGYS, Cornelius George (1816-1896), professor of the Institutes of Medicine in Miami Medical College, Ohio, author, was born July 23, 1816, on an ancestral farm, called "Cherbourg," in Delaware. His father, Cornelius Parsons Comegys, was governor of Delaware from 1838-1841. The family descended from Cornelius Comegys, who came from Holland to America in 1661, and settled on the east shore of Chesapeake Bay, in Kent County, Maryland. The mother of Cornelius George Comegys was Ruhamah Marim, also of English ancestry. Cornelius George passed his early life on the farm, and after many vicissitudes and trying various trades, he matriculated at the University of Pennsylvania, where he graduated in 1848. Having taken his M. D. he practiced for a year in Philadelphia, then removed to Cincinnati, Ohio, where, by his successful treatment of the Asiatic cholera in the epidemic of 1849, he gained great distinction. Feeling the need of a wider clinical study, he went abroad in 1851 to spend a year in the medical schools of London and Paris. In the former, his especial instruction was at Guy's Hospital; and in Paris, he was a special student of Charcot, chief of La Charité. Upon his return to Cincinnati in 1852, he gave a course of lectures on anatomy in the College of Physicians and Surgeons, and then joined in the organization of the Miami Medical College as professor of the institutes of medicine. He held this same chair in the Medical College of Ohio, with which the Miami College united five years later, until 1868 (with the exception of the years 1860-4). In the year 1857 he was lecturer in clinical medicine at the Cincinnati Hospital. He was one of the founders of the Cincinnati Academy of Medicine, and twice served as president. He was a member of the Medico-Chirurgical Society, the Cincinnati Medical Society, Mississippi Valley Medical Association, honorary member of the Philadelphia College of Physicians and of the Delaware State Medical Society; chief of the medical staff of Christ's Hospital, Cincinnati, from its beginning until his death. He labored earnestly and persistently for the creation of a department of public health.

His published literary works were two translations from the French: "The Histroy of Medicine," by Renouard (1856), and "Lectures on the Pathological Anatomy of the Nervous System—Diseases of the Spinal Cord," by J. M. Charcot (1881). In addition, he was the author of numerous papers published in the medical press—two of them es-

pecially attracted much attention: one, "On the Pathology and Treatment of Phthisis" (1854), referred to in the American edition of "Watson's Practice," and in "Copeland's Dictionary" (American edition); and the other, "On Cool Bathing in the Treatment of (Infantile) Enterocolitis," "Philadelphia Medical Times" (July, 1875). Other papers were: "Conservative Value of Fever and Inflammation" (published in the "Transactions of the Cincinnati Medico-Chirurgical Society," 1854); "The Treatment of Asiatic Cholera," "American Journal of Medicine," 1866; "Reports of Cases of Brain Tumors," "Philadelphia Medical and Surgical Reporter," "Philadelphia Medical and Surgical Reporter," 1870 and others.

On October 3, 1839, he married Rebecca Turner Tiffin, of Chillicothe, Ohio, daughter of Edward Tiffin, M. D., the first governor of Ohio, and had six children. Two of the sons, Edward Tiffin and William Henry Comegys, followed their father's profession.

Dr. Cornelius George Comegys died of uremia, on February 10, 1896.

A. G. DRURY.

CONANT, David Sloan (1825-1865), teacher and army surgeon, the son of a carpenter in the little country village of Lyme, New Hampshire, not far from Dartmouth, was born January 21, 1825. Submitting himself to his father's will he learned the trade of a carpenter, like many of his ancestors before him, although he detested the business, for his heart was set on obtaining an education. He worked diligently until the very last day of his twentieth year, became very skilful in his handicraft, and developed into a man of tremendous muscular power. During his leisure hours he read widely and gave much attention to the study of medicine and anatomy, so that with the beginning of his years of freedom, he possessed a fund of book knowledge of medicine and general literature. On the day after he obtained his majority he left his father's shop and studied two years with energy and ambition, at Stratford Academy in Vermont, and advanced so far that he could have passed a college examination for the sophomore class. He was, however, at this time dissuaded from obtaining a college education, an occurrence which he regretted during the rest of his life. He began the actual study of medicine with a country practitioner in the town adjoining his birthplace, and in the autumn attended his first course of lectures at the Dartmouth Medical School. Here he attracted at once the attention and enduring interest of a man then celebrated in medicine, Dr. Edmund Randolph Peaslee (q. v.), professor of anatomy and physiology in Dartmouth and various other schools; a man who having unequaled prestige and influence could advance a student of promise. He perceived that Conant was a youth of unusual qualities, he favored him, and Conant kept up to his appearances and his promises by doing well the work allotted to him. It happened that Peaslee went during Conant's third year in medical lectures to the school at Bowdoin, and from that institution, Conant, who accompanied Dr. Peaslee from Dartmouth, as demonstrator, was graduated in 1851. Lacking money to establish himself in New York, as Dr. Peaslee urged, Conant first settled in his native town for three years as country doctor, studied in spare hours, worked in other spare hours as a carpenter and job-workman, and at the end had saved enough to give himself a living chance in New York for two or three years, if all went well. He demonstrated at the 13th Street School, gave private lectures in anatomy, was capable in practice, and in 1854 he took charge of the Mott Street Cholera Hospital, and whilst there wrote several papers on the pathological alterations discovered in the numerous patients. Immediately after the resignation of Dr. Peaslee from the chair of anatomy at Bowdoin, Conant went there and continued until 1862 when he was elected professor of surgery. He lectured also on anatomy and surgery at the medical school of the University of Vermont from 1855 until his death. He became a member of many learned medical and surgical societies and was a favorite wherever he presented himself. As a teacher he was exact and comprehensive, as a surgeon courageous and skilful, and as a man upright and the soul of honor. With the beginning of the Civil War he volunteered as a surgeon, and on the field did an incredible amount of surgery, often under embarrassing conditions and with a high percentage of recoveries. After the battle of Antietam Conant volunteered his services, and owing to his great exertions contracted an intestinal disease which never entirely left him. He died of septic meningitis following an operation for rhinitis at his home in New York, October 8, 1865.

He was twice married; first to Miss Mary Sanborn of Strafford, Vermont, and after her death to Miss Mary Larrabee, of Brunswick, Maine, who with a child survived him.

The salient characteristic of Conant was force, properly directed. He could turn a handspring from a tree-stump without a springboard. He was a wonderful boxer. He hit everything hard, driving it home like a nail, but he was never out of breath. He was a handsome specimen of the strong man, not big, but powerful. He lectured delightfully, but he preferred to listen to recitations, to question his pupils to find out just what they did not know, and then he strove to get at them until they should know what they needed for practice in Medicine. Although brusque in manner he was so good-natured that a second later you forgot and forgave any seeming discourtesy. He read much and absorbed what he read. He operated with mechanical accuracy. His early experience with tools stood him of immense value in surgery. In operating upon his own father, coming down unexpectedly upon the carotid, he ligated it as coolly as if nothing had occurred. Bold, yet conservative, he would save one limb rather than get rid of fifty by bold operations. JAMES A. SPALDING.

CONDICT, Lewis (1773-1862), organizer of a medical society in New Jersey, public man, was the son of Ebenezer Condict and a descendant of John Condict of Newark, 1690. He was born in Morristown, March 3, 1773, and died there in his ninetieth year, May 26, 1862. His early academic training was limited, he began the study of medicine in his fourteenth year with Dr. Timothy Johnes, of his native town. He subsequently attended lectures at the University of Pennsylvania and received his medical honors in 1794. He immediately began practice in Morristown, where he continued to reside till his death. In 1798 he married Martha, daughter of Rev. Nathaniel Woodhull, of New Town, Long Island. He soon acquired popularity as a physician and became active as a public man. In 1805 he was elected a member of the Assembly to which he was returned year by year till 1811 when he was elected to Congress, serving three consecutive terms. While in Washington he was associated with Clay, Madison, Randolph, and others in the formation of the Colonization Society. In 1827 he was made a trustee of Princeton College and served as such till 1861 when he resigned on account of the infirmities of age. In 1838 he was again a member of the State Legislature, and was one of a commission to settle the boundary line between New York and New Jersey.

"The responsibilities of political station did not diminish his interest in his profession. He was industrious and enthusiastic in efforts for its advancement. In 1819 he was elected president of the State Society, and until within a few years of his death was a constant attendant upon its meetings.

"Thus, we reflect upon the busy and distinguished life of a man who was the first president of the Morris County Medical Society," for he was appointed to this office, June 11, 1816.

A. ELDRIDGE CARPENTER.

CONDIE, David Francis (1796-1875) was born in Philadelphia, May 12, 1796 and graduated at the University of Pennsylvania in 1818, with a thesis on "Digestive Process." In 1844 he published "A Practical Treatise on the Diseases of Children" (6th edition, 1868), which was the accepted authority until superseded by the work of Meigs and Pepper.

Among his other works were: "A Course of Examinations of Anatomy and Physiology, Surgery, Chemistry, Materia Medica, Midwifery, and the Practices of Medicine" (1818); "Reports on Diseases of Pennsylvania" (1868); "Biographical Notice of Henry Bond, M. D." (1860); and several addresses. He edited: Barlow's "Manual of the Practice of Medicine" (1856); Carpenter's "On the Use and Abuse of Alcoholic Liquors" (1858); Churchill's "On the Diseases of Women" (1857); Watson's "Lectures on the Principles of Physic" (1856).

Condie practiced in Philadelphia and always visited his patients on foot, disapproving of a physician's driving. He declared that "those who rode in one-horse carriages were physically deficient; those who rode in two-horse carriages were mentally deficient." What he would have thought of those who in later years visited their patients in automobiles, one shudders to think.

He died at his home in Ridley Township, Delaware County, Pennsylvania, March 21, 1875. A son, Francis, was a physician.

CONKLIN, Henry Smith (1813-1889), a native of Champaign County, Ohio, was born of Scotch-Irish parentage on July 8, 1813, and in 1833 began the study of medicine under Dr. Needham, of Springfield, Ohio, and Dr. Robert Rodgers, of the same place. The first course of lectures he attended was at the Medical College of Ohio in the winter of 1835-1836. He began to practice in Sidney, Ohio, in 1836, where he continued until his death

in 1889. In 1860 he was elected President of the Ohio State Medical Society, of which he was one of the founders.

On invitation by Gov. Dennison, he assisted in organizing the medical departments of the first Ohio regiments which went to the front on the outbreak of the Civil War in 1861. He was commissioned surgeon to Gen. Fremont's infantry bodyguard (Benton Cadets), and served during a portion of the Missouri campaign, but resigned when Fremont was relieved from command of the department.

Two of his sons studied medicine.

WILLIAM J. CONKLIN.

CONKLIN, William Judkins (1844-1916), writer, of Dayton, Ohio the son of Dr. Henry Smith (q. v.) and Ann Blake Conklin, was born at Sidney, Ohio, December 1, 1844. After a preliminary education in the public schools of his native town, he entered Ohio Wesleyan University, graduating with an A. B. in 1866 and an A. M. in 1869. In 1861, he began the study of medicine under his father and received his degree from the Ohio Medical College in 1868. Following a post-graduate course at the University of Michigan, he was appointed assistant physician to the Dayton State Hospital for the Insane, resigning in 1871 to engage in general practice with Dr. John C. Reeve, Sr., (q.v.) in Dayton. He was professor of physiology in 1875-78 and professor of the diseases of children in 1878-86 in Starling Medical College of Columbus. He was also connected with the staffs of the St. Elizabeth and Miami Valley hospitals from their organization until his death and was appointed by Governor R. B. Hayes a member of the board of trustees of the Dayton State Hospital.

Dr. Conklin was Secretary of the Ohio State Medical Society in 1872 and 1873 and its president in 1890 and 1891. He was for several years a member of the Dayton School Board, writing "A Report upon the Sanitary conditions of the public schools of Dayton, with special reference to the eyesight of the pupils"; and for over twenty five years a member of the board of trustees of the Dayton Library and Museum of which he was president at one time; he was also a director in various local organizations, including the Merchants National Bank.

He contributed to medical journals and to Wood's "Handbook of the Medical Sciences"; among his monographs may be mentioned the "Medical History of Dayton and Montgomery County," "The Pioneer Doctor," "The Mating of the Unfit," "A Study in Eugenics," a subject in which he was always deeply interested, "The Relation of Epilepsy to Insanity and Jurisprudence," and "A Plea for Cremation." He wrote many biographies for Dr. H. A. Kelly's Cyclopaedia of American Medical Biography Phila. 1912.

In 1875, he married Fannie Beckel of Dayton, and of their two children, a son survived.

Dr. Conklin died in October, 1916, of carcinoma of the prostrate.

J. H. J. UPHAM.

CONN, Granville Priest (1832-1916) who was for over a generation president of New Hampshire's first state board of health and for the same time secretary of the state medical society, was born at Hillsborough, N. H., January 25, 1832, and died at the home of his son, in Wayne, Pennsylvania, March 24, 1916, at the age of eighty-four. He was the youngest of the eight children of William and Sarah Priest Conn, who were of combined Scotch-Irish and English descent. Until sixteen years of age he lived on his father's farm and attended the country schools; then he went to Francestown and Pembroke academies and spent two years at Captain Alden Partridge's Military Institute, at Norwich, Vermont. From 1851 to 1856 he read medicine in the office of Dr. H. B. Brown of Hartford, Vermont, being at the same time instructor in mathematics at the academy in that town, and he listened to two courses of lectures at the Vermont Medical College, Woodstock, and one course at Dartmouth Medical School, Hanover, New Hampshire. There he received his M. D., in 1855. In 1880 Norwich University conferred on him the Honorary A. M.

Dr. Conn practiced medicine at East Randolph, Vt., from 1856 until 1861, when he removed to Richmond in the same state, then in August, 1862, he was commissioned assistant surgeon to the Twelfth Regiment, Vermont Volunteers. He served eleven months and was mustered out with his regiment, July 14, 1863. In the fall of this year he moved to Concord, N. H., and passed the rest of his life serving that city and state. From 1872 to 1876 he was city physician, having previously, in 1866, secured the passage of a city ordinance requiring a house-to-house sanitary inspection, the first law of its sort in the country. In 1869 he became secretary of the New Hampshire Medical Society (founded 1791) and held the office until 1906, except for

the two years, 1880 and 1881, when he was vice-president and president, respectively. The organization of a state board of health was due in great measure to the efforts of Dr. Conn, and when in 1881 the bill was passed that created it he was made president, an office he held until his retirement. From 1886 to 1896 he lectured on hygiene at the Dartmouth Medical School and in the years 1877 and 1881 he was elected railroad commissioner. He published a "History of the New Hampshire Surgeons in the War of Rebellion," Concord, 1906, an attractive book of 558 pages.

Dr. Conn married Helen M. Sprague, of East Randolph, Vt., May 25, 1859, and they had two sons. She died in 1915, after which Dr. Conn made his home with his son who lived in Wayne, Pennsylvania. He was for a long time at the head of the surgical staff of the Margaret Pillsbury Hospital and he was a member of many medical and other societies. Forcefulness stood out in every lineament of his rugged and serious face.

WALTER L. BURRAGE.

CONNER, Phineas Sanborn (1839-1909), surgeon of Cincinnati, the oldest son of Dr. Phineas Sanborn Conner and Eliza Angelina Fair Pritchard Hook Sanborn, was born in Westchester, Pennsylvania, August 23, 1839. Dr. Conner's father and mother were first cousins. Dr. Phineas Sanborn Conner, Sr., was the son of Gideon Conner, of Newburyport, Mass., and Hannah Sanborn, of East Kingston, New Hampshire. Gideon Conner was the son of Joseph Conner, a soldier of the Revolution, and Hannah Chase. In the Chase line Dr. P. S. Conner, Jr., was in the eighth order of descent from Aquilla Chase, who came from Cornwall, England, and settled in Hampton, New Hampshire, prior to 1639. Dr. P. S. Conner, Jr., was therefore, twice descended from John Sanborn III. Lieutenant John Sanborn came from England with his maternal grandfather, Stephen Bachiler, landing in Boston Harbor, June 5, 1632. "Father Bachiler," as he was known in the annals of early New England, received the degree B. A. at St. John's College, Oxford, England, September 5, 1585. When he was long past ninety years of age, he returned to England, and died there in his one hundred and first year. Among his descendants were Daniel Webster, Justine Smith Morrill, Seth Low, Nathaniel Hawthorne, and John Greenleaf Whittier. The last made frequent mention of Bachiler in his poems. The "Bachiler eye," variously described as brilliant, keen, piercing or penetrating, reappeared constantly in his descendants; Webster, Hawthorne and Whittier were said to possess it. Those of us who knew Dr. Conner intimately will remember that look when he was amused or excited. Dr. Conner was of the ninth generation in descent from "Father Bachiler." It would be difficult to find a more striking illustration of the transmission of brilliant qualities as the result of repeated intermarriages of relations through so many generations.

In 1841 Dr. Conner's parents moved to Camden County, North Carolina, and in 1844 they went to Cincinnati. In 1855 P. S. Conner, Jr., entered Dartmouth College, Hanover, N. H., and graduated in 1859. He attended lectures at the Medical College of Ohio in 1858-9, and at Jefferson Medical College in 1860-61, where he was graduated in the latter year. During his student life he was for some time acting assistant physician in the Retreat for the Insane at Hartford, Connecticut, and after graduation he spent six months in the hospitals in New York. In November, 1861, he was acting assistant surgeon at Columbia Hospital, Washington, and in April, 1862, was commissioned assistant surgeon.

Immediately after the battle of Antietam, September 16 and 17, 1862, he was sent to the field with a corps of officers, and was there engaged for three weeks, sleeping at times on the field, and more than once in a coffin stuffed with straw. There he developed a sepsis, resulting in the loss of a finger joint. He was then furloughed for some time. Later he was surgeon to Duryea's battery of light artillery at the seige of Port Hudson. Soon after he was detailed for service under General Ben Butler in New Orleans, and fitted up and took command of University Hospital, December 26, 1862, remaining in charge of the hospital until ordered by General Banks to take a corps of surgeons and nurses on the Red River campaign. Later he was detailed for duty in the Department of the Gulf, being one of the board that paid an official visit to General Cortina at Matamoras, Mexico, opposite Brownsville, Texas, in 1864. During the winter of 1864-5 he was at Ft. Columbus, New York Harbor. There he was in charge of the Confederate prisoners from Fort Fisher. After leaving Fort Columbus in the spring of 1865, he was made medical director in the Department of North Caro-

lina. Late in the fall of 1865 he resigned and came home, having received the brevet of major for meritorious services.

In 1866 he was appointed professor of surgery in the Cincinnati College of Medicine and Surgery. In 1867 he became professor of chemistry in the Medical College of Ohio, and in 1868 he was made professor of physics and medical chemistry. In 1869 he was transferred to the chair of surgical anatomy. Later he was professor of anatomy, and from 1879 to 1902 he was professor of surgery, being dean of the faculty for the last two years. He was on the surgical staffs of the Cincinnati and Good Samaritan hospitals for many years. The complete removal of the stomach was first performed by Conner in 1883. This was reported to the Cincinnati Academy and was mentioned in the "Centralblatt für Chirurgie" in 1885. After Schlatter's operation twelve years later Conner again brought his report before the medical profession in the "Journal of the American Medical Association" in 1898. In 1884 Dartmouth College conferred on him the LL. D. degree. He was professor of clinical surgery in Dartmouth Medical College from 1875 to 1899, lecturing there in the summer terms. At the Centennial exercises at Dartmouth, in 1897, Dr. Conner delivered the Centennial address, which was published by the college. It was a work of 127 pages, and, in addition to being a complete history of the college, is full of most interesting notes on the status of medical education during that period.

Dr. Conner was a member of the Academy of Medicine of Cincinnati from October 1, 1866, until his sudden death March 25, 1909, and its president in 1887. He was a member of the Ohio State Medical Association, and of the American Medical Association; and was also a member of the Loyal Legion; of the Sons of the Colonial Wars, and of the Sons of the Revolution. Although he never published any large works, he was a most voluminous writer, his papers appearing in all the prominent journals.

Dr. Conner married December 17, 1873, Julia E. Johnston of Cincinnati. She died in 1899, leaving three children.

A. G. Drury.

CONNOR, Leartus (1843-1911), of Detroit, eye and ear surgeon, educator, writer, was born at Coldenham, Orange County, New York, January 29, 1843, son of Hezekiah and Caroline Corwin Connor. His ancestors on both sides emigrated to New England about the middle of the seventeenth century and soon afterwards came to New York. Dr. Connor's early education was obtained in the Walkill Academy, Middletown, New York, and Williams College, Massachusetts, from which he received the degree of Bachelor of Arts in 1865 and Master of Arts in 1868. He taught for two years as assistant principal of Mexico Academy, Mexico, New York, and at the same time began the study of medicine under Dr. George L. Dayton. During 1867-8 he studied in the medical department of the University of Michigan, paying especial attention to the practical work in the chemical laboratory. The following two years he spent in the College of Physicians and Surgeons of New York City, taking the degree of Doctor of Medicine in 1870. He was especially fortunate at this time to be under the instruction in ophthalmology of Cornelius Agnew (q. v.) and Hermann Knapp (q. v.) in their respective institutions.

He began the practice of medicine in Searsville, New York, but on February 28, 1871, moved to Detroit to fill the chair of Chemistry in the Detroit Medical College. Here he spent the remainder of his life, teaching and practicing his profession. In 1872 he was made professor of physiology and clinical medicine; in 1878 professor of diseases of the eye and ear. From 1871 to 1879 he was attending physician to St. Mary's Hospital; from 1881 to 1894 eye and ear surgeon to Harper Hospital, and from 1894 to 1906 consulting eye and ear surgeon; from 1887 to his death he served as attending and consulting eye and ear surgeon to the Children's Free Hospital; and from 1881 to 1890 he was consulting eye and ear surgeon to the Woman's Hospital. From 1871 to 1895 Dr. Connor edited a medical journal known at different times as the "Detroit Review of Medicine and Pharmacy;" "Detroit Medical Journal;" "Detroit Lancet;" and the "American Lancet."

His interest in medical societies and the advancement of the profession never failed and for him the election to any office meant simply an enlarged responsibility and increased opportunity for service. From 1876-83 Dr. Connor was secretary to the Association of American Medical Colleges; from 1875-81 secretary of the faculty of the Detroit Medical College; secretary of the Detroit Academy of Medicine and its president in 1877-8 and again in 1888-9; president of

the American Academy of Medicine in 1888-9; president of the American Medical Editors' Association in 1883-4; chairman of the section of ophthalmology of the American Medical Association in 1891; vice-president of the American Medical Association in 1882-3; trustee of the Journal of the American Medical Association in 1883-89 and in 1892-4. He was president of the Michigan State Medical Society in 1902-3 and chairman of its council in 1902-5.

Dr. Connor was of medium height, full bodily habit and a ruddy complexion. He was fond of botanizing and collected flowers, shells, and minerals whenever opportunity offered. He was very fond of his home and delighted to beautify it with collections of etchings, oriental rugs, and old furniture of each of which he made a study as his interest became aroused. Dr. Connor was an elder in the Fort Street Presbyterian Church, a member of the Detroit Club, the Old Club, the Sons of the American Revolution, and the Detroit Bankers' Club. For many many years he served as a director of the Home Savings Bank of Detroit.

Dr. Connor's contributions to medical literature were numerous and in varied fields. In addition to many papers on his special work in ophthalmology and otology, he wrote something in the realm of general medicine, and public health. His interest in medical biography is attested by the many lives he contributed to the "Cyclopedia of American Medical Biography." The communal life of physicians became of growing interest to him in his closing years and he was the author of numerous presidential addresses. His pen was also busy for twenty-four years in editorial writing. His was a large share in the organization of the profession. The Michigan State Medical Society, the American Academy of Medicine, the section of ophthalmology of the American Medical Association as well as the Association itself owe much of their success to his persistent, unselfish and efficient labors.

During his early practice, he married Anna A. Dame, daughter of the Rev. Charles and Nancy Page Dame of Exeter, N. H. Two sons were born, both receiving degrees from Williams College and later graduating as Doctors of Medicine from Johns Hopkins University.

Dr. Connor passed away April 16, 1911, following a cerebral hemorrhage.

RAY CONNOR.

COOKE, John Esten (1783-1853), medical teacher and writer of Virginia, was born in Boston, Mass., while his parents were making a visit in that town. His father, Stephen Cooke, a physician of Virginia and a surgeon of the Revolution, was taken prisoner by the British and sent to Bermuda where he fell in love with Catherine Esten, the accomplished daughter of an English family of distinction. They were married on the island, despite opposition from her family, and lived there until 1791, except for the visit to Boston. John Esten was the eldest of their eight children; he was well educated and a most accurate scholar of the English language besides reading Latin and Greek. He began the study of medicine under his father in Alexandria, Va., then went to the University of Pennsylvania in Philadelphia, where he received his M. D. in 1805, his graduation thesis being: "Account of the Inflammatory Bilious Fever which prevailed in the Summer and Fall of 1804 in the County of Loudoun, Virginia." He settled in Warrenton, Fauquier county, Virginia, moving to Winchester in 1821. He wrote "Essays on the Autumnal and Winter Epidemics" for the "Medical Recorder," in 1824. This brochure attracted considerable notice because of its scholarly style and its definite views as to treatment. In 1827 he was called to the chair of the theory and practice of medicine in Transylvania University Medical School at Lexington, Ky., as successor to the famous Daniel Drake, (q. v.) who had been his classmate at the University of Pennsylvania. Dr. Cooke was the first professor at that institution to prepare a systematic treatise on any branch of medicine. "A Treatise on Pathology and Therapeutics" was published in two volumes in 1828, each volume having about 540 pages. A third volume was projected but not published. With Charles Wilkins Short (q. v.) he was co-editor of the "Transylvania Journal of Medicine and the Associated Sciences" published by the medical faculty of the university, and he and Short were potent factors in shaping the medical thought of the time in the southwest. Cooke wrote many articles for this journal; these and others contributed to the "Medical Recorder" would make a book of good size. His vogue as a lecturer was due to his personality and to the simplicity, straightforwardness and conciseness of his style. He never jested, never exaggerated, so that although he was handicapped by a hesitating and difficult delivery he succeeded in

impressing a long following of students. He gave his hearers definite instructions in the details of medical treatment and sent them forth to follow out his views. It may be remarked in passing that this attribute in a lecturer is by no means common at the present time.

For eighteen years Dr. Cooke had been a member of the Methodist Church when, a short time after moving to Lexington, he became converted to the Episcopalian faith. His zeal, his exemplary life, his learning gave him great influence in the church. On the organization of the Theological Seminary at Lexington in 1832, he was elected professor of the history and polity of the church. Within a short time he had collected for the seminary one of the best theological libraries in the country.

After ten years of teaching and writing in Lexington Dr. Cooke was prevailed on to move to Louisville and help found the Louisville Medical Institute, which later became the University of Louisville. He filled the chair of the theory and practice of medicine and taught until his retirement in 1844, which was brought about partly because of his extreme views, which developed opposition in the faculty, and partly because of the attitude of the students, who asked the faculty to retire him on a pension. Dr. Cooke had become a confirmed optimist and carried out heroic measures in his treatment of disease. He thought that all diseases, especially fevers, arose from cold or malaria, that weakened the action of the heart thus producing an accumulation of blood in the vena cava, and in particular, in the adjoining large veins in the liver. As calomel acts on that organ he favored its use in large doses, although he employed other cathartics, being a firm believer in catharsis as the basis of all treatment. He was reported to have said: "If calomel did not salivate, and opium did not constipate, there is no telling what we could do in the practice of physic." He gave as much as a teaspoonful of calomel at a dose and repeated it until the patient had taken 240 grains in twenty-four hours. He had the courage of his convictions and in his last illness from a chronic pulmonary complaint he bled himself freely and purged himself copiously with calomel. He had retired with his wife and children to a farm near Louisville in 1844, and later had moved to an unimproved tract of land on the Ohio river where he passed his last days in the occupation of farming. Dr. Lunsford P. Yandell, (q. v.) who wrote of his life and writings for the "American Practitioner," in 1875, says of him that he was "stern and sometimes even harsh in his intercourse with the world but that he was gentle, tender and child-like in his religious affections, in the domestic circle, and in social intercourse with the friends he loved." He died at the age of seventy, October 19, 1853.

WALTER L. BURRAGE.

COOLIDGE, Richard Hoffman (1820-1866), surgeon of the United States Army, was born in Poughkeepsie, N. Y., in 1820, studied medicine in New York, taking his M. D. at the College of Physicians and Surgeons in 1841, and was commissioned assistant surgeon in the army. During the Mexican War he was assistant medical purveyor. In 1849 he was assigned to duty in the surgeon-general's office at Washington. Here he compiled the "Statistical Report on the Sickness and Mortality in the Army of the United States from 1839 to 1855" and the "Army Meteorological Register," published in 1855. He was also one of the co-editors of the American edition of Beck's "Medical Jurisprudence." In 1860 he was promoted to the rank of surgeon and appointed medical inspector in 1862, rendering meritorious services on the battlefields of South Mountain, second Bull Run, Gettysburg and Resaca, and in 1865 he was ordered as medical inspector of the department of North Carolina, to Raleigh, where he died in the following year. Coolidge was a modest and courteous gentleman, loved by all his fellow officers.

ALBERT ALLEMANN.

COOPER, Elias Samuel (1822-1862), surgeon and founder of the first medical college on the Pacific coast, was born in Somerville, Ohio, in 1822, a brother of Dr. Esaias Cooper of Galesburg, Illinois. He began to study medicine at the age of sixteen in Cincinnati, Ohio, and received his M. D. from the St. Louis University, Missouri, first practicing medicine in Danville, Illinois, but moving to Peoria in 1844. He was president of the Knox County, Illinois, Medical Society in 1853 and spent the year 1854 visiting various European clinics. In 1855 he went to San Francisco, and in 1856 was instrumental in organizing the Medical Society of the State of California.

He founded in San Francisco, in 1858, the first medical college on the Pacific coast, known as the Medical Department of the Uni-

versity of the Pacific, which was afterwards reorganized as the Medical College of the Pacific and later as Cooper Medical College by his nephew Dr. Levi Cooper Lane. In 1860 he began publishing the "San Francisco Medical Press," a quarterly journal of medicine and surgery, edited after his death by Dr. L. C. Lane and Dr. Henry Gibbons. Most of his published writings appear in this journal and in the "Northwestern Medical and Surgical Journal," the "California State Journal of Medicine" (1856) and the "Transactions of the Medical Society of the State of California" (1858).

Cooper was a bold, enthusiastic and original surgeon who, soon after his arrival in San Francisco, gained a reputation as a daring operator by a sensational operation in which he successfully removed a breech-pin of a fowling piece from beneath the heart. Much of Dr. Cooper's operative success was doubtless due to his free use of alcohol on his instruments, thus sterilizing them.

He successfully removed uterine myoma suprapubically; ligated the innominate artery, the patient living forty days, dying then of secondary hemorrhage; strongly advocated the use of silver wire for ununited fractures and successfully wired the fractured patella and olecranon, and removed a large sarcoma of the clavicle, taking away a portion of the sternum.

It is of particular interest at this time to note that in the first published annual announcement of the medical department of the University of the Pacific (1859) Cooper offered a course in operative surgery on animals as a valuable means of instruction in surgery and in which the students were required to pass an examination. Of his own experiments on dogs the admitting of air into the jugular vein and subsequently resuscitating the dog by aspiration of the air from the ventricle is not the least remarkable.

Dr. Cooper announced a cure for aneurysm consisting of cutting down on the sac and sewing it up from the outside. He reported a case of popliteal aneurysm cured in this way. He reported the effective reproduction of a tendon destroyed for four inches of its length by laying open its sheath, permitting the interval to fill by means of granulation tissue. He operated for club-foot by cutting all contracted soft parts down to the bone, much as was later done by Phelps (q. v.) of New York. After wrenching the club-foot into proper position he held it by moulding heavy sheet lead about it . He died in San Francisco, California, October 13, 1862.

EMMET RIXFORD.

Cooper, James G. physician, naturalist and explorer, see American Medical Biographies, H. A. Kelly and W. L. Burrage, Baltimore 1920, page 249.

COOPER, Thomas (1759-1839), for twelve years president of the University of South Carolina, naturalist, politician and writer, was an Englishman who believed in individual thinking and free speech, a stormy petrel who found it best to flit to the land of the free and settle in Pennsylvania in 1795. He was born in London, October 22, 1759, was educated at Oxford and subsequently studied law and medicine, receiving the M. D. degree; he was admitted to the Bar and travelled a circuit for a few years. Being sent to France by the democratic clubs of England to similar clubs there, he sided with the Girondists and was called to account for this by Mr. Burke in the House of Commons, Cooper replying with a violent pamphlet. While in France he learned to make chlorine from common salt and on his return became an unsuccessful calico-printer at Manchester. He established himself as a lawyer in Pennsylvania in 1795, allied himself with the democrats and attacked President Adams in a newspaper article in 1799; was tried for libel and sentenced to six months imprisonment and a fine of four hundred dollars. A little later he was made a judge in Lucerne County, but was removed for arbitrary conduct in 1811. As a personal friend of Thomas Jefferson he supported his administration and the administrations of Madison and Monroe. Next he became professor of chemistry in Dickinson College and then was elected professor in the newly established University of Virginia, but was soon forced to resign, because of his religious views.

This was previous to December 3, 1819, when he was selected to succeed Professor E. D. Smith in the chair of chemistry in the South Carolina College at Columbia, then fifteen years old and having a faculty of five and a student body of one hundred. In two years, on the death of president Macy, Dr. Cooper took his place and continued in office until 1833. He was almost idolized for his genius and learning; he lectured on chemistry and on political economy; felt qualified to teach metaphysics but thought it "not worth

the time required to be bestowed upon it." Almost from the beginning he had difficulty with discipline. The students misbehaved and rebelled against established order, an attitude with which Cooper might have been sympathetic, because of his own past, but was not. The college was in a turmoil during his incumbency. J. Marion Sims (q. v.) who was graduated here in 1832 wrote of Cooper:—"He was considerably over seventy, a remarkable looking man, never called Dr. Cooper but 'Old Coot,' a name applied to a terrapin, and the name suited him exactly." He was less than five feet tall and had an enormous head. To him is attributed the suggestion of establishing a medical college in South Carolina, a project that Samuel Henry Dickson (q. v.) finally saw to fruition. Cooper was an ardent free trader and an advocate of state rights, publishing anonymously a clever allegorical sketch entitled "Memoirs of a Nullifier," in 1832. In the previous year he had attacked Professor Silliman's views on geology in a lecture to his class, Silliman of Yale and he being at that time the only two lecturers on this subject in the country. Silliman's syllabus of lectures was "founded on the Mosaic account of the foundation of the earth and of the Deluge, as being delivered under the authority of divine inspiration." Furthermore, Cooper published a pamphlet on the connection between geology and the Pentateuch, that gave great offense. Finally his connection with the college was severed by reorganizing the faculty, dropping his name, but at the same time conferring on him the degree of LL.D.

The rest of his life was spent in Columbia, South Carolina, in the revision of the statutes of the state, five volumes having been published at the time of his death, May 11, 1839.

Dr. Cooper possessed great versatility and wide knowledge, displayed as a lecturer and writer. He was an admirable talker. Some of his best known writings are:—"Lectures on the Elements of Political Economy," Charleston, 1836; "Observations on the Writings of Thomas Priestley," 1826; "Foundation of Civil Government" and "On the Constitution of the United States."

WALTER L. BURRAGE.

Cooper, William D. (1820-1897), President of The Medical Society of Virginia and writer. See American Medical Biographies H. A. Kelly and W. L. Burrage, Balto. 1920, page 250.

CORDELL, Eugene Fauntleroy (1843-1913), medical historian and teacher, was born June 25, 1843, at Charlestown, Virginia (now West Virginia), and died of cerebral embolism secondary to an abscess, August 27, 1913, at Baltimore, Md. He came from old English stock that emigrated from Wiltshire, England, in 1743, his earliest forbear being the Rev. John Cordell. His father was the Rev. Dr. Levi O'Connor Cordell and his mother Christine Turner Cordell. He was educated at Charlestown Academy and later at the Episcopal High School at Alexandria, Virginia, and spent a short time at the Virginia Military Institute. At eighteen he enlisted in Wise's Legion as a private of the Confederate Army and served from 1861 to 1865. He was wounded at Winchester, September 19, 1865, and was a prisoner of war from March 2, 1865, to June 19, 1865. During the latter part of his service he was a commissioned officer with the rank of Lieutenant. He entered the University of Maryland Medical School in 1866 and received his degree in 1868. After being assistant resident physician at the University Hospital for a year he entered practice in Baltimore in 1869, serving as attending physician at the Baltimore General Dispensary from 1869 to 1872. He soon took a leading place in the medical life of the city and was a founder of the Woman's Medical College in 1882 and professor of medicine there from 1884 to 1903, during which time he was also attending physician at the Good Samaritan Hospital.

Dr. Cordell's fondness for books led to his appointment as librarian of the Medical and Chirurgical Faculty of Maryland from 1870-71, and again from 1880-87. During part of this time he was co-editor with Dr. T. A. Ashby (q. v.) of the "Maryland Medical Journal". He was president and chief worker of the Hospital Relief Association, and one of the founders of the Home for Incurables, and also of the Home for Widows and Orphans of Physicians. Other offices he held were president of the Johns Hopkins Hospital Historical Club 1902-04, and president of the Medical and Chirurgical Faculty of Maryland, 1903-04. He took an active part in lengthening the course of instruction from two to three years and in bringing about the examination for preliminary education of medical students and the formation of the Association of American Medical Colleges. In 1903 he was elected professor of the history of medicine in the University of Maryland, and editor of "Old

Maryland" holding both these positions until his death.

Cordell's chief work was as a medical historiographer and his most important work was the "Medical Annals of Maryland" which was the centennial volume of the Medical and Chirurgical Faculty of Maryland, published in 1903, a book of inestimable value in the history of medicine in that state. He contributed many other articles, among which may be mentioned:

"Historical Sketch of the University of Maryland, 1809-90," and a second edition in two volumes in 1907; "The Medicine and Doctors of Horace," "Johns Hopkins Hospital Bulletin," Baltimore, 1901, vol. xii, 233-40; "The Medicine and Doctors of Juvenal," "Medical Library and Historical Journal," Brooklyn, 1903, vol. 1. 8-17; also "Johns Hopkins Hospital Bulletin," Baltimore, 1903, vol. xiv, 283-87; "Aretaeus the Cappadocian," "Johns Hopkins Hospital Bulletin", Baltimore, 1909, vol. xx, 371-77; "Library of a Colonial Physician," an account of the library owned by Upton Scott, "Old Maryland," Baltimore, 1912, vol. viii, 98-101.

The article on Horace is one of extraordinary interest. Cordell was unusually well versed in the classics, and though largely self-taught, one of the best Latin scholars in Baltimore. His knowledge of local medical history was remarkable.

Dr. Cordell married Louise Tazewell Southall, of Southfield, Isle of Wight Co., Va., and had three children.

He was a man of large stature and well proportioned, with a rather commanding presence and a somewhat reserved manner, tempered with old fashioned courtesy. He lacked to some degree the aggressiveness which seems to be necessary to great material success and he never enjoyed the full measure of reward for his labors. He was a man with the highest moral code, overstrict in his observance of medical ethics and, to a certain degree, an idealist. He gave much of his time and work to the furthering of medical education, medical charities, and medical social work. Of a most charitable nature, he was a friend to the poor and oppressed. By disposition a bookworm, he spent much of his time in study and in historical research.

JOHN RUHRÄH.

CORNELL, William Mason (1802-1895), clergyman, physician and author, was born at Berkley, Massachusetts, October 16, 1802, and died at Boston, the same state, April, 1895. He was educated at Brown University where he received an A. B. in 1827. He studied for the ministry and was ordained a congregational minister in 1830 and the next year was settled as pastor at Woodstock, Connecticut. After three years he moved to another parish at Quincy, Mass., where he stayed five years. His health failing, Dr. Cornell entered the Berkshire Medical Institution at Pittsfield and graduated M. D. in 1844, settling in Boston where he practiced medicine and wrote for the rest of his life. He joined the Massachusetts Medical Society; during two years, 1846-1848, he was editor of the "Journal of Health"; and later, 1863-1865, he edited the "Union Monthly" and "Journal of Health".

Some of his writings are: "Grammar of the English Language"; "Consumption Forestalled and Prevented 1846"; "Ship and Shore Physician and Surgeon, 1865"; "Life and Career of Horace Greeley, 1872"; "How to Enjoy Life, 1873"; "History of Pennsylvania, 1876"; "Lives of Clergymen, Physicians and Eminent Business Men of the 19th Century, 1881." He edited the memoir and eulogies of Charles Sumner in 1874.

Columbian College gave Dr. Cornell an A. M. in 1843, Western University an LL. D. in 1863, and Jefferson College a D. D. in 1865. Previous to the Civil War he was professor of anatomy and physiology in Western University.

Cornett, William T. S. (1805-1897), pioneer physician of Indiana. See Cyclopedia American Medical Biography, H. A. Kelly, Philadelphia, 1912, vol. i., page 202.

CORSON, Hiram (1804-1896), pioneer promoter of the recognition of women physicians, was born at Plymouth Meeting, Pennsylvania, October 8, 1804, and died in his native town, March 4, 1896. He was the seventh child of Joseph and Hannah Dickinson Corson, members of the Society of Friends, and descendents respectively of Huguenot and English ancestors. His school life began in the school at Plymouth Meeting, a small town near Plymouth, and was continued at the Friends' School in Philadelphia. Then he entered the office of the "Norristown Herald" with journalism in view, but changing to medicine he was graduated from the University of Pennsylvania in 1828, beginning practice at once in Plymouth Meeting.

Dr. Corson advocated the use of cold water as a drink and as an external application for

the sick, measures at that time thought to be dangerous. In this fashion he treated measles and scarlet fever, and wrote papers on these and on a large variety of subjects, which are to be found in the transactions of the Pennsylvania Medical Society from 1857 to 1876, and in the "Medical and Surgical Reporter" of Philadelphia from 1871 to 1882.

When in his fifty-sixth year and pressed by the demands of a large practice he began his efforts for the recognition of women physicians by the profession, working through the state medical society year after year until their right to practice medicine was acknowledged throughout the state in 1871. In the year 1877 he introduced a resolution at a meeting of the state society, urging that women physicians be put in charge of the female patients in insane asylums. Although opposed in the legislature, this reform was adopted in Pennsylvania and later spread to Massachusetts, New York and other states. Besides championing and carrying on these reforms, Dr. Corson was able to found the Montgomery County Medical Society, to read many papers before it, and to give antislavery lectures before the War. He may be said to have had a genius for medical societies and knew how to get them to aid him in promoting reforms. The list of such societies of which he was a member would fill a column. He retired only at the age of eighty-four in 1888, when his wife died.

In 1833 Dr. Corson married Ann Jones Foulke, and they had nine children.

Corss, Frederic (1842-1908), a lecturer on geology, of Kingston, Pa., see American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, p. 252.

COTTING, Benjamin Eddy (1812-1897), president of The Massachusetts Medical Society, and promoter of sociability in the profession, was born at Arlington, Massachusetts, November 2, 1812. His education was obtained at Harvard, where he took his A. B. at the age of twenty-two, and A. M. and M. D. three years later, in 1837, being a member of the Phi Beta Kappa Society. Settling in Boston he struggled along as a poor but busy practitioner for four years when he was brought into contact with the Lowell family and through their influence was made curator of the Lowell Institute for Free Public Lectures. This position he held for fifty-five years and through his duties met the eminent men of the world of letters who came to Boston to lecture. Besides this important influence on his life he was enabled to make favorable investments in the valuable mill stocks of that period, so that in later life he was comfortably situated financially and could establish the Cotting Fund for the Massachusetts Medical Society in 1876, the income being used to provide a luncheon at the meetings of the Council of that body, also the Cotting Fund in the Harvard Medical School in 1890. Dr. Cotting settled permanently in Roxbury, a part of Boston after 1868, and there built up a very large practice, boasting that on one occasion he made as many as forty-three visits in one day from early morning to late at night and on another attending four births in different parts of the town in twelve hours. His modest cottage was the meeting place of many noted men. Scholarly, witty, skeptical, Dr. Cotting was at his best when surrounded by his friends in his home.

He was a founder of the Obstetrical Society of Boston in 1861 and of the Roxbury Medical Improvement Society in 1866. One of the chief interests of his life was the Massachusetts Medical Society and we note that he was recording secretary, 1855-1857, corresponding secretary, 1857-1864, orator, 1865, vice-president, 1872-1874, and president, 1874-1876. It was said of him that the society was his very religion. With several others Dr. Cotting purchased the "Boston Medical and Surgical Journal" when it was in a decadent condition and was at one time its editor; he was consulting physician to the Boston City Hospital, founded in 1864, a Fellow of the American Academy of Arts and Sciences and a trustee of the Boston Latin School. In later years he enjoyed the role of being a father in medicine to the young practitioner and all his life he exalted friendship. Of short stature he had the spare frame and fine face of a sensitive gentleman and his everyday ministerial frock coat made him a marked figure in his community. He died at his home in Roxbury, May 22, 1897, at the age of 84.

WALTER L. BURRAGE.

COTTON, Alfred Cleveland (1847-1916), Chicago pediatrician, was born in Griggsville, Illinois, May 18, 1847, son of Porter Cotton and Elvira Cleveland. In 1869 he graduated at the Illinois State Normal University, and in 1878 received his M. D. at Rush Medical College, Chicago. He served in the Civil War as drummer and private in Company F, 137th Illinois Volunteer Infantry. He settled to practice in Chicago in 1878, becoming profes-

sor of pediatrics in Rush Medical College; attending physician to the Children's Department of the Presbyterian Hospital; consulting physician to the Central Free Dispensary, and to Jackson Park Sanitarium. He was physician in charge of the infectious disease ward of Cook County Hospital and was city physician of Chicago in charge of isolation hospitals and the bridewell. He was president of the Illinois State Medical Society; the Chicago Medical Society; American Pediatric Society; Chicago Pediatric Society; and Chicago Medical Examiners' Association.

He wrote "Diseases of Children"; "Anatomy, Physiology and Hygiene of the Developing Period"; "Care of the Infant."

In 1893 Dr. Cotton married Nettie U. McDonald, of Chicago. He died at his home in Chicago, July 12, 1916, of heart disease.

COUES, Elliott (1842-1899), naturalist, was born in Portsmouth, New Hampshire, September 9, 1842, son of Samuel Elliott Coues and Caroline Haven Ladd. He graduated at Columbian (now George Washington) University, Washington, in 1861, taking A. M. in 1862; M. D., 1863; Ph. D., 1864. Medical cadet at Washington 1862-63, he was appointed assistant surgeon in the United States Army in 1864. His service was somewhat extensive, including hospitals and field; later he served in Arizona, North Carolina, South Carolina and Dakota.

His "Key to North American Birds" was published in 1872, and revised and rewritten in 1884 and in 1901; it "has done much to promote systematic study of ornithology in America."

From 1873-1876 he was surgeon and naturalist to the United States Northern Boundary Commission; 1876-1880 secretary and naturalist to the United States Geological and Geographical Survey of the Territories, and he edited the Survey publications. He lectured on anatomy in the medical school of Columbian University, 1877-1882, and was professor of anatomy there, 1882-1887. Resigning from the Army in 1881, he gave himself altogether to scientific work in mammalogy as well as in ornithology. He was founder of the American Ornithologists' Union, and editor of its organ, "The Auk", and of other ornithological publications. In 1887 he became president of the Esoteric Theosophical Society of America.

Among his publications are: "Birds of the North-west" (1874); "New England Bird Life" (1881); "Dictionary and Check List of North American Birds" (1882); "Biogen, A Speculation on the Origin and Motive of Life" (1884); "Can Matter Think?" (1886); "Neuro-Myology" (1887). His "Fur-Bearing Animals" (1877) was "distinguished by the accuracy and completeness of its description of species, several of which are already becoming rare." He contributed the definitions of biological and zoölogical terms to the Century Dictionary (1889-1892), and edited Lewis and Clark's travels, with extended notes (1893).

In 1867 he married Jeannie Augusta, daughter of Owen McKinney, of Rushford, New York.

Coues died at the Johns Hopkins Hospital, Baltimore, December 25, 1899, of pneumonia following an operation for esophageal diverticulum.

HOWARD A. KELLY.

COWLES, Edward (1837-1919). One may visualize Dr. Cowles in his later years as he sat in his office in the administration building of the McLean Hospital at Waverley, Massachusetts, presiding over an institution rated as the leading large semi-private hospital for mental diseases in the United States, one which he had supervised as it grew towards completion in the last decade of the nineteenth century, with its many beautiful buildings on the crest of a hill looking across the valley of the Charles river to the Wellesley hills. He was of rather short stature, military bearing, florid complexion, hair well back from the forehead and turning gray, a bushy well-trimmed mustache and a genial expression looking at his visitor through pince-nez eyeglasses.

Dr. Cowles, the son of George and Mary Bradley Cowles, was born at Ryegate, Vermont, July 20, 1837. He traced his ancestry from a long line of distinguished men and women. On his father's side he was a direct descendant from Governor Pitkin, Colonial governor of Connecticut. His father was a State senator and representative in the Vermont legislature for many terms. Edward Cowles was educated in the schools of his native town and at Dartmouth College, where he received an A. B. in 1859. His medical degree was taken in 1863 from the College of Physicians and Surgeons, Columbia, New York and in the same year Dartmouth conferred on him another M. D. and also an A. M. After serving as an interne in the celebrated Hartford Retreat for the Insane, at Hartford, Connecticut, Dr. Cowles entered the

Medical Corps of the United States Army as assistant surgeon, resigning in the year 1872, with the rank of captain. For two years of his army service he was medical director of the military district of the Rio Grande, Texas, where he went through epidemics of cholera and of yellow fever, contracting the latter disease and nearly losing his life. On leaving the army he settled in South Boston and was appointed visiting physician to the Carney Hospital, in that suburb of the city. In a few months he was elected medical superintendent of the great municipal Boston City Hospital. This was one of the first of the big hospitals of the country to have a medical rather than a lay superintendent. Cowles' administration was noteworthy; he established the training school for nurses, among the first of such schools, and made it an integral part of the hospital; he inaugurated the plan of having patients admitted to the hospital by the executive or his representative rather than by an outside physician; the medical library was resuscitated and made practical and useful to the staff; he supervised the erection of new buildings, using the experience gained in his army service and elsewhere, and renovated the old ones so that they were adapted to modern requirements. The hospital made great progress during his stay and it is not surprising that he was called to the superintendency of the McLean Asylum, then at Somerville, in the year 1879, when it was about to move to more commodious quarters at Waverley and a hospital executive was needed. Dr. Cowles' unusual ability there came into full play. He developed the scientific side of hospital work, when the new buildings had been erected, and was among the first to conceive and to carry out the scientific study of the insane within the institution itself, with proper laboratory equipment and a corps of experts; he instituted seminars where the staff discussed the cases under their care; he advanced the professional training of nurses for this special class of patients. The hospital, under the charge of the same board of trustees as the Massachusetts General Hospital, in Boston, became one of the foremost in the country during Dr. Cowles' incumbency. On retiring in 1903 he established a home in Plymouth, Mass. and maintained an office in Boston. He was professor of mental diseases at Dartmouth from 1886 to 1914 and professor emeritus after that date. Dartmouth conferred her LL. D. on him in 1890. At Harvard he held the positions of clinical instructor in mental diseases (1888-1907), instructor in the same specialty (1907-1913) and instructor in psychiatry during the following year. He was also a non-resident lecturer in mental diseases at Clark University, Worcester, after 1904. He contributed several monographs to medical literature on hospital construction, the training of nurses and on mental diseases. Dr. Cowles was a Fellow of the American Association for the Advancement of Science, a member of the American Psychological Association, American Neurological Association, American Medico-Psychological Association, of which he was at one time president, and he belonged to the American Medical Association, Maine Medical Association, the Massachusetts Medical Society, the Boston Society of Psychiatry and Neurology, and the National Geographic Society, as well as to foreign medical societies. Dr. Cowles was a member of Alpha Delta Phi, the Phi Beta Kappa, and the Loyal Legion, and he belonged to the St. Botolph Club in Boston. He was a Republican in his politics and a Congregationalist in his church interests.

He married, in 1865, Harriet M. Wainwright of Hanover, New Hampshire, who survived him. They had no children.

He died at his home in Plymouth, after a month's illness, July 25, 1919, having just begun his eighty-third year.

WALTER L. BURRAGE.

COWLING, Richard Oswald (1839-1881), surgeon, lecturer, founder of the "Louisville Medical News," a native of Georgetown, South Carolina, of English descent, was born on April 8, 1839, and entered Trinity College, Hartford, Connecticut, in 1858 and was graduated there three years later, being made adjunct to the professor of mathematics even in his sophomore year. On coming home from an European trip in 1862, his inclination was for civil engineering, in which line he did some very good work; but he gave that up and began to study law. While convalescing from typhoid fever, he chanced to read Watson's "Practice of Physic," which so impressed him that he decided to take up medicine, therefore in 1864 he entered the University of Louisville with Dr. George Bayless, professor of surgery, as his preceptor. After attending one course of lectures there, he graduated at the Jefferson Medical College, Philadelphia, in 1867. In the autumn of 1868 he was made demonstrator of anatomy in the University of Louisville, and a few years later, adjunct to the chair of surgery. He there discharged his

duties so well that the next session he was elected to the chair of surgical pathology and operative surgery. In 1879 he was made professor of the science and art of surgery, and this position he held until his death.

He was the founder of the "Louisville Medical News", a weekly journal, the first number of which appeared on New Year's day, 1876. This journal was soon in the front rank of the best medical periodicals. Dr. Cowling contributed many articles on surgery to the medical journals, but the only sustained scientific work which he published, was a little volume entitled "Aphorisms in Fractures."

There was nothing small about Dr. Cowling, he was a big man in every sense of the word, in person, mind and heart. He had a most attractive personality, a magnificent physique, and a figure that would attract attention anywhere.

As a lecturer, he was fluent, earnest, forcible. As a writer, brilliant, broad, witty and comprehensive. He was president of the College of Physicians and Surgeons of Louisville, and chief surgeon of the L. C. & L. Railway.

Dr. Cowling married Mary, daughter of Col. Samuel B. Churchill, who with three daughters survived him when he died suddenly at Louisville on April 2, 1881, from a heart complication following acute rheumatism.

WILLIAM OWEN ROBERTS.

Cox, Christopher Christian (1816-1882), professor of medical jurisprudence at Georgetown University. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 254.

COXE, John Redman (1773-1864), scholar, collector, writer and teacher of materia medica, was born in Trenton, New Jersey, September 16, 1773. When a little boy he was educated under the care of his grandfather, Dr. Redman, in Philadelphia. This relative studied in Europe as a medical student and seems to have liked English methods best, for he sent his grandson to English schools and on to Edinburgh when sixteen to begin classical studies under a chosen teacher. There the surgeon with whom he boarded induced him to attend the hospital lectures. In his autobiography he says: "After fifteen months in Edinburgh I returned to London in 1789 and attended two courses of anatomy and chemistry at the London Hospital and in 1790 left England to study medicine more directly under Dr. Benjamin Rush, and stayed with him until I obtained my degree in the University of Pennsylvania of doctor of medicine in 1784." During the yellow fever in Philadelphia in 1793 so great was the number of patients that he fought the plague side by side with Dr. Rush and seldom saw fewer than thirty to fifty a day. For "his skill, fortitude, patience and perseverance, and humanity" during that hard time, Dr. Rush gave him a "Commentary on Boerhaave."

In 1794 he went for two years to London, Edinburgh and Paris, for study in the hospitals, and then returned to Philadelphia, 1796-7, to settle in practice.

One thing done by Coxe did much to destroy ignorant prejudice against vaccination. A warm, enthusiastic advocate of it, he was the first to use it in Philadelphia, and in 1801 vaccinated himself and his baby son Edward Jenner, thus doing much to establish confidence in the new preventive. In 1829 he succeeded in cultivating the true jalap plant, so that its real character and position might be determined. He invented "Coxe's Hive Syrup," Syrupus Scillae Compositus U. S. P., that had a great vogue for half a century. He lectured to druggists and apothecaries until a sufficient number had been educated to form the "Philadelphia College of Pharmacy."

The success of the "New York Medical Repository," then seven years old (1804), made Coxe think of publishing a quarterly, "The Medical Museum," with a section called the "Medical and Philosophical Register." It had a fine début, for the best doctors contributed good papers and the "Museum" had a vigorous existence until 1811, paving the way for similar journals, while being itself the first uniformly issued periodical in Philadelphia. His biographers give Coxe place as unique among the medical men of Philadelphia and the founder of medical journalism, but it is said he was too much "under the influence of earlier systems and became the most notable illustrator of the conservative teaching of an older time, though this in no way affected the good he did as the inaugurator of medical journalism."

He married Sarah Cox, daughter of Colonel John Cox, and they had six children.

Dr. Coxe died in Philadelphia, March 22, 1864, at the advanced age of ninety.

He was professor of chemistry, University of Pennsylvania, 1809-1818; professor of materia medica and pharmacy, 1818-1835;

editor of the "Medical Museum," Philadelphia (1804-1811) the second medical journal in this country. "The American Dispensary," and a "Medical Dictionary," 1808.

His writings included: "Practical Observations on Vaccination," Philadelphia, 1802. Late in life he issued an exposition of the works of Hippocrates, Philadelphia, 1846, and an essay on the "Origin of the Circulation of the Blood," Philadelphia, 1834.

Coxe had one of the largest private libraries in the country—about 15,000 volumes. In personal appearance he was thin, about five feet six and a half inches high, had a good sized head covered with hair growing low over the forehead and brushed back, eyes black and piercing, a nose of Grecian contour, and a good sized mouth made somewhat irregular by the projection of several front teeth.

DAVINA WATERSON.

CRAGIN, Edwin Bradford (1859-1918), New York obstetrician and gynecologist, was born in Colchester, Connecticut, October 23, 1859. A direct descendant of Governor William Bradford, his father was Edwin Timothy Cragin and his mother Ardelia Ellis Sparrowe. His early education was at the Bacon Academy in Colchester. He was graduated from Yale College in 1882, and from the College of Physicians and Surgeons, New York, in 1886. He then served eighteen months on the house staff of the Roosevelt Hospital. Yale conferred the Master of Arts degree on him in 1907.

Dr. Cragin was an assistant gynecologist to the Roosevelt Hospital from 1889 to 1899. He was appointed professor of obstetrics at the College of Physicians and Surgeons in 1899 and professor of gynecology in 1904, and he held both of these chairs in that institution until the time of his death. After 1898 he had the entire charge of the Sloane Hospital for Women and was instrumental in the founding of the gynecological department in that institution. He was consulting obstetrician or gynecologist to the New York Infant Asylum, Italian, Lincoln, Presbyterian and Roosevelt hospitals. In addition to the New York Obstetrical Society, he held membership in the American Gynecological Society, the American Medical Association, the New York State and County societies, the New York Medical and Surgical Society and the New York Academy of Medicine. He was a vice-president of the Academy of Medicine at the time of his death.

Dr. Cragin's professional duties were so exacting that he had but little time to devote to other pursuits. Even his vacations were broken into by calls of a professional nature and but few had the privilege of knowing any but the professional side of his life. A few knew that he founded a library and erected a handsome building for it in his home town of Colchester and fewer still the extent to which he gave his financial support to medical missionary work in China.

Dr. Cragin confined his professional activities entirely to the specialties of gynecology and obstetrics. As a gynecologist he was easily one of the best in the city. A shrewd diagnostician, a rapid operator, conservative, of sound judgment, he not only gave his patients honest advice, but obtained remarkably good results. It is not as a gynecologist, however, that he will be remembered, but as an obstetrician. For nearly twenty years in charge of the active obstetrical service at the Sloane Hospital with its 1,500 deliveries a year, maintaining meanwhile an extensive private and a large consulting practice, he had almost unequalled opportunities for acquiring a wide knowledge of obstetrics. And with his quick perception, his remarkable memory, and his unbounded energy, he made good use of these opportunities. It is doubtful if anywhere in this country, among all the justly celebrated obstetricians, there was one who was his equal in judgment, diagnostic skill, or operative ability.

He has been criticised for turning out so little scientific work during all these years. In his later life especially his energies were directed more particularly towards operative gynecology, rather than to the problems of obstetrics. Except for his textbook on obstetrics, on which he spent much time and thought, his writings and teachings were almost exclusively on clinical subjects. His fame was won and maintained as a clinician and teacher, and on these will he be given his place in medical history. It is undoubtedly true that for years his was the last word in obstetrical consultations. In time of doubt, his was the advice sought. As an obstetrical consultant he stood on a pinnacle by himself.

He married Mary R. Willard at Colchester, Conn., in 1889, who survived him with three children, two daughters and a son.

He died of cardio-renal disease October 21, 1918, from which he had suffered for several years.

Dr. Cragin's interests, outside of his professional work, were chiefly farming and re-

ligion. Every summer during the months of July and August, he returned to his home town of Colchester, and became once more an enthusiastic farmer, taking a keen interest in the outdoor life and manifold happenings on his farm, in that beautiful country among the hills. There in his quiet home, on the wide elm-shaded street, surrounded by his family, far from the jangle of the telephone, and the discordant city noises, he rested and regained strength for his strenuous winter's work in the city. During the winter Dr. Cragin was an ardent churchgoer; for twenty-five years he was a member of the Central Presbyterian Church, in which he was an elder, and rarely indeed did he miss the Sunday service or the Wednesday evening prayer meeting. With the manifold calls of his large practice, this undeviating regularity was little short of marvelous. He was also a systematic and most generous contributor to foreign missions, notably in China, where in the town of Hwai Yuen he gave the money for a Woman's Hospital, and for years supported entirely one missionary, a woman doctor.

GEORGE H. RYDER.

CRAIG, Benjamin Faneuil (1829-1877), army sanitarian and chemist, was born in Watertown, Massachusetts, the eldest son of Gen. H. K. Craig, chief of ordnance, United States Army. He was educated in Boston schools and finished at the University of Pennsylvania, graduating A. B. in 1848 and A. M. and M. D. in 1851. Inspired with an earnest interest in chemical and physical science, he desired to perfect himself in this rather than engage as a medical practitioner, and immediately after graduation went abroad and studied in London and Paris. Returning in 1853, he was appointed professor of chemistry in the Georgetown Medical College and lectured there for five years. In 1858 he was appointed to the chemical laboratory of the Smithsonian Institution.

On the outbreak of the Civil War it became necessary to engage a consulting chemist for the immense transactions that devolved on the purveying department of the army medical staff, and Craig was chosen. The various reports and innumerable analyses that he prepared were necessarily confidential; but had they appeared in scientific journals, they would outweigh the material on which many prominent modern scientific reputations are founded.

After the close of the war Craig continued in charge of the chemical laboratory of the Army Medical Department, and in addition supervised and collected the meteorological observations reported by medical officers at various points. In 1873, at the request of the secretary of the treasury, he made two voyages to Europe to make a series of elaborate experiments on the air of the steerage in emigrant steamers, with a view of establishing regulations for more sanitary conditions. For a year before his death on April 10, 1877, he was engaged in drawing up a report of the influence of climate on the health of troops, designed as an addition to the medical history of the war.

He was a member of the American Association for the Advancement of Science, and an associate or correspondent of other learned bodies. His published works are few, but his printed papers are models of conciseness and precision, and include: "Products from the Combustion of Gunpowder under Different Pressures" ("Journal Science and Arts," 1866, vol. xxxi); "Reports on Nitrification," presented to the Smithsonian Institution in 1858 (in Smithsonian Annual Report, 1861). "Remarks on the Comparative Mechanical Energy Developed by the Combustion of Gun Cotton and Gunpowder in Fire Arms" (Smithsonian Annual Report, 1864); "Variations in the Temperature in the Human Body," read before the Philosophical Society of Washington, ("American Journal of Sciences and Arts,") 1871, vol. ii; "Determination of the Zero Point" ("American Chemist," 1873, vol. iii, p. 325).

DANIEL SMITH LAMB.

CRAIG, James (1834-1888), obstetrician, was born in Glasgow, Scotland, but came to the United States when seventeen, first staying a while in Canada, then graduating at the University of the City of New York, (1861) afterwards settling in New Jersey for the rest of his life. He was eminently successful as an obstetrician in over 4,000 cases without the loss of a mother. He invented the elastic ligature for the umbilical cord in 1861; elastic electrodes in 1884, introduced hydrate of chloral as an hypnotic to the profession in New Jersey, and was the first to use hydriodic acid in acute inflammatory rheumatism. Craig was attending physician to the St. Francis legal Society, and a frequent contributor to Hospital, a member of the New York Medicothe medical journals.

His death occurred on February 10, 1888, after an illness of nineteen hours from hem-

orrhage, the result of gastric ulcer. He left five children, three daughters and two sons; one son, Burdette P., followed his father's profession.

DAVINA WATERSON.

CRAIK, James (1731-1814), physician-general of the United States Army was born at his father's country seat, Arbigland, near Dumfries, Scotland, and studied medicine at Edinburgh, emigrating to the North American colonies, and practicing medicine first in the West Indies and later in Virginia, where he formed a connection with the young planter and surveyor, George Washington, establishing a friendship disturbed only by the death of Washington. He was appointed surgeon of the Virginia Provincial Regiment in 1754, of which Washington held the command, and was present at the battle of Great Meadows and also at Monongahela, where he dressed the wounds of the ill-fated Braddock and many others. At the close of the Braddock campaign and upon the formation of the Virginia Provincial Army Craik continued in the service as the chief medical officer, and remained until the disbandment of the forces at Fort Pitt, 1758. During the time that he practiced medicine in Charles County, Maryland, Washington and he continued their intimacy and made famous exploring trips into the west which were noteworthy even in those adventurous days.

An active patriot in early Revolutionary times, he became assistant medical director of the hospitals in the Middle Department at the solicitation and special nomination of Washington, and organized the medical department of the forces of Count Rochambeau, being the junior of the four chief army hospital physicians and surgeons, taking the seniorship, second in rank to the director general. This position he held until mustered out at the end of the war in 1783, after personally participating in many of its most important events, including the capitulation at Yorktown. Through his agency the Conway Cabal against Gen. Washington was exposed.

In 1782 the University of Pennsylvania conferred the M. D. degree on a James Craik and it is supposed that it was this distinguished member of the profession. Shortly after being mustered out at the close of the Revolutionary War, he took up his home at Alexandria in order to be near his friend's Mount Vernon home, until 1798, when war with France seemed inevitable and Washington was again summoned to lead the army. But he made the appointment of Craik as the head of the medical department one of the conditions of his own acceptance of the command, and the latter was duly commissioned physician-general, retaining the office until the army was disbanded in 1800. Some months before the official severing of his relations with the military establishment, however, he had returned to his Virginia home where he was soon called upon to attend his old friend in that illness which, on December 14, 1799, deprived the country of its most illustrious citizen. Craik survived him fifteen years, a time passed partly in active practice and at the last in retirement.

He died in Fairfax County, Virginia, February 6, 1814.

LEWIS STEPHEN PILCHER.

CRAIK, Robert (1829-1907), was dean of the medical faculty of McGill University from 1889 to 1901 and directed its affairs during that important period. He was professor of clinical surgery from 1860 to 1867; professor of chemistry from 1867 to 1879; professor of hygiene from 1889 till 1902, holding the minor positions of demonstrator of anatomy in 1856, curator of the museum in 1859, and register in 1869. He entered the Montreal General Hospital in 1854 as house surgeon, and after six years' service was appointed attending physician in 1860. Beginning as a student in McGill University, and graduating with honors at the head of his class in 1854, his connection with it, as student, teacher, and governor, was continuous and close until his death on June 28, 1907. He was a member of the Quebec Board of Health and consulting physician to the Royal Victoria Hospital from 1896, and for many years was recognized as the chief family physician in Montreal, but he had interests apart from medicine. He was a man of many social graces, an excellent speaker, and wrote with admirable style. Dr. Craik was born near Montreal, April 22, 1829, and was in his seventy-eighth year at the time of his death, the immediate cause of which was pulmonary tuberculosis. He married in 1856, Alice, eldest daughter of the late Alexander Symmers, of Dublin, Ireland, who died childless in 1874.

ANDREW MACPHAIL.

Crane, Charles Henry (1825-1883), surgeon-general of the United States Army. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 258.

CRANDALL, Floyd Milford (1858-1919), New York pediatrist, was born in Belfast, New York, May 2, 1858, the son of Charles Milford Crandall, a physician, and Deborah Wood Crandall. His early education was had at the Genesee Seminary and at the Genesee Normal School from which he was graduated in 1880. An affection of the eyes temporarily forced him to relinquish his studies, and he became the principal of the Genesee Seminary. In 1881, he resigned to take up the study of medicine at the New York University Medical College, graduating in 1884. After serving as interne and house physician at Bellevue Hospital, he entered upon private practice in New York.

Dr. Crandall was attending physician at Northwestern Dispensary in 1889-90; lecturer on diseases of children, 1889-93; adjunct professor at the New York Polyclinic Medical School from 1893; surgeon at the New York Skin and Cancer Hospital from 1890 to 1898, and consulting physician to Randall"s Island Infants' and Children's Hospital from 1897. After 1907 he was a state medical examiner of New York. He was an editorial writer on the "New York Medical Journal", 1889-95; managing editor of Gaillard's Medical Journal, 1893-95, and editor of the Archives of Pediatrics. He wrote "How to keep Well," 1903, and many articles, particularly on diseases of children. Dr. Crandall had a nice literary taste and a clear manner of exposition both as a speaker and writer. He was singularly sincere, upright, and honest.

He was secretary of the section of diseases of children of the Pan-American Medical Congress in 1893 and president of the section on pediatrics of the New York Academy of Medicine.

Dr. Crandall was unmarried. He died November 19, 1919.

CRANE, William Henry (1869-1906), physiological chemist, was born in Cincinnati on March 17, 1869, the son of Henry L. Crane, who came to Cincinnati from New Albany, Indiana, and Harriet Lupton, of Cincinnati. Dr. Crane went to the public schools of his native city and the University of Cincinnati, where he received his B. S. in 1891, immediately after entering the Medical College of Ohio (the medical department of the University of Cincinnati) and graduating with high honors in 1893. For the next two years he served as interne in three of the city hospitals before beginning active practice. His interests had always been in the domain of natural science, and he had early taken up and pursued with particular zeal the study of chemistry. In the earlier years of practice, Dr. Crane devoted much time to original research along the lines of physiological chemistry, and soon after starting in practice, was made instructor in physiological chemistry in the Medical College of Ohio. In 1898 he became professor of chemistry, a position he held up to the time of his death. In 1902 Dr. Crane took charge of the municipal laboratory of the city of Cincinnati, and during his four years there completely revolutionized the workings of the laboratory.

His tragic death, which occurred in May, 1906, at the Academy of Medicine, happened as he was just in the act of demonstrating a new cream thickener, which he had invented. He suddenly fell to the floor lifeless. He was an active member of the American Chemical Society, and for some time was president of the Cincinnati branch. Among his publications was a laboratory text-book of methods of "Physiological Chemistry," which was adopted as a standard work in several schools. Dr. Crane's interests were not limited to his chosen fields of medicine and chemistry; he always retained his interest in zoology and botany, and was an amateur photographer of rare skill, an excellent linguist and a thorough musician. Perhaps his chief characteristic was his attractive personality.

Dr. Crane married on April 26, 1902, Emilie Esselborn, and had one child, Paul Willard, born in 1904.

ALFRED FRIEDLANDER.

CRAWFORD, John (1746-1813), an introducer of vaccination into America and investigator into the cause of disease, was born in the north of Ireland May 3, 1746. He was the second of four sons of a Protestant clergyman, all of whom became professional men, his brother Adair being physician to St. Thomas' Hospital, London, and professor of chemistry at Woolwich.

At seventeen he entered Trinity College, Dublin, and afterwards went to the Leyden University, where he graduated M. D. He then made two voyages to the East Indies as surgeon in the East India Company's service. About 1778 he was married and shortly after received an appointment as surgeon to the Naval Hospital on the Island of Barbados, a position of great responsibility. In 1780 a terrible hurricane devastated the island, whereupon he furnished aid and medicines to the afflicted inhabitants without stint and

without compensation. In 1781 he returned to England on account of bad health and during the voyage lost his wife. In 1790 he received from the Dutch government the appointment of surgeon-major to the colony of Demerara in South America; there he had charge of a military hospital of sixty to eighty beds. In 1796 he went to Baltimore. Here he helped forward the founding of the Baltimore General Dispensary, 1801; the penitentiary, 1802; the Bible Society, and the Baltimore Library. He delivered courses on natural history at the College of Medicine in 1811 and 1812, and his introductory lecture on "The Cause, Seat and Cure of Diseases" is extant. He held high rank in his profession, being censor, examiner, orator, and member of the committee to publish the "Transactions of the Medical and Chirurgical Faculty," and consulting physician to the Board of Health and City Hospital.

He was among the very first in America to use vaccine virus, which he did in the summer of 1800, a date contemporaneous with that of its use by Dr. Waterhouse (q. v.), of Massachusetts, who has been given the credit of its first use in the Western Hemisphere. He wrote many medical articles of great interest and value in the medical journals of the day.

What most rivets attention on John Crawford is his remarkable research into the cause of disease. As early as 1790 he conceived—entirely independently—the idea of a living contagium—minute animalculæ gaining access to the human body and there depositing germs to develop and produce disease. He ransacked the whole realm of nature and brought together a great mass of evidence to prove this theory which he maintained, notwithstanding its unpopularity and prejudice to his professional success, with all the ardor of absolute conviction. He pointed out that man, notwithstanding his superior nature and possession of a soul, was subjected to the same laws as the lower animals. He enunciated the doctrine of universal parasitism. He argued convincingly from the known to the unknown, and declared prophetically that while the minute animalculæ could not then be demonstrated, they are not beyond the reach of human ken and in due time would be recognized. He compares the action of the seeds of disease to the vegetable seeds—each of which gives rise to its respective plant, and to that only. He not only held these views, but displayed his consistency by carrying them out to their legitimate conclusion—he applied them to the prevention and treatment of disease. The bigotry and prejudices of his contemporaries compelled him to publish his opinion in a non-medical periodical, "The Baltimore Observer," in which they appeared in 1806 and 1807 under the heading "Quarantine." We may conclude that John Crawford made an independent discovery of this theory, and so far as is known to me he is the first in all history who investigated it in a thorough and scientific manner.

John Crawford died in Baltimore on May 9, 1813, after a short illness and was buried in Westminster churchyard. He was survived by one daughter, who married Maximilian Godefrey, an eminent French architect of Baltimore with whom she returned to France. Dr. Crawford's library is preserved in the University of Maryland. His articles are to be found in the "American Medical Repository," the "Baltimore Observer," and the "Medical and Physical Recorder," Baltimore; in Schultz's "History of Freemasonry in Maryland," vol. ii, 1885, and in Cordell's "Medical Annals of Maryland." There is a crayon portrait and a manuscript work on Tropical Diseases in the library of the Medical and Chirurgical Faculty.

EUGENE F. CORDELL.

Crawford, John Barclay (1828-1894), army surgeon, of Pennsylvania. See American Medical Biographies. H. A. Kelly and W. L. Burrage. Balto. 1920, page 260.

CROSBY, Alpheus Benning (1832-1877), professor of surgery at Dartmouth Medical School, "Dr. Ben," as he was affectionately called by everybody, was a brilliant man from the beginning of his career to its very last day. He was not meteoric, shining briefly, and then fading out of sight, but with a steady light he shone for twenty years as an operator, a surgical lecturer, a clinical teacher, a lecturer on anatomy and public health, and as an eulogist of men who had gone on before him. Remarkable in his choice of words and in his portraitures of famous men, like President Lord of Dartmouth, his eloquence attracted many listeners.

Alpheus Benning Crosby, the son of Dr. Dixi (q. v.) and Jane Moody Crosby, was born in Gilmanton, New Hampshire, on Washington's Birthday, 1832, and died in Hanover, August 9, 1877, in his forty-sixth year, worn out by overwork. His parents moved to Hanover when he was young, and at an early age

he showed interest in chemical and electrical experiments; he built a locomotive which would run. He was educated at Moor's Indian charity school, in Hanover, sometimes called "The Academy," and was graduated in the class of '53 at Dartmouth. Directly afterward he studied medicine with his father, attended the lectures at the Dartmouth school, acted as demonstrator, and after two years thus spent, served for a year as interne at the U. S. Marine Hospital at Chelsea, Massachusetts, where he saw cases of fracture, frost bite, pneumonia and syphilis in manifold forms. He then finished off his education with a third course of lectures, and was graduated at the Dartmouth School as Doctor of Medicine in 1856. He established himself in practice with his father, and together they attended to a large and growing business, with the medical school as a nucleus for patients a hundred miles around.

With the outbreak of the Civil War, "Dr. Ben" volunteered at once, was appointed surgeon to the First New Hampshire volunteers, and in May, 1861, at Poolesville, Maryland, he personally drew the plans and superintended the building of the first complete military hospital on the pavilion plan, ever constructed. He was present at the important battles of Ball's Bluff and the Second Bull Run, and was promoted to the position of brigade surgeon, but he resigned in 1862, as his father had need of him at the medical school. There he was nominated as assistant professor of surgery and anatomy, and in a brief time developed a gift of descriptive anecdote and a charm of person and of style which gradually increased his fame as a speaker and made him known in medical circles throughout the entire north.

Three years later he was full professor of surgery at Dartmouth and then in rapid succession delivered entire courses of lectures on surgery and operated on all attending patients at the University of Vermont, at the University of Michigan, at the Long Island College Medical School, once at Bowdoin, and also at the Bellevue Hospital and Medical School, in New York. He declined an invitation to the chair of surgery in the New York University School of Medicine and at the death of Pancoast (q. v.) he was urged to become professor of anatomy in the Jefferson Medical College in Philadelphia. But this crowning honor of his life he also declined, because he could not leave his other engagements nor spare the time. Not contented, however, with all these labors he delivered at the Cooper Institute in New York a series of public health lectures, in which the most attractive were those on "the hand" and "the foot." The most valuable of his medical papers were those entitled "Seven Cases of Foreign Bodies in the Knee Joint," "A Successful Case of Ovariotomy," done when that operation was a rarity, another on "Abscesses," one on "Diabetes;" all with a wealth of illustrative cases, also a charming brochure entitled: "A Month in a Volunteer Camp."

The crowning paper of his career was his address as president of the New Hampshire Medical Society in 1877, entitled "The Mutual Relations of Physician and Patient," for in a brief two months his work had ended forever. Perhaps he had even then a premonition of early death, for those who were present had occasion soon to recall his closing words, his fervent exclamation, "And so goodbye, gentlemen, and God bless you all."

As a surgeon "Dr. Ben" was dextrous, his results were good, and this speaks more plainly than rapidity or style. As a public speaker, he possessed the exquisite art of extempore speaking. He had a large fund of anecdote, could tell a story to the point, or cap another; his voice was clear and resonant and whenever a speech was wanted for an occasion, or an anniversary, everybody said: "Ask Dr. Ben." As a teacher, he possessed the rare gift of making friends with the students, then of attracting their attention with genial anecdotes, and finally of pushing home his emphatic points of instruction.

Dr. Crosby married in July, 1862, at Baltimore, Maryland, Mildred Glassel Smith, daughter of Dr. William Smith of Galveston, and bringing her to Hanover they built up a centre of widespread hospitality. Nor did they ever forget to include within it college boys living far from home and needing social correction of their boyish enthusiasm.

When he died, all Hanover mourned.

JAMES A. SPALDING.

CROSBY, Dixi (1800-1873), New Hampshire surgeon. When a member of the Class of '66 in Dartmouth, I often met Dr. Dixi Crosby, always called "Dr. Dixi" to distinguish him from his son, "Dr. Ben" (q. v.), and I recall him as he walked to and fro in the village as a short, compact, well-dressed man, firm on his feet and rather ponderous in his gait. He had a large head and wore a curly reddish beard, shaggy as if never a comb had touched it, and his hair reached his coat collar behind. His upper lip was clean

shaven so that, as he said, no hair should obstruct his voice in his lectures in the medical school. His face had a winning expression and he liked to talk as he walked. The whole effect of his appearance was majestic and impressive. I used to call at Dixi Crosby's house, to chat with visiting girls, but being a callow youth, it never occurred to me to forsake the girls and enter into conversation with the old man concerning his adventures in surgery. Fifty years later, it happens to me to be asked to give some account of the commanding figure who dominated New Hampshire surgery for thirty years.

Just before the child of Dr. Asa and Betsey Hoit Crosby of Sandwich, New Hampshire, was born there was a friendly dispute between the parents concerning the possible sex of the infant, the father wanting a boy and the mother a girl. When it turned out to be a boy, the happy father shouted "Dixi" (Latin "Dixi," I told you so), and Dixi he was named. The date of his birth was February 7, 1800, and that of his death at Hanover, September 26, 1873.

Young Crosby studied in the village schools and then ventured in business, traveling as far south as New Orleans, but he failed from lack of experience. He studied then with his father, who was by this time practicing in a larger center, at Gilmanton, New Hampshire, and in the winters attended the lectures at the medical school at Dartmouth, where he was graduated in 1824. During his medical student life various instances of his surgical audacity are recorded. One, in which in spite of the protests of older but timid attending physicians, he amputated the gangrenous leg of an apparently moribund patient successfully, and another in which to save the patient's life he utilized an ordinary carving knife, carpenter's saw and chisel, to amputate a leg high up, and was again completely successful. How much truth belongs to these youthful outbursts of fearless surgery, is really unknown, but they seem to justify the belief that in them was the germ of that surgical courage soon to make itself known throughout the State.

He practiced in Gilmanton with his father for ten years, then in Laconia, and finally in Hanover, when he was called to the chair of surgery in the Dartmouth Medical School in 1838. His practice in Hanover was very large, many patients being attracted by the high reputation of the school, while the personal ability of the man spread far around for many miles. The chair of surgery at Dartmouth he occupied for many years, then gradually retired from that in favor of his son, "Dr. Ben," but continued as professor of obstetrics and diseases of women until 1870, when he resigned, was made professor emeritus and continued as such until his death three years later.

As a lecturer he was straightforward and to the point and he had also a gift of dry humor that kept the attention of his scholars. "See with your own eyes, feel with your own fingers, use your own judgment and be the disciple of no one man." . . . "Operate not quickly, but surely, so that your work shall be for the benefit of the patient."

Among the novelties which he suggested was one for reducing dislocations of the thumb. By bending the phalanx backward, forcibly, and then by pressure from below, the bone was sent quickly into place. At one time he was known as "Elbow Crosby" from his method of breaking up adhesions at that joint, while his brother Josiah was known as "Sticking Plaster Crosby," for his frequent use of that material in fractures. Although Dr. Dixi Crosby performed some famous operations, he might be called a careful, rather than a brilliant operator. He said, "An operation, gentlemen, is soon enough done when well enough done." He learned all the new methods of practice by frequent visits to metropolitan hospitals; he went to Boston to see just how ether was used, and later on to study chloroform, which he preferred in his practice, if he had the services of a skilled anesthetist like his son Benning. No statistics of his operations have been preserved, but he had the reputation for years of doing more surgery than any other man in New Hampshire.

He was the cynosure at the meetings of the New Hampshire Medical Society, was honored with every office within its gift, was twice chosen president, and was a dignified presiding officer. He spoke often at the meetings, which he attended regularly for years, from the date of his election as a member in 1826. Although on each occasion as president he may have delivered an address, no record of his topics has been preserved. Careful study, too, of the society's records, shows that set papers were rarely read, most of the meetings being occupied with the exhibition and discussion of the treatment of cases. Dr. Crosby once read a paper "On Tumors of the Pelvis" and another "On Trusses." He exhibited in 1835 the case which made his name noted in American surgery, in which in

March of that year he removed after a bloody operation, and before the days of ether, be it emphasized, an enormous osteoma involving clavicle, shoulder-joint and scapula. Amputating all of the parts involved, the gigantic mass was removed. The operation was so completely successful that when shown in the June following, the patient who had been an emaciated skeleton of 80 pounds, was then a "monstrous healthy fellow weighing over 200." This operation was first performed by Ralph Cuming, an English naval surgeon, in 1808, as reported by A. Copland Hutchinson in the "London Medical Gazette," 1829-30, vol. v, 273. He is said to have done one of the first mastoid operations. It was on a man who had a "brain abscess." With the aid of his jackknife, not having any instruments with him, he found pus and the patient's life was saved.

No account of the life of Dixi Crosby would be complete which failed to mention his extraordinary law suit, which originating in 1845 was not tried until 1853, and tried anew in 1854, with acquittal. It was extraordinary, because it was the first time in this country in which a consulting surgeon was ever sued, and it was the first in which so long a time elapsed from the date of the original visit before proceedings were brought. Early in 1845, a man was covered with gravel in a pit, and taken out with a broken leg. Crosby was called as consultant, and advised the use of Gibson's splint. When this was ready the next morning he applied it and never saw the patient again. He was sued, because abscesses and gangrene supervened, with shortening of the limb. The first trial, which was to be begun two days before the legal limit in Vermont had expired, slipped over until 1853, eight years, and a verdict against him was found in the amount of $800. He carried the case to the higher court, got a new trial in 1854, and was acquitted. This sounds simple, but it attracted attention throughout the nation, and when it was over Dr. Dixi received congratulations from every state in the union.

We may sum up Dr. Dixi Crosby as a genial man, a faithful adviser, and in his prime the leading surgeon in his state. He was proud of his temperance doctrines and did much to prevent the sale of "intoxicating bitters" to Dartmouth boys. He served twice in the legislature, and was surgeon in the provost marshal's office for two years during the Civil War.

In 1827 he married Mary Jane Moody of Gilmanton, and left two sons; one of whom was Alpheus Benning (q. v.) and another who, after training as a lawyer, studied medicine and became a surgeon, Albert H. Crosby of Concord, New Hampshire.

JAMES A. SPALDING.

Crosby, Thomas Russell (1816-1872), of Hanover, N. H.; Army surgeon. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 263.

CRYER, Matthew Henry (1840-1921), oral surgeon of Philadelphia, was born July 21, 1840, in Manchester, England, the son of Henry and Elizabeth Cookson Cryer. In 1851, he came to America. At the outbreak of our Civil War, he enlisted and was advanced to the rank of major. After graduation from the Philadelphia Dental College in 1876 and from the medical department of the University of Pennsylvania in 1877, he practiced in Philadelphia. For twenty years, he lectured on mechanical dentistry at the Philadelphia Dental College and in 1898 was appointed professor of oral surgery at the University of Pennsylvania. Following 1900 he was oral surgeon on the staff of the Philadelphia (Blockley) Hospital. In 1902, he was president of the Pennsylvania State Dental Society and was a member of various other dental and medical associations.

Among his writings are "Regional Anatomy," 1886; "Studies of Internal Anatomy of the Face," 1901 and "Imperial Stereoscopic Anatomy of the Head" (with D. J. Cunningham and David Waterson), 1909. He also contributed the chapter on extraction of the teeth in the "American Textbook of Operative Dentistry" and the one on general hygiene of the mouth in the "Handbook of Practical Treatment" by Musser and Kelly.

He married Martha Gates Phillips of Philadelphia, June 17, 1889.

After several months' illness, Dr. Cryer died August 12, 1921.

CULBERTSON, Howard (1828-1890), surgeon, and ophthalmologist, was born in Zanesville, Ohio, February 24, 1828, a son of the Rev. James Culbertson, Presbyterian minister. Thrown at an early age upon his own resources by the death of his father, he worked for a time in a machine shop at Cincinnati, Ohio. This work proved too severe for his somewhat frail constitution, and being of a studious disposition, he gave it up and for a

short time read medicine with Dr. Lyman Little of Zanesville, in 1848 entering the Jefferson Medical College, from which he took his M. D. in 1850. From the time of his graduation until 1862 he practiced in his native city, acquiring a more than local reputation, especially in diseases of the eye; but in 1862 he left his rapidly growing practice to enter the army as an assistant surgeon and was assigned to active service at Rolla, Missouri, where he immediately set to work to improve conditions, succeeding so well under adverse circumstances that in a year he was assigned to take charge of Harvey General Hospital at Madison, Wisconsin. Here he did some of his most successful operating, which is recorded and favorably commented on in the "Medical and Surgical History of the War of the Rebellion."

In 1865 he left the volunteer service with the rank of brevet lieutenant colonel, and joined the regulars as captain and assistant surgeon, serving as medical director of Taylor barracks at Louisville, also at Memphis, and at Jefferson barracks, St. Louis. From there he was ordered to Baton Rouge, but climatic conditions completely prostrated him, and he was compelled to go on the retired list, with health permanently undermined. Returning to Zanesville in 1869, he again took up private practice, devoting most of his time to his chosen specialty, diseases of the eye, and soon became one of the leading ophthalmologists of the state. For several years he was professor of of ophthalmology in the Columbus Medical College, Columbus, Ohio. Dr. Culbertson invented a number of instruments for use in both general and ophthalmic surgery. Among these were a meerschaum probe for bullets, used in the army, and a prismoptometer for testing eyes. Although comparatively an invalid, he worked incessantly, and it was during the last twenty years of his life that his most important work was done.

In 1862 he received the gold medal of the Ohio State Medical Society for an essay on "The Use of Anesthetics in Midwifery," and in 1876 published the greatest work of his life, a book entitled "Excisions of the Larger Joints of the Extremities." This was published as the prize essay of the American Medical Association for that year, and at the time was the most exhaustive treatise on the subject. He also wrote and published a great many articles for medical journals both in America and England.

He married Maria Louisa Safford, daughter of Dr. Elial T. Safford of Parkersburg, West Virginia, November 16, 1854, and had seven children, one of whom, Louis R., following in his father's footsteps, practiced ophthalmology in Zanesville, Ohio.

The father died at Zanesville, June 18, 1890, of infirmities acquired by overwork and exposure in the service of his country.

JOHN G. F. HOLSTON.

CULBERTSON, James Cox (1840-1908), medical journalist of Cincinnati, the eldest of seven children, was born on December 19, 1840, at Culbertson Mills, Miami County, Ohio, son of William and Mary Ann Cox Culbertson, whose people came originally from Scotland.

In August, 1860, he went to Cincinnati and began to study medicine under Dr. John Davis, attending lectures during the session of 1860-61. On April 19, 1861, he volunteered as a private in the fifth Ohio Volunteer Infantry—the first troops enlisted under the call of Pres. Lincoln—and went to Camp Harrison and later to Camp Dennison, then on, in 1861, with the regiment to West Virginia. Dr. Culbertson was detailed to act as medical officer to three companies sent to French Creek. Soon afterwards he was detailed as hospital steward at Seminary Hospital, Romney, Virginia, and held many medical army appointments until 1864. Owing to the illness of Dr. Clendenin, (q. v.) much of the responsibility devolved upon Dr. Culbertson. In September, 1864, he entered Bellevue Hospital Medical College, and in October the vacancy occurred of senior assistant in the New York City Lunatic Asylum to which after a competitive examination he was elected. Arriving at the asylum, he found his predecessor had died of typhus fever, and the junior assisstant was sick. That night the superintendent, Dr. Ranney, was attacked, and died five days later, leaving Dr. Culbertson the only acting medical officer. While thus employed he found time to attend lectures at Bellevue Hospital Medical College, and took his M. D. there in March, 1865.

In April, 1865, he resigned and went to Cincinnati and soon after to Chicago, with a view to making it his home, but in October returned to Cincinnati and immediately began practice. On December 23, 1873, Dr. Culbertson purchased the "Lancet and Observer," a monthly journal long established. From that time medical journalism was the principal business of his life, although for a number of years he took an active part in municipal

affairs. In October, 1875, he purchased the "Indiana Journal of Medicine"; published in Indianapolis, and united it with the "Lancet and Observer." In June, 1878, he took over "The Clinic", a weekly journal founded by the Medical College of Ohio in 1871; a journal which numbered among its editors, James T. Whittaker (q. v.) and Roberts Bartholow (q. v.) The title of the consolidated journal was changed to "Lancet and Clinic", and in 1904, to "Lancet-Clinic". Finally, in 1881, he bought the "Obstetric Gazette". From 1891 to 1893 he was editor of the "Journal of the American Medical Association", and lived in Chicago.

He was professor of the theory and practice of medicine in the Cincinnati College of Medicine and Surgery from 1893 to 1902, and exceedingly active in the advancement of the interests of the University of Cincinnati.

In 1899 he published "Luke, the Beloved Physician," a work which showed much research into the life and character of the Apostle. During his active life he wrote and published more than 4,000 pages of editorials.

On May 3, 1865, Dr. Culbertson married Virginia B. Clark, of Cincinnati, but on July 11, 1866, she died suddenly. April 10, 1873, he married Sarah Pogue, of Cincinnati, and had three children: Henry Coe, James Clark and Margaret Elizabeth. Mrs. Culbertson died September 2, 1884. On June 18, 1888, Dr. Culbertson married Sophia W. Brown, who survived him. He died June 4, 1908, of arteriosclerosis.

A. G. Drury.

CULLEN, Ernest Keys (1878-1922), gynecologist of Detroit, was the son of an Irish father, Thomas Cullen, a well-known Methodist minister who came to Canada in childhood, and of an English mother, Mary Greene, whose father came to Canada in the early 40's as a Bible Christian missionary. Ernest was born May 14, 1878, in Belleville, Ontario. After preparation at the Parkdale Collegiate Institute in Toronto, he entered the medical department of Toronto University in 1899. Following graduation in 1903, he was assistant in medicine in the Johns Hopkins Hospital dispensary, Baltimore, for a year, where he worked in general medicine and in diseases of the skin and genito-urinary surgery. During 1904-05, he served as house surgeon in the Toronto General Hospital and then returned to Baltimore and was a fellow in pathology with Prof. William H. Welch for the ensuing year. In 1908, he became assistant resident gynecologist on Dr. H. A. Kelly's staff in the Johns Hopkins Hospital and two years later was made resident gynecologist. In 1911, he moved to Detroit where he was gynecologist to the City of Detroit Receiving Hospital, the Harper Hospital, and St. Mary's Hospital and established a connection with the Detroit Medical School—teaching gynecology and gynecological pathology. When the call to service in the World War come in 1917, he joined the Harper Hospital Unit as captain. Two years later he was discharged as major and again settled to his work in Detroit. In 1921, when J. Henry Carstens (q. v.) resigned his chair because of failing health, he suggested Dr. Cullen for his place, and the latter became professor of gynecology in the Detroit Medical School. The following year brought heavy duties, and the end of the school session found him greatly fagged. Just as he was about to leave his office one evening, with vacation in immediate prospect, he was suddenly taken ill and died on the evening of July 5, 1922, from uncontrollable hemorrhages from ruptured varicose veins of the esophagus.

On April 28, 1920, he married Myrle Macklem of Marlette, Michigan, who with an infant daughter, Charlotte Mary, survived him.

Beloved by all, Cullen was a surgeon of sound judgment and ability.

Twelve short articles are credited to him. Among them, three deal with the use of silver wire in fixing the kidney. There is a portrait of Dr. Cullen in the Southern Surgical Transactions xxxv, 1922.

CULLEN, John Syng Dorsey (1832-1893), surgeon, was the son of Dr. John Cullen, a Dublin man and one of the founders of the Medical College of Virginia. He was born in Richmond, and educated in the best schools in Virginia and New York and at the University of Virginia, graduating in medicine in 1853. After this he spent some time in a hospital in Philadelphia, and then continued his studies abroad. Upon his return home he settled in Richmond and practiced with Dr. Charles Bell Gibson (q. v.).

When the war began in 1861 he became surgeon to the first Virginia infantry, and soon afterwards was appointed medical director of the first, or Longstreet's corps. During the time of the battles around Richmond (June, 1862), he was assigned by Gen. Robert E. Lee the position of acting director of the army of northern Virginia. Soon after the

close of the war he was elected professor of diseases of women and children in the Medical College of Virginia, and when Dr. Hunter McGuire (q. v.) retired in 1885, was chosen his successor in the chair of surgery, and also was made dean of the faculty, both of which positions he filled until death. He was a member of the Southern Surgical and Gynecological Association; charter member of the Medical Society of Virginia, and at one time president of the Richmond Academy of Medicine. His contributions to medical literature were numerous and valuable.

Dr. Cullen was a handsome and attractive man, a skilful physician and surgeon and an excellent teacher, and had the full confidence and esteem of his patrons.

He married Jenny, daughter of John Maben, Esq., of Richmond.

After a protracted illness from chronic nephritis, he died in Richmond on March 22, 1893.

There is a photograph in the family.

ROBERT M. SLAUGHTER.

CUNNINGHAM, Francis Deane (1836-1885), surgeon and ophthalmologist, the son of Dr. John Cunningham, of Goochland County, Virginia, was born in that county in 1836, and received his collegiate education at the University of Virginia taking an M. D. from the Medical College of Virginia in 1857 and from the University of New York in 1859. For a time he was house surgeon in the Brooklyn City Hospital, and spent some time in 1859-60 studying in London and Paris, giving special attention to ophthalmic surgery. Upon his return home he settled in Richmond, Virginia.

When the Civil War began he entered the Confederate army and was commissioned surgeon July 19, 1861 being first assigned to duty with the thirtieth Virginia Infantry. During the course of the war he held several important positions, and at its close was inspector of the hospitals at Richmond, Virginia. In 1868 he was elected professor of anatomy in the Medical College of Virginia, and for a number of years served as a member of the City Board of Health. He had the honor of election to the presidency of his local society, and in 1876 to that of the Medical Society of Virginia. He built up a large practice, devoting special attention to surgery and ophthalmology. He was one of the co-editors of the "Virginia Clinical Record" and contributed some valuable articles to that journal, as well as to other medical periodicals.

He married on September 21, 1864, Agnes Campbell Gordon, and of the two children born, one died in infancy, the other, a son, Dr. R. H. Cunningham, became a physician in New York City.

Some three years before his death Dr. Cunningham contracted dysentery, which becoming chronic, gradually sapped his strength. He died in Richmond in September, 1885.

A good photograph of him was in possession of his son.

ROBERT M. SLAUGHTER.

CUPPLES, George (1815-1895), progressive medical publicist of Texas, was born in Berwickshire, Scotland, October 13, 1815, and died in San Antonio, Texas, April 19, 1895. He was the son of Robert Cupples, surgeon in the Royal Navy. Educated liberally in his native country, he studied medicine at the University of Edinburgh and later in Paris. In 1836 he began two years service in Spain. In 1843 he emigrated to Texas and soon after his arrival in that State settled in San Antonio, where he became a distinguished pioneer practitioner, especially in surgery. During the war with Mexico he was surgeon in the American army. In the civil war he was medical director, in the trans-Mississippi department, of all cavalry in the service of the Confederate government. He was a founder and first president of the Texas Medical Association in 1853 and also served as president in 1878. He was one of the first men in this country to establish (in 1878) a state board of examiners for the licensing of physicians. In 1877 he began an exhaustive statistical inquiry into the results of Texas surgery and showed by his published results that "as good surgery could be done in Texas with a carpenter's saw and Bowie knife as was done in London with the most approved appurtenances," thus answering effectively the slurring question, as applying to Texas, put by a writer of that period in the "London Lancet," "What good can come out of Nazareth?" His address as president of the Texas Medical Association in 1853 was redolent of advanced thought in medicine and showed him far ahead of his times. He had then a conception of what the exigency of public health demanded such as might do credit to the modern sanitarian. For instance, he was a sturdy champion of compulsory vaccination. In his address of 1853 he said, "I would propose to the Association as a legitimate and laudable object of their endeavors the passage of a law by our legislature, rendering

vaccination obligatory on all, and making its neglect punishable by fine. I am well aware that many difficulties and much opposition would have to be overcome before this desirable end could be attained. The boasted liberty of this country, in this instance ill-understood, renders legislation on this subject difficult of attainment. These difficulties and this opposition can only be surmounted by the enlightenment of the people on this momentous question, and this is the duty and the province of the Association." Again, in that same remarkable paper, addressing himself to the subject of medical education, he said, "On the proper preparation of the public mind for the consideration of this great subject will depend the organization of the medical schools of our universities; by the action and the influence of the medical men of this country from this time forward will it be decided whether the schools of medicine shall be worthy of the name, affording in their organization, their operation and their requirements, proof that Texas desires to make as rapid progress in intellectual as in political and commercial development, or whether she will be content with tame copies of the miscalled universities of too many states, notably of the West and South, where a nominal curriculum of one or two years, and a mockery of examination by the very professors whose pecuniary interest and natural self-love incline them to indulgence, entitle students to receive honors and degrees." All this, and much else of like tenor, from the State of Texas in 1853 and out of the lips of a man of great wisdom and prescience!

Dr Cupples was a handsome man, of patrician mien, of cultivated manners and of knightly conduct in all the relations of life.

G. Alder Blumer.

CURRIE, Donald Herbert (1876-1918), sanitarian of the United States Public Health Service, was born in Jefferson County, Missouri, March 25, 1876, son of Daniel McNeil Currie and Martha Dent. His early education was had at the High School and the Manual Training School of St. Louis, and he graduated in medicine at the Washington University, St. Louis, in 1897. In 1899 he entered the United States Public Health Service as an assistant surgeon, was promoted to the grade of passed assistant surgeon in 1904 and to the grade of surgeon in 1912. He was stationed at the Hygienic Laboratory, Washington, 1900-01; served in the plague epidemic in San Francisco in 1901-05, and in the yellow fever epidemic in New Orleans in 1905.

He was best known for his work in connection with leprosy, in which field he rendered eminent service. He had two tours of duty in Hawaii, the first from 1909 to 1912 and in 1915 and 1916 he served as director of the Molokai Leprosy Investigation Station. By his sound common sense, scientific knowledge and attainments he frequently had occasion to disprove spurious claims in connection with the treatment of the disease and the biology of the leprosy organism. Between the tours of duty in the Hawaiian Islands he served as secretary of the California State Board of Health, and was closely identified with the inception of the modern public health laws which are doing so much for the betterment of conditions there. In 1909 Dr. Curry ably represented the United States at the International Leprosy Congress held in Bergen, Norway. He was appointed quarantine officer at Boston, Massachusetts, in 1917.

Currie wrote valuable articles on leprosy and the bubonic plague.

He married Helen Hope Hanson, of Webster Groves, Missouri, in 1900. He died from pneumonia, following influenza, at his home at Brookline, Massachusetts, December 23, 1918.

Victor G. Heiser.

CURRIE, William (1754-1828), a founder of the Philadelphia College of Physicians, was a son of an Episcopal clergyman, who was a native of Scotland. William was born in Chester County, Pennsylvania, in 1754. As it was designed that he should become a clergyman, his education tended in that direction. Under the instruction of his father and competent teachers, he acquired a thorough knowledge of Latin and Greek, and a superficial knowledge of the Hebrew language. It is stated that at an early age he had imbibed opinions in conflict with those inculcated by the Thirty-nine Articles, and for this reason he was not willing to become a public teacher in the church. He preferred the medical profession and was apprenticed to Dr. Kearsley, (q. v.) After the close of his apprenticeship he attended the medical lectures of the College of Philadelphia. No diploma was conferred upon him. He entered the American Army as a surgeon early in the revolutionary conflict. In 1776 he was attached to the military hospital on Long Island, and subsequently at Amboy. At the close of the war he be-

gan to practice medicine in the town of Chester, and soon afterward married. His first wife died and he married again in 1793 the widow of Dr. Busch, by which union they had one son and three daughters. The son and one daughter survived their parents. He was elected a member of the American Philosophical Society July, 1792, and contributed to the Transactions, vol. iv, a paper "On the Insalubrity of Flat and Marshy Situations; and Directions for Preventing or Correcting the Effects thereof." On December 6, 1820, he addressed a communication to the joint committee of the City Councils on the yellow fever of that year, for which see "Report of the Joint Committee of Councils, relative to the Malignant or Pestilential Disease of the Summer and Autumn of 1820, in the City of Philadelphia. Philadelphia, 1821." For many years he was a member of the Board of Health and senior physician of the Magdalen Asylum.

Dr. Currie was well acquainted with medical literature and highly estimated by contemporary physicians. He was a successful practitioner and amassed considerable wealth. He was always, however, extremely plain in his dress and manners, and strictly temperate in all things. To the deserving poor he freely gave his professional services and in cases of need, money also.

In the warmth of conversation his love for satire would lead him occasionally to place in a ludicrous light the foibles of his professional opponents, but for this he in some measure compensated by always giving them full credit for whatever talents or estimable qualities they might possess. Throughout life he observed a stern integrity, which would never permit him to do injustice knowingly even to the character of an enemy.

His health began to fail in 1816, the year of his wife's death, and he became hopelessly childish later, and so continued till his death June 12, 1828.

CURTIS, Alva (1797-1881), advocate of the Thompsonian Cult, was the product of revolutionary stock and first saw the light of day in Columbia, N. H., in 1797. He received a good literary education and began life as a teacher. He took up medicine as a side issue and became an ardent advocate of the therapeutic notions expounded by Samuel Thomson (q. v.). In 1835 he became the editor of the "Thomsonian Recorder" of Columbus, Ohio, an exotic medical periodical, which under his management became a widely known publication. He obtained a charter for a Physio-Medical College in 1836 and it sailed off in 1839 with Curtis at the helm. The college was called the "Botanico-Medical College," afterwards the "American Medical Institute," later the "Physio-Medical College of Ohio," still later known as the "Literary and Botanico-Medical College of Ohio," and "Literary and Scientific Institute." Curtis was the head, hand and soul of the school. The Thomsonians or botanical practitioners made a good deal of noise in the early part of the last century. Popularly they were known as the "steam doctors" because they practiced diaphoretic therapy under any and all circumstances. Their principal remedies were sweat-baths, lobelia and capiscum. Coupled with these fundamental principles of their therapeutic faith was an intense hatred of regular medicine. Samuel Thomson (q. v.), their founder, was a man of talent, but crude and uneducated. C. S. Rafinesque, author of a book on "The Medical Flora of North America" (Philadelphia, 1828), was really the originator of the botanical movement. He was a genius whose strange career puzzled his contemporaries as much as it has been an enigma to posterity. In Cincinnati the physio-medical or botanical practitioners had Alva Curtis to fight for them and their cause. He was a host in himself, tremendously energetic, well educated, a good talker and reasoner and by nature a fighter. That a man of this character should in the course of time become greater than the cause he was fighting for, is not surprising. Throughout his long and strenuous career he kept himself prominently before the people. He locked horns with some of the ablest medical men in this part of the country, John P. Harrison, Roberts Bartholow, M. B. Wright (q. v. to all) and others. He published the "Journal of Education" in 1866 and for fully sixteen years the "Botanico-Medical Recorder" (1837-52). With him the cause of physio-medicalism in Cincinnati died, showing that all "systems" in medicine need some extraneous support to prevent collapse.

His writings were: "Medical Discussions" (1833); "Lectures on Midwifery" (1838); "Theory and Practice of Medicine" (1842); "Medical Criticisms" (1856).

CURTIS, Edward (1838-1912), of New York, one of the first to perfect a process of making microphotographs, was born at Providence, Rhode Island, June 4, 1838. He was a descendant of Henry Curtis, who came to

Watertown, Massachusetts, from London, England, in 1636. Edward, brother of George William Curtis, author of the Potiphar Papers and for nearly half a century editor of Harper's "Editor's Easy Chair," was the son of George Curtis, a banker, and of Julia Bowen Bridgeham Curtis, daughter of the first mayor of Providence. Dr. Curtis attended a private school in New York, graduated from Harvard College in 1859, and began the study of medicine at the College of Physicians and Surgeons, New York, under Dr. Robert Watts, but broke off to enter the army in July, 1861, as medical cadet. In 1863, after two years' service in several army hospitals, he was appointed acting assistant surgeon and was assigned to duty in the microscopical department of the Army Medical Museum (then in its infancy).

He found time to take instruction at the University of Pennsylvania and received an M. D. there in 1864, when he was commissioned assistant surgeon and saw field service with the Army of the Potomac, and with General Sheridan in the Shenandoah Valley. Returning to the museum in the fall of 1864 he assisted with the autopsy on the body of President Lincoln, April 15, 1865. Becoming major in 1867, he was engaged in 1869, in conjunction with assistant surgeon J. S. Billings, (q. v.) in one of the earliest investigations undertaken by the medical department of the army, that on the possible connection of vegetable organisms with the then prevailing diseases of cattle. During the years of service in the army museums, after the close of the war, Dr. Curtis developed the embryo art of photographing through the microscope; he used wet plates, the only kind then available, but even succeeded in photographing with high powers.

Resigning from the army in 1870, Dr. Curtis was appointed clinical assistant to the New York Eye and Ear Infirmary and microscopist to the Manhattan Eye and Ear Infirmary. Soon he became lecturer and then professor (1873) of materia medica and therapeutics at the College of Physicians and Surgeons, a position he held until 1886, when he resigned to give his whole attention to the office of medical director of the Equitable Life Assurance Society, to which he had been appointed ten years previously.

Dr. Curtis was the author of a "Catalogue of the Microscopical Section of the United States Army Medical Museum," Washington, 1867; "An Apparatus for Cutting Microscopical Sections of Eyes," Transactions of the American Ophthalmological Society, 1871; "Manual of General Medical Technology," N. Y. 1883; "How Neither of Us Was Hanged," a prize story of army medical life, published in the "Youth's Companion," Boston, October 21, 1897; also articles on ophthalmology, materia medica and other subjects in the medical journals and in the Reference Handbook of the Medical Sciences.

Dr. Curtis married Augusta Lawler Stacy of Chester, Pennsylvania, in 1864, and they had five children.

He died of cerebral hemorrhage at his home in New York, November 28, 1912, at the age of seventy-four.

Curtis, Edward M. (1840-1874), of Vermont and Colorado. See Cyclopedia American Medical Biography, H. A. Kelly, Philadelphia, 1912, i, 214.

CURTIS, Henry Holbrook (1856-1920), New York laryngologist, was born December 15, 1856 in that city, the son of Judge William Edmond and Mary Scovill Curtis and the brother of William Edmond, eminent lawyer and publicist. He took his Ph. B. at Yale in 1877 and his M. D. in 1880.

His first effort to find his niche in the medical field was in 1879 when he translated with T. Barton Brune, Hoffmann and Ultzmann's work on "Analysis of the Urine." Subsequent publications, some fifteen in all, relate to diseases of the respiratory tract, giving him an international reputation. They include "Anemia and Nasal Stenosis," 1890, "The Effects on the Vocal Cords of Improper Methods of Voice Production and their Remedy," 1893, "Operations on the Nasal Septum," 1893, "Voice Building and Tone Placing," 3rd edition, 1909." In 1900, he edited Friedrich's "Rhinology, Laryngology, and Otology".

Dr. Holbrook Curtis, as he was generally known, was visiting laryngologist to the New York Throat, Nose, and Lung Hospital and to the Minturn Diphtheria and Scarlet Fever Hospital. In laryngology, he might be termed a late pioneer who maintained his lead through life. A well-known confrêre states; "He enjoyed the unique honor of being considered the last court of reference in the throat troubles of the leading singers of the world," whose gratefully autographed photographs covering his consulting room walls, were a constant source of justifiable pride. He was the prime factor in the organization of the American Laryngological, Rhinologi-

cal, and Otological Society and its president in 1913. He was also an honorary member of numerous foreign societies.

On June 19, 1884, he married Josephine Allen of Brooklyn; they had one child, a daughter. He died May 14, 1920.

CURTIS, Josiah (1816-1883), naturalist, hygienist, was born at Wethersfield, Conn., April 30, 1816, and died at London, England, August 1, 1883, while traveling. He was fitted for college at the Academy at Monson, Mass., and received his A. B. degree from Yale College in 1840. He taught school for a time and was principal of the Salem (N. J.) County Academy. He taught also in Philadelphia, and while there studied medicine and graduated M. D. at Jefferson Medical College in 1843. He settled to practice in Lowell, Massachusetts, removing to Boston in 1849. Dr. Curtis made a study of the sanitary management of public cities, and twice visited Europe between 1850 and 1855, in pursuit of the subject. In 1861 while secretary of the Boston Sanitary Association, he assisted in the preparation for publication of the mortality statistics of the U. S. Census of 1860, and this year Yale conferred an M. A. upon him.

He served as brigade-surgeon during the civil war in various stations. After being mustered out in 1865, with a brevet promotion, he took up his residence in Knoxville, Tenn. In 1872 he accompanied the U. S. Geological Survey as surgeon, microscopist and naturalist, traversing that portion of the present National Park which includes the Yellowstone Lake and its many geysers. In 1873 he became chief medical officer to the U. S. Indian Service, which he organized and placed on a useful footing. He resided for many years in Washington, D. C., where he was well and favorably known.

He was a member of the Massachusetts Medical Society after 1845 and of the American Medical Association from 1847, as well as being a member of scientific and literary associations. He was a faithful and industrious worker in various fields of scientific research and a contributor to medical and other periodical literature. He was the author of "The Hygiene of Massachusetts, especially Lowell and Boston," Transactions American Medical Association, 1849.

While making gun cotton, after it was discovered, he found accidentally that by washing it with ether, it became liquid, forming what was afterwards known as collodion.

CURWEN, John (1821-1901), alienist, was born at Walnut Hill, in lower Merion Township, Montgomery County, near the City of Philadelphia, Pennsylvania, on his father's estate, September 20, 1821, and died after a brief illness July 2, 1901.

His ancestors lived in Little Broughton, Bridekirk, County of Cumberland, England. He was a graduate of Yale College of the class of 1841. In 1844 he received the degree of M. D. from the University of Pennsylvania. After spending several months at Wills Hospital for Diseases of the Eye, he was appointed during the same year an assistant physician of the Pennsylvania Hospital for the Insane. He was thus brought into close personal and professional relations with Dr. Kirkbride (q. v.), whose character and methods of administration did much to influence and shape the course of his after-life. Reference is made in the report of the Pennsylvania Hospital for 1845 to the establishment of a course of lectures for the entertainment and instruction of patients, and to the zeal and cooperation of Dr. Curwen, which contributed so much to "the very gratifying success of the experiment." The number of lectures varied from 45 to 50 during the year. Dr. Kirkbride, in a succeeding report, states that "the manner in which Dr. Curwen has acquitted himself of this self-imposed task is worthy of high commendation." In addition to his medical duties he showed at this early age the untiring zeal and capacity for work characteristic of his entire life.

Dr. Curwen was appointed physician and superintendent of the State Lunatic Asylum at Harrisburg, February 11, 1851, which he organized and administered until February 1, 1881. In 1862 Jefferson College, Pennsylvania, conferred the degree of LL. D. upon him. On the 25th of June, 1881, he was elected physician and superintendent of the Warren State Hospital for the Insane, an office which he held until June 15, 1900.

He was one of the commissioners to find a place for and to build the Danville State Hospital, and later acted in the same capacity to erect the Warren State Hospital. He was appointed a commissioner to erect an asylum for the chronic insane, but subsequently resigned. He was connected with hospitals for the care and treatment of the insane. with scarcely an interval, for a period of 57 years—a record of service without parallel in our country. In addition to official hospital duties, he exercised much influence in shaping legislative and public sentiment in the inter-

ests of the insane, and his opinion as an expert was often sought in lunacy trials.

He was an honorary member of the British Medico-Psychological Association; of the American Philosophical Association; of the American Medical Association; of the State Medical Society of Pennsylvania; of the county societies of Dauphin and Warren; president of the State Society in 1869, and trustee of La Fayette College in 1865.

Dr. Curwen was best known to the members of the American Medico-Psychological Association as the secretary and acting treasurer of that body—a double office—held during a period of 34 years. To him a lasting debt of gratitude has been due for keeping a record of its proceedings and preserving its archives during this long period. In 1893 he was made president of the association. He was a frequent contributor to the literature of his profession in communications to "The American Journal of Insanity;" to medical societies, through the medium of his annual reports, and on several occasions through memorials to the State Legislature to urge increased accommodations for the insane. Although not a member at the time, he was the last survivor of those who were present when the American Medico-Psychological Association was organized under its earlier name and he had a personal acquaintance with each of the 13 founders.

Dr. Curwen was a man of religious convictions and an elder of the Presbyterian Church. During his official life it was his daily rule to meet his patients, as they could be brought together, and to lead them in a service of Scripture reading, song and prayer, by which he hoped to impart hope, comfort and consolation to them.

CUSHING, Edward Fitch (1862-1911). The outline facts of Dr. Cushing's life appear simple and are soon told: He came of a distinguished line of physicians. His great-grandfather was a physician in New England; his grandfather, Erastus Cushing, was a pioneer and one of the early physicians of Cleveland; his father, Henry Kirke Cushing (q. v.), a surgeon of the Civil War, practiced medicine in Cleveland almost to the time of his death at the age of 83. Dr. Harvey Cushing, surgeon of Johns Hopkins and Harvard, was Edward Cushing's younger brother.

Edward Fitch Cushing was born in Cleveland June 24, 1862; was graduated A. B. from Cornell in 1883 and M. D. from Harvard in 1888. After completing his postgraduate studies in the Massachusetts General Hospital, where he served as house officer on both the surgical and medical services, a very unusual accomplishment, he began practice in his native town in 1891, when his father was still active. In the course of years the son took over the father's work. The younger Cushing soon made himself felt in the community. Important assignments were given him, and he created new enterprises. He was visiting physician to the children's ward of the Lakeside Hospital and professor of pediatrics in the Western Reserve University; he fostered the "Cleveland Medical Journal," which owes much of its success to his leading and his money; he promoted and established the Babies' Dispensary, a splendid work; he was foremost in organizing the Cleveland Medical Library; and in reorganizing the prosperous and distinguished Western Reserve Medical College. In all questions relating to public health his advice was sought and was liberally given. He was a vice-president of the Harvard Medical Alumni Association. Such were a few of his many activities. His life was one of service. He was an ideal clinician; perhaps there was no greater in this country. And with all this, his was a life of self-abnegation. Rarely in this modern world do we see great talents so consecrated to plain duty. We have our professional leaders, our great martyrs to science, our widely heralded surgeons, our Walter Reeds, our heroes of the laboratory;—Edward Cushing might have ranked them all; but he chose what seemed a humbler field; to give himself unreservedly, faithfully, brilliantly to the daily service of the sick. He set a standard which may well be an inspiration and an example to every practitioner, humble or famous, in the land; and in the short space of twenty years he accomplished a work and gained a loyal devotion in a great community which for generations may not hope to see his like again.

He died in Cleveland March 23, 1911, after a brief illness, from a malignant obstruction of the colon.

JAMES GREGORY MUMFORD.

CUSHING, Ernest Watson (1847-1916), gynecological surgeon and editor, was born in Boston, January 17, 1847, the son of Thomas Cushing and Elizabeth Adelaide Baldwin, both of Boston. He received his early education at Chauncy Hall School, of which his father was principal for many years. His fondness for out of door life was fostered by

his summers at North Scituate where his love of adventure manifested itself in a desire to follow the sea. He was persuaded to go to college first, however, and received the degree of bachelor of arts from Harvard in 1867 (Phi Beta Kappa). He began his medical studies at Harvard Medical School, but received his degree as doctor of medicine from the College of Physicians and Surgeons in New York in 1871, on completing his course there. After a year as interne at Bellevue Hospital, he spent two years in study abroad, chiefly in Vienna, where he met Maria Magdelena Ralenowsky, whom he married December 27, 1873. Returning to Boston the next year, he entered general practice though he was especially interested in diseases of the nose and throat. From 1877 to 1884 he was physician to out-patients in the nose and throat department, Boston City Hospital.

Having become interested in surgery in connection with the diseases of women, he again went abroad in 1885, studying chiefly in Berlin with August Martin, whose assistant he was for a time and whose work on "Pathology and Therapeutics of the Diseases of Women" he translated in 1890. In 1887 he was appointed secretary of the Section of Diseases of Women of the Ninth International Medical Congress at Washington, and in the same year he founded the "Annals of Gynaecology," called later the "Annals of Gynaecology and Paediatry." Of this he continued as editor until 1903. He contributed a large number of articles, chiefly to the various medical journals, and he was for many years a constant attendant at medical meetings where he exhibited specimens and read papers.

In 1889 he was made surgeon to the Woman's Charity Club Hospital, of which he was one of the founders, and two years later designed its new hospital building on Parker Hill, Roxbury. In 1892 he established a private hospital for women, near at hand where he did a great deal of work, largely in abdominal surgery, and this was the great interest of his later life. In 1890 he was again the secretary of the International Medical Congress (Tenth) which met at Berlin. In 1894 he became one of the members of the original faculty of the Tufts College Medical School as professor of gynecology; in 1898 "Abdominal Surgery" was added to his title, and in the same year Tufts also conferred on him the degree of LL. D. In 1913 he became professor emeritus. He was a member of the American Gynecological Society, the American Association of Obstetricians and Gynecologists and the American College of Surgeons; and from its inception he was a trustee of the Robert Breck Brigham Hospital for the chronic sick, situated not far from his hospital.

Dr. Cushing was an Episcopalian and a man of deep religious feeling. He had a wide knowledge of the history and literature of the Church and he was familiar with the Bible as are few men today. He was a thorough optimist; genial, but direct and incisive in speech; of retentive memory, and an accomplished linguist; for every occasion he had an apt quotation, usually from the classics. Greek was his especial pleasure in later years, his reading extending from Plato to the modern monthly magazine and daily paper, and he often spoke of his hope to visit "Hellas."

He was in failing health for about a year before his death, which occurred in Boston at the Cushing Hospital, August 27, 1916.

He was survived by his wife and five daughters, one of whom, Olga, was also a physician and the wife of Dr. Timothy Leary, professor of pathology in Tufts College Medical School.

STEPHEN RUSHMORE.

CUSHING, Henry Kirke (1827-1910), prominent family practitioner and medical teacher of Cleveland, grandson of Dr. David Cushing and son of Dr. Erastus Cushing, was born in Lanesboro, Massachusetts, on July 29, 1827. His father came to Cleveland in 1835 and practiced there forty years, and Henry Kirke, after taking his A. B. from Union College in 1848, followed in his father's steps after graduating M. D. from the University of Pennsylvania in 1851.

He was successively professor of obstetrics and diseases of women and children; professor of gynecology, and emeritus professor of gynecology in the medical department of Western Reserve University; a trustee of Western Reserve University, which in 1884 conferred upon him the honorary degree of LL. D. He served in the Civil War as surgeon-major in the Seventh Ohio Volunteer Infantry and was a member of the Military Order of the Loyal Legion. He retired from active practice about twenty years before his death from paralysis, which occurred on February 12, 1910.

In the medical societies, especially the smaller ones, which he seemed particularly to enjoy, he was always at his best. His ex-

tensive reading and his large and varied experience, coupled with a retentive memory, made him able to speak intelligently and authoritatively on any subject. He could have delivered a creditable course of lectures in any of the departments of medicine, as he was a man of fine intellect, endowed with quick and clear perception and always a student. Dr. Cushing was one of the best posted men in the country on army and navy affairs.

Helen Watterson Moody has repeated a statement made years ago: "'Most of the work of the world is done by the men and the women who are not very well', said a wise physician to me once," and she adds that the "wise physician" was Henry Kirke Cushing.

Besides being an eminently successful practitioner his energies were ever directed towards the advancement of scientific medicine; a fitting tribute in this respect was the naming in his honor of the new laboratory of experimental medicine of the Western Reserve University.

He married Betsy M. Williams in 1852; she died in 1903, leaving him with six children, William E., Alice K., Henry P., Edward F., (q. v.) George B., and Harvey, who with Edward, followed his father's profession.

Cushman, Nathan Sydney Smith Beman (1810-1890), an early general practitioner of Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 272.

CUSHNY, Arthur Robertson (1866-1926), pharmacologist of Ann Arbor, Michigan, the fourth son of a Scottish clergyman, was born March 6, 1866, at Fochabers in Morayshire, Scotland. From the local school he proceeded to the University of Aberdeen and there obtained his degree of M. A. in 1886. He received his M. B. and C. M. in 1889 from Marischal College with highest honors. At Aberdeen, Cushny had the good fortune to come under the influence of John Theodore Cash who aroused his interest in pharmacology, and was largely responsible for sending him in 1889 to Oswald Schmiedeberg's laboratory at Strassburg. Cushny also spent a year at Berne with Kronecker through whom he learned much concerning the elementals of physiological technique. After a year's work with Schmiedeberg he accepted an appointment as assistant to the professor, remaining in this position from 1892 to 1893, and publishing several papers on anesthesia during this time.

In 1893 Cushney was sought out by Professor J. J. Abel who in that year had resigned the chair of pharmacology at Ann Arbor to go to Johns Hopkins, and had promised to obtain a successor in his former post. Cushny, after some hesitation, accepted Abel's offer, and in 1893 left Strassburg and became, at the age of 27 years, professor of pharmacology at the University of Michigan, a position which he held until 1905. During these years he developed the three interests with which his name is so importantly identified: (1) the action of digitalis; (2) the contrasted actions of optical isomers; and (3) the mechanism of urinary secretion. In addition to teaching and carrying on active research upon these three problems, Cushny brought out in 1899 his masterly "Textbook of Pharmacology and Therapeutics", of which it has been justly said that "it was the first textbook on the subject in any language to consider and to meet the needs of students and scientific physicians alike; for, while taking his stand firmly on results of exact experiment, Cushny had always the practical end in view, in accordance with the book's subtitle—'The action of drugs in health and disease.'" During the remainder of his life he worked assiduously to improve his textbook and to include in its successive editions the results of recent studies.

Cushny's investigations upon the effects of digitalis were epoch-making. Prior to his time pharmacological experiments upon the action of this drug had been carried out largely upon cold-blooded animals. To Cushny we owe the first carefully-controlled experiments with modern physiological technique on the influence of digitalis upon the mammalian heart. His first important paper appeared in 1897 in the second volume of the "Journal of Experimental Medicine," and this was followed in turn by a series of important contributions which culminated in 1925 in Cushny's monograph, "The action and uses in medicine of digitalis and its allies" (Longmans, 303 pages). In 1899 Cushny, writing with S. A. Matthews (Journ. Exper. Med., vol. 4), said, "A few words may be added in regard to the extreme irregularity of the heart known clinically as delirium cordis . . . The clinical sphygmogram in these cases resembles exactly that obtained from dogs when the auricle is undergoing fibrillary contraction, which may be continued for a long time without proving fatal. I

do not wish to assert that the clinical delirium cordis is identical with the physiological delirium auriculae, but the resemblance is certainly striking." It is thus evident that Cushny had recognized the fundamental similarity between clinical and experimental fibrillation ten years before the usually accredited discovery of the nature of auricular fibrillation by Lewis in England and, independently, by Rothberger and Winterberg in Vienna.

Cushny's early contributions to the theory of kidney secretion appeared between 1901 and 1904 in a series of three papers published in the "Journal of Physiology" (vols. 27, 28, 31). The subject was then apparently dropped for some fifteen years when (in 1917) he published his important monograph entitled "The secretion of urine" (Longmans, 241 pp.), in which he put forward the view, modestly termed 'the modern theory', that the activity of the kidney is explicable on the assumption that the glomeruli filter a group of non-protein bodies referred to as 'non-threshold substances,' and that the uriniferous tubules reabsorb an optimal fluid akin to Ringer solution. By this process nitrogenous waste products become concentrated. This rational conception has done much to overthrow the older views of vital secretion and has stimulated a great amount of work which was ably summarized in the second edition of Cushny's monograph (288 pp.) brought out a month after his death (he had corrected the galley-proof). Cushny's interest in optical isomerism similarly culminated in a short monograph brought out posthumously in June, 1926 based upon the Charles Dohme memorial lectures given at Johns Hopkins in 1925. The monograph was entitled "The biological relations of optically isomeric substances" (80 pp.).

In 1905 University College, London, founded a full professorship of pharmacology and Cushny was asked to fill the new chair. He accepted and continued to hold the position until 1918. During these years he built up the new department and soon had many students working under him. In addition he continued his investigations upon digitalis and other pharmacological problems which he had begun at Ann Arbor. In 1918 he was invited to the professorship of pharmacology in Edinburgh in succession to Sir Thomas Fraser, and for the third time he brought strength and prestige to a needy chair. On removal to Edinburgh he secured the historic manor, Peffermill House, at Craigmillar, the 'Dumbiedykes' of the 'Heart of Midlothian', and there for a few short years he was able to withdraw somewhat from public activity and to commune with the fathers of therapeutic science in his library and with his garden. There in the fulness of his powers he died suddenly of a vascular accident, February 25, 1926. Cushny married in 1895 Sarah Fairbank, a young English lady whom he had met at Strassburg. They had one daughter.

J. F. FULTON.

CUTBUSH, Edward, (1772-1843), author of the first book written by a medical officer of the United States Navy, was born in Philadelphia on January 5, 1772. His father, for whom he was named, came from Wokingham, in the county of Berkshire, England. Edward entered Philadelphia College at the age of twelve; there he studied mathematics and the classics. His father's money giving out, he left college and became a medical student at the Pennsylvania Hospital, where he stayed from 1790 to 1794, receiving the M. D. degree in the last year, with a graduation thesis "On Insanity." Edward joined the state troops in the "Whisky Rebellion," of 1794, as hospital surgeon and soon became surgeon-general of the Pennsylvania Line. At the close of the brief military operations, Cutbush settled in practice in his native city, although his popularity was somewhat lessened among his Quaker friends from having taken part in warlike operations. In the spring of 1795, he married Miss Ann Reynolds, of Philadelphia and three years later visited Geneva, New York, perhaps with the idea of settling there. He was appointed surgeon in the Navy, May 28, 1799 and was assigned to the frigate "United States," 50 guns; Commodore, John Barry.

In 1808 he published in Philadelphia, his book, entitled:- "Observations on the Means of Preserving the Health of Soldiers and Sailors; and on the Duties of the Medical Department of the Army and Navy, with Remarks on Hospitals and their Internal Arrangements." This was a volume of 337 pages, in which the many phases of medical life in the service were discussed. Dr. F. L. Pleadwell has published a lengthy review in his article on Cutbush, in the "Annals of Medical History," N. Y. 1923, V. No. 4. pp. 337-386, where there is a portrait of Cutbush as well as a reproduction of the title page of his book. Three years after the book appeared, the secretary of the Navy, Honorable Paul Hamilton, asked Cutbush to assist in elabo-

rating "Rules and Regulations for Naval Hospitals." In 1820 Cutbush advised the secretary of the Navy on the subject of introducing into the Service a pharmacopoeia, which had been lately compiled; three years later he discussed with the secretary whether a work on "Nautical Medicine" should be patronized. It is plain that his opinion was sought by those in high place.

Dr. Cutbush was elected professor of chemistry in the Medical Department of Columbian College, Washington in 1825, a position he held for two years. In 1829 he resigned from the Navy after thirty years' service and next year took the chair of chemistry in the recently chartered Geneva College, in New York State. In 1834 when the medical department of that college was organized, Dr. Cutbush became dean of the medical faculty. He resigned in 1839, on account of ill health, but continued to practice until a short time before his death, which occurred, from a complication of diseases, at Geneva, June 23, 1843, when he was in his seventy-second year.

WALTER L. BURRAGE.

CUTTER, Ammi Ruhamah (1705-1746). Ruhamah is a woman's name, and in the early days of the Cutter family belonged to an aunt of the Rev. Ammi Ruhamah Cutter of North Yarmouth, in the District of Maine. This gentleman, named half for an uncle and half for an aunt, was the father of Dr. Cutter of Portsmouth, but a doctor of medicine himself, one who gave service to the state as compiler of a vocabulary of words in the Indian language and to the country as surgeon in the army. Rev. Ammi Cutter, of North Yarmouth, was the son of Samuel and Rebecca Rolfe Cutter of Cambridge, Massachusetts, and was baptized there May 6, 1705. He was graduated at Harvard in 1725, and after studying divinity accepted a call from the church at North Yarmouth, at a salary of £120 in silver, a parsonage, and a woodlot. He did his best to teach his flock in a church abounding in cracks through which the air circulated freely. He had the good fortune to marry Dorothy Bradbury of Newburyport, and they had four children. After a year or two his creed began to be "offensive" to his people, the church sat "uneasy" beneath his theology, and he was asked to resign. Immediately upon leaving the pulpit he studied medicine and practiced it steadily the rest of his life. His legible handwriting caused his election as town agent and he often attended the General Court of Massachusetts. As Indian agent he compiled a vocabulary of words in the Pequot and Ossipee languages, and made himself in this way a man of great public value.

When the expedition against Louisburg was determined upon, he was chosen captain and surgeon, and sailed with Col. Moulton's York regiment in March, 1745. His medical services during the campaign were highly commended, and after the capture of the fortress, he was left in charge as commanding officer and surgeon-in-chief. The autumn of 1745 was sickly with fever, which became epidemic in February, 1746, and in March Dr. Cutter fell its victim. He left considerable property, one son inheriting a thousand acres of woodland and seventy sovereigns.

Amongst the curious documents of the town of North Yarmouth, belonging to this era, are those relating to the parson's woodlot, which one would think Mr. Cutter would have given up when he resigned his pastorate But the people had not paid his salary, and he held on to the lot. Moreover, as an original settler he was entitled to a lot and until the town made over a piece of land to him he kept the one allotted to the parson. His widow failed to bring the town to a settlement, and whilst waiting for a decree, cut off all the timber.

This, then, is a brief record of the first Dr. Ammi Ruhamah Cutter.

JAMES A. SPALDING.

CUTTER, Ammi Ruhamah (1735-1820), celebrated for his medical services in the Colonial and Revolutionary Wars, son of Ammi Ruhamah Cutter (1705-1746), was born in North Yarmouth, in the District of Maine, March 15, 1735, O. S., and graduated at Harvard in the class of 1752. While in college he made the acquaintance of a number of young men from Portsmouth, particularly that of John Wentworth, afterward Sir John Governor Royal of New Hampshire, with whom he remained intimate for life and to whom he was personal physician, until the Governor was exiled to Halifax during the Revolution. These college boys suggested to Cutter to study medicine with Dr. Clement Jackson from Hampton, New Hampshire, who had lately established himself in practice in Portsmouth. A letter from Wentworth to Cutter as early as 1754 speaks of him as "Doctor." If such precociousness causes surprise, we may recall another item from Wentworth to Cutter which reads to this effect:

"The college is full of boys from 11 to 14 discussing original sin and actual transgression." Dr. Cutter's first patient, a negro, consulted him September 21, 1755, as he mentions in his diary: "I removed nine bits of bone from the leg of a wounded negro. I did it all myself."

Cutter was appointed surgeon in Rogers' Rangers, and in 1776 marched with Col. Meserve's Regiment against Ticonderoga. The experience gained in this campaign was abundant but it was unpleasant, for his duty was not only to care for the sick and wounded with insufficient equipment, but to cook for them in miserable field hospitals, especially in one at a famous place, which in his diary he invariably spells, "Sarahtoga." The year 1757 found Dr. Cutter attached to the second Louisburg expedition, which proved a failure. Whilst making ready for this in New York Dr. Cutter saw soldiers impressing sailors in the streets, he borrowed money for a medicine chest and drugs, and worked inccessantly at five shillings a day. Returning to New York after the disastrous expedition, Cutter marched with the troops to Albany, but soon went on sick leave and we find him in North Yarmouth once more for, on the 14th of January, 1758, his mother made him a present of books once belonging to his father, amongst which may be noted Blackmore's "On Spleen and Vapors," and Fuller's "Dispensatory."

Pepperell's expedition against Louisburg, the third, by the way, being soon ready, Dr. Cutter joined as surgeon, and sailing on the snow "Halifax,"* arrived off Louisburg, June 10, 1758, saw a hundred men drowned in landing through the surf, and remained on active duty till the place surrendered. Smallpox became epidemic; 92 out of 108 in the company had the disease; the other 16 acted as nurses; 2 became blind, and finally Dr. Cutter fell ill himself. Gradually convalescing, he reached Portsmouth and November 2, 1758, was married to Hannah, daughter of Charles and Mary Kelly Treadwell of that town.

From this time, Dr. Cutter practiced at Portsmouth or travelled about New Hampshire with his classmate, Governor Wentworth. Old documents mention his presence at Wolfeborough, named after General James Wolfe, of whom Cutter used to say, that had he lived American independence could never have been achieved, so superior to all the other British military leaders was he, in Dr. Cutter's opinion. I also find that Dr. Cutter gave a guinea to the famous Dartmouth College punch-bowl, presented by the Governor in 1771, and another interesting document shows that Dr. Cutter imported into the port of Portsmouth a large invoice of "cortex peruviana" about this time, for use in his practice.

When the medical service of the United States was reorganized in 1777, Dr. Cutter was appointed physician-general of the eastern department, taking charge of two hospitals with three hundred beds at Fishkill and Peekskill-on-the-Hudson. His health gave out at the end of a year of this laborious duty and he retired permanently to Portsmouth. As time went on he began to be considered the leading physician in that interesting old town. When his son William, one of ten children, obtained his medical degree they worked together agreeably, and it was a serious blow to the father when the son died first, and very suddenly. It took him long to recover from this separation. He remained, however, interested in his profession to the last and was very fond of showing to medical visitors his interesting cases, amongst them one of pulmonary tuberculosis with metastasis to an eye, with blindness, but with a cure of the constitutional diathesis.

Dr. Cutter had an honorary medical degree from Harvard in 1792; was an incorporator in 1791 of the New Hampshire Medical Society, and was president from 1799 to 1811, also an honorary member of the Massachusetts Medical Society from 1783 until his death. He passed away December 8, 1820, aged eighty-five, and his widow survived him until January 20, 1832, when she died, aged ninety-seven.

JAMES A. SPALDING.

*(A snow was a vessel of that era with two masts and a trysail astern.)

CUTTER, Calvin (1807-1873), medical lecturer and author, was born in Jaffrey, New Hampshire, May 1, 1807, and died in Warren, Mass., June 20, 1873. He was a pupil at the New Ipswich Academy and afterward taught in Wilton, N. H., and Ashby, Mass. In 1820 he studied medicine, graduated M. D. at Dartmouth in 1832 and practiced his profession in Rochester, N. H., from 1831 until 1833; in Nashua from 1834 until 1837; and in Dover from 1838 until 1841. Between 1842 and 1856 Dr. Cutter visited twenty-nine states of the Union, delivering medical lectures. In 1847 he began the compilation of "Cutter's Physiology," a text-book for schools and colleges, of which prior to 1871 about 500,000 copies

had been sold. It was translated into several oriental languages.

In 1856 Dr. Cutter was chosen to convey a supply of Sharpe's rifles to Kansas, a hazardous task which was successfully performed. Later in the same year he led into Kansas the Worcester armed company of 60 men and also the force known as "Jim Lane's army," which he commanded for nearly a year. He was president of the military council in Kansas and instrumental in the capture of Colonel Titus. In 1861 he became surgeon of the 21st Massachusetts Infantry, serving in the National Army nearly three years. He was twice wounded and made prisoner at Bull Run. During most of his term of service he had charge of the medical depot of the 9th army corps as surgeon-in-chief. Amherst conferred on him her A. M. in 1871.

CUTTER, Ephraim (1832-1917), inventor, contributor to medical literature, was born at Woburn, Massachusetts, September 1, 1832, and died at West Falmouth, in the same state, April 24, 1917. His father, Benjamin Cutter, M. D., A. M., practiced in Woburn from 1827 to 1864. From him he inherited his love of medicine and from his maternal grandfather, Amos Whittemore, the ability to invent, and the capacity to direct a mechanic what to do.

Dr. Cutter was fitted for college at Warren Academy and graduated from Yale in 1852, receiving the degree of M. D. from Harvard in 1856 and from the University of Pennsylvania in 1857. In the last year he received the degree of LL. D. from Grinnell College.

His medical undergraduate course was alternated year by year between Harvard and the University of Pennsylvania. While pursuing his undergraduate college work at Yale he entered the newly opened Sheffield Scientific School, for the study of chemistry and the use of the microscope. He began practice with his father at Woburn, in 1856, at the same time taking up office work in Boston and removing to Cambridge in 1875. In 1881 he removed to New York City, whence after twenty years of professional activity he retired to West Falmouth, where he ended his days.

In 1871 Dr. Cutter experimented on the action of galvinism in the treatment of fibroid tumors of the uterus, following the writings of Ciniselli of Cremona in 1869, and established the fact that the current penetrates the body. Dr. Cutter was a man of many-sided interests and accomplishments. He was a diligent student of morphology, and in this department, as in others, showed much originality and keen power of observation. As a master of the microscope he deserves much consideration. He not only excelled in the use of this instrument, but with his fine mathematical mind was able to suggest valuable improvements. His successful use of the 1/75th objective with direct lamp-light was enough to prove his eminence in this department. In the work of photomicrography he was a pioneer. Among other observations upon the morphology of the blood, he antedated Metchnikoff's leucocytosis by nearly ten years.

Becoming interested in the early decay of children's teeth, he began investigations upon white flour, and antedated by over forty years the present crusade against the use of denatured and decorticated wheat, thereby earning the opprobrium of Mrs. Eddy who animadverted upon him in several editions of her so-called "Science and Health."

Undoubtedly one of the most interesting attempts of Dr. Cutter's life was his effort to invent an instrument for the demonstration of the larynx. This was constructed for him by Mr. Alvan Clark, the great maker of telescopic lenses. The original laryngoscope is now in the possession of the Boston Medical Library. It consists of a shell or brass cylinder open at one end and closed at the other. On the under side, near the closed end, there is an opening. The cylinder is passed into the pharynx, the eye of the observer applied to its open end, and the larynx,—as in any laryngoscopic mirror, is supposed to be seen reflected in a mirror above the opening near the closed end of the cylinder. He says of this invention: "I can only add that in 1856 I had a most earnest desire to see my own larnyx. I heard of Garcia's invention, but could not find an instrument representing it, so had to invent one for myself. Taking the microscope as a pattern, I made drawings and explanations to Alvan Clark and Sons, who constructed a laryngoscope for me in 1859. I did but little with it. I saw Czermak in Paris, in 1856, demonstrate his own larynx; I also saw the photographs of his own larynx. After this, I had my tinsmith construct my laryngoscopes out of tin mirrors. They were successful. In 1866 I photographed my own larynx. I was fortunate enough to finish Czermak's work as to the anterior insertion, he not having been able to demonstrate it."

In further reminiscence Dr. Cutter says: "In 1865 I became acquainted with Louis

Elsberg, a man of great inventive genius and one of the best electricians I have ever met. We studied together things connected with laryngology, and it was delightful to us both to see each other's inventions. His technique and tactile gifts made patients like to be treated. I should also mention Dr. J. Solis Cohen, although he is still living to bless the world. He and Elsberg were like Damon and Pythias, one in New York, the other in Philadelphia. It was a delightful event for me when they came to Woburn to assist in my operation for removal of an intralaryngeal growth by thyrotomy without the tracheotomy tube. Some of my cases were very interesting. The first, operated upon in 1866, was without recurrence for twenty years. Another patient, in whom new vocal bands were made by scissors, recovered phonation."

Dr. Cutter married Rebecca L. Sullivan and had nine children. He married, for a second wife, Ellen Bigelow Wright of Worcester, May 28, 1881. She died in 1896.

In his later years Dr. Cutter wrote much on food and its relation to health and disease.

CUTTER, George Rogers (1840-1891), author of the first German-English Dictionary, son of Stephen and Mary Sanford Cutter, was born in New York City on March 21, 1840, and died in Brooklyn, N. Y., on February 12, 1891. He was of American ancestry for several generations. His father, Stephen Cutter, was born at Woodbridge, N. J., in 1809, and his mother, Mary Sanford, was born in Catskill, N. Y., in 1812. Stephen Cutter, residing in New York and prominent in work for the Prison Reform Association, died in 1885.

George R. Cutter studied with Drs. Griscom, Agnew and Willard Parker and was graduated from the College of Physicians and Surgeons in New York in 1861, and soon after entered the army and served through the Civil War as surgeon of the 127th Regiment of New York Volunteers from 1862 to 1865, being mustered out with the rank of major. After the war he went to Heidelberg and continued his studies there for five years. This period greatly influenced his subsequent career and gave him the command of German which enabled him to prepare the excellent first work of its kind, "A Dictionary of German Terms used in Medicine," 1879, which was pirated by a subsequent compiler.

Dr. Cutter began his career in the New York Eye and Ear Infirmary as resident surgeon and was afterward placed upon the staff, being made surgeon in 1877. His connection with the Infirmary covered twenty years. He was noteworthy for fidelity, promptness and zeal and unflagging industry. He was also prompt to adopt new methods. Gifted with linguistic talents, his reading was wide.

He was long a member of the Staff of St. Catherine's Hospital, Brooklyn, and was a member of the New York Ophthalmological and the American Ophthalmological societies. A busy man and though never enjoying robust health, he managed to accomplish much work.

He translated Heinrich Frey's "Compendium of Histology" in 1872 and "Microscopical Technology" by the same author in 1876.

Dr. Cutter married in 1880, Esther, daughter of Gertrude Martense and John D. Prince of Flatbush, L. I. His wife and two daughters, Mrs. T. A. Armstrong and Mrs. Alfred E. Clegg, survived him.

LEWIS H. TAYLOR.

Cuyler, John M. (1810?-1884), surgeon and brevet brigadier-general in the United States Army. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 276.

DABNEY, William Cecil (1849-1894), prolific writer, a physician of Huguenot descent, the name being originally D'Aubigné, was born in Albemarle County on July 4, 1849. His father was a planter in that county and had married a Miss Gordon of Scotland. His early education was obtained at home from private tutors, then he entered the University of Virginia in 1866, and studied medicine for two years, graduating in 1868. For one year he was in a Baltimore hospital as resident physician; and for another at Big Lick, now Roanoke, Virginia. On account of his health he then returned to Albemarle County and farmed for two years, after which he resumed practice in Charlottesville.

He was a member of the Medical Society of Virginia, the Association of American Physicians, and the Southern Surgical and Gynecological Association; in 1886, professor of the practice of medicine and obstetrics in the University of Virginia, which chair he filled with benefit to the university until his death.

A prolific writer, he contributed many translations from French and German medical journals, and original articles to medical literature, of which the following are a few of the most important: "The Value of Chemistry to the Medical Practitioner," Boylston

prize essay, 1873; "Maternal Impressions" (Keating's Cyclopedia of the Diseases of Children, 1889); "An Abstract of a Course of Lectures on the Practice of Medicine"; A syllabus of lectures on "Obstetrics" and one on "Medical Jurisprudence" for the use of his students; "The Physiological Action and Therapeutic Uses of the Water of the Greenbriar White Sulphur Springs" ("Gaillard's Medical Journal," April, 1890). During his professional life he contributed more than thirty articles to medical journals. These are to be found in the volumes of the "American Journal of the Medical Sciences", "Philadelphia Medical News," "New York Medical Record," the medical journals of North Carolina and Virginia, and in the "Transactions of the American Medical Association" and the medical societies of Virginia and North Carolina.

He married Jane Belle Minor in 1869, and had nine children, seven of whom, three sons and four daughters, survived him. One son, William M., became a physician.

Dr. Dabney died at his house at the University of Virginia, of typhoid fever, August 20, 1894.

ROBERT M. SLAUGHTER.

DA COSTA, Jacob Mendez (1833-1900). Like many of the noted American men of medicine, Da Costa was of foreign birth. Jacob Mendez Da Costa came of an old Portuguese family long resident in London. But Jacob was born on St. Thomas Island, West Indies, February 7, 1833, and educated in Europe, chiefly in Dresden. In 1849 he came to Philadelphia because his mother was there and shortly after began to study medicine in Jefferson Medical College and also under Prof. Mutter. He must have been a good worker as, during his second year, he was, with his friend John H. Brinton, appointed demonstrator of the tumors and other specimens removed by Dr. Mutter at his clinics. In 1852 he took his M. D. at Jefferson Medical College, and after that spent over a year in the universities and hospitals of Paris and Vienna, finding time also to cultivate his talent for painting, an art which he knew would prove of use in his preparation of class-room sketches and diagrams. Not yet twenty-one, he was determined to fit himself for a teacher; he was not only eager to know things but how to teach them. He worked under all that was brilliant in Paris, thence going to Prague and Vienna to study more particularly pathology and diseases of the heart and lungs, then back to Paris for a while before settling in Philadelphia, where the first work he was invited to take was at the Sumner Association for Medical Instruction, long famous for extramural teaching; he also organized classes in physical diagnosis and clinical teaching that were popular. When in 1864 the chair of the theory and practice of medicine became vacant in Jefferson College he was elected and in 1872 succeeded Prof. Dickson in the chair of practice. His bedside methods, his diagnostic accuracy, his skill in the use of remedies, his wide and well ordered knowledge of medicine, and his still greater knowledge of men made his influence felt upon the physicians who worked with him and those who were to follow.

He was not a great writer, but when he had something to say, said it well and lucidly. Of his one treatise, "Medical Diagnosis, 1864," nine editions appeared during his lifetime, and it was translated into several languages. His literary ability and professional skill were recognized by Jefferson College, by the University of Pennsylvania and by Harvard University, who all gave him their LL. D. Someone has called him "the physicians' physician," a title which means much. In 1892 there was a meeting at Dr. Weir Mitchell's house to arrange for two portraits of Da Costa, for the College of Physicians of Philadelphia and the Jefferson Medical College, and so great was the number of subscribers that money had to be returned. In this same year Da Costa withdrew from active teaching except for a short clinical course at the Pennsylvania Hospital, but his interest was maintained until his death from heart disease which occurred on September 11, 1900, at his country house, Ashwood, near Villa Nova.

In April, 1860, he married Frederica Brinton and had two sons. His wife died many years before he did. One of his bequests was a fund to the University to found a retiring fund for professors of long service. He described irritable heart in soldiers, 1862-71, and wrote much on functional diseases of the heart. His writings occupy over two columns of the "Surgeon-general's Catalogue," at Washington, D. C., which, besides articles on diseases of the respiratory tract and some on Bright's disease, mentions his "The Physicians of the Last Century," Philadelphia, 1857.

Among his many appointments were that of lecturer at Jefferson College, 1864; professor of medicine and clinical medicine, 1872,

emeritus professor, 1891; president of the Association of American Physicians; twice president of the College of Physicians, Philadelphia; honorary member of the Medical Society of New York and of The Medical Society of London; president of the pathological Society of Philadelphia.

DACOSTA, John Chalmers (1871-1920), was born June 13, 1871, in Pottstown, Pennsylvania, the son of John C. (1834-1910) and Mary Gould Meigs DaCosta. His father was a graduate of Jefferson Medical College in 1878 and gynecologist to the Jefferson Hospital until 1904; on his mother's side he was a descendant of Elder Brewster and Governor Bradford of the Plymouth Colony. John C. Jr. studied at Rugby Academy and the Delancey School, Philadelphia, and at the Hill School, Pottstown, and for two years attended Princeton; in 1893, he was graduated from Jefferson Medical College and from 1894 devoted himself to internal medicine. Dr. DaCosta was clinical assistant, chief of the medical clinic, assistant visiting physician, and rose from assistant demonstrator to associate professor of medicine in his alma mater. He was also hematologist to the Lankenau Hospital, and assistant visiting physician to the Philadelphia General Hospital. During the Spanish War, he was a lieutenant and assistant surgeon in the army.

He married Elizabeth Smead Hayes in 1894, who became his indispensable literary coadjutor. In the summer of 1895, while doing some research work in tuberculosis, he became infected and for two years was practically invalided, indeed he never fully recovered. Subsequent to radical dental work, in 1909, he had a streptococcus infection, the beginning of the end; in December, 1913, while delivering a lecture at Jefferson, he had a stroke and later his mind became affected. Through the devotion and faithful nursing of his wife over a long period he was able to continue his work until about a twelve month before his sudden death from fracture of the skull in an automobile accident, April 26, 1920.

DaCosta published numerous articles, essays, and books: "Clinical Hematology," 1901, "Surgical Hematology" (Keen's "System of Surgery"), 1906; "Diseases of the Blood" (Hare's "System of Therapeutics"), 1910; "Treatment of Anemia" (Sajous' "Cyclopedia of Practical Medicine"), 1912; "Principles and Practice of Physical Diagnosis, 7th ed., 1919; "Handbook of Medical Treatment," 1918. The results of numerous clinical and laboratory investigations on serum diagnosis in enteric fever, hematology of appendicitis, hematology of septicemia, opsonin studies, spinal percussion in meditstinal disease appear in a series of short papers, considered by himself his best work

HOWARD A. KELLY.

Dalcho, Frederick (1770-1836), physician, botanist, editor and minister, of Charleston, S. C. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 278.

DALTON, John Call (1825-1889), a pioneer physiologist; was born at Chelmsford, Massachusetts, February 2, 1825, educated at Harvard University, where he received his A. B. in 1844 and M. D. in 1847, and early devoted himself to the study of physiology. In 1850, he learned to experiment and prove under Claude Bernard in Paris, rather than to rely on guess work. Here he developed the "teaching instinct" which he possessed in a high degree. In 1851 his essay on the "Corpus Luteum of Pregnancy," which obtained the prize offered by the American Medical Association, at once established his reputation as an able investigator in physiology. Shortly afterwards he was appointed professor of physiology and morbid anatomy in the University of Buffalo, and, it is said, was the first in this country to use vivisection in class teaching. He resigned this chair in 1854 to accept a similar one in the Vermont College, and three years later he accepted the chair of physiology and microscopical anatomy in the Long Island College Hospital. In 1885 he was appointed to the same chair in the College of Physicians and Surgeons of New York, holding it until 1883, when he retired from active teaching and accepted the presidency of the college. As both a demonstrator and teacher Dr. Dalton had few equals. He was especially deft as a blackboard artist and in giving "chalktalks" with many colored crayons, much to the edification of his students. By the experimental method he brought them face to face with the facts of physiology so that the science became something more than a résumé of the best foreign text books. During his presidency the College of Physicians and Surgeons moved into its new buildings in fifty-ninth street.

During the war he served in the army, first in April, 1861, as surgeon of the New York Seventh Regiment, and in August he was ap-

pointed brigade surgeon, and served until March, 1864, when he returned to New York City and re-entered upon his duties at the College of Physicians and Surgeons.

Dalton was a member of the National Academy of Sciences and of numerous medical societies. He was an earnest student and able writer. He was a good artist and had great manual dexterity as well. His "Treatise on Human Physiology," the first edition of which was published in 1859, always enjoyed marked popularity, and was at once adopted as a standard text-book in all of our medical schools; it went through seven editions, the last published in 1882. He also wrote a "Treatise on Physiology and Hygiene for Schools" (which was published in 1868 and was translated into French); "The Experimental Method in Medicine"; "Doctrines of the Circulation"; "The Topographical Anatomy of the Brain" (1885), a beautifully illustrated atlas of which only two hundred and fifty impressions were printed, and copies of which are now highly prized. A list of his writings in the Surgeon-General's Catalogue, Washington, D. C.

He died in New York, February 12, 1889.

DALY, William Hudson (1842-1901), army doctor and pioneer laryngologist, was born in Indiana County, Pennsylvania, September 11, 1842, the son of Scotch-Irish parents, Thomas and Helen Mar Daly. When he was seventeen both parents died, and when the Civil War began he fought as a confederate in the fifteenth Virginia Volunteers and was present in most of the big battles from Big Bethel to Lee's Mills. After peace was proclaimed he entered Jefferson Medical College and was later assistant surgeon in the United States Army in the army hospital at Whitehall, Pennsylvania, and in the military hospital in Savannah, Georgia, Hiltonhead, South Carolina, and Jacksonville, Florida. He then entered the University of Michigan medical department, graduating there in 1866 and settling down to practice in Pittsburgh, Pennsylvania. In 1878 he went to Europe, and for a year devoted his time to study of diseases of the ear, nose, throat and chest in the schools and hospitals. In 1868 he was appointed physician to the Reform School of Pennsylvania; in 1871 surgeon-in-chief of the eighteenth Division, Pennsylvania national guards. For many years he was visiting physician to the Western Pennsylvania Hospital in Pittsburgh and the Pittsburgh Free Dispensary. Though he engaged in the general practice of surgery and medicine, he gradually restricted himself to the treatment of diseases of the nose and throat, of which specialty he might be said to have been the father in America. In 1894 he was president of the American Laryngological Association and in 1897 president of the American Laryngological, Rhinological and Otological Society. He also held membership in the British Laryngological, Rhinological and Otological Association and the Société Française de l'Otologie, de Laryngologie et de Rhinologie.

Among the articles he contributed to medical literature may be mentioned a paper which appeared in the April, 1882, issue of the "Archives of Laryngology" on "The Relation of Hay Asthma and Chronic Nasophryngeal Catarrah," of which Sir Morel Mackenzie said in an editorial in the "London Journal of Laryngology and Rhinology," August, 1887; "There can be no doubt that Dr. Daly may justly be regarded as the founder of the surgical school of rhinology in America, which has at the present day so many distinguished representatives, by his having drawn forcible attention to the importance of intranasal surgical treatment." His contributions to medical literature numbered over half a hundred and embraced many subjects.

At the outbreak of the Spanish War Dr. Daly was appointed major and chief surgeon, United States Volunteers, and assigned to duty on the staff of Gen. Nelson A. Miles.

On June 22, 1896, he married Athalia Cooper, daughter of James N. Cooper, a steel manufacturer of Pittsburgh. Two children were born, both of whom died in infancy. Mrs. Daly died November 22, 1899. After the death of his wife his friends became aware of a gradual change in his previously jovial disposition. He suffered from insomnia and shortly before his death, on June 9, 1901, developed delusions of varied character under the influence of which he ended his life by suicide. At the time Dr. Daly possessed a considerable fortune which he devised by will for the establishment of a "Home" to provide for girls dependent upon their own exertions for support. This "Athalia Daly Home" was opened in Pittsburgh November 1, 1907, and bore the fruit which Dr. Daly, in his philanthropy, had hoped for. His portrait is in the meeting hall of the Allegheny County Medical Society, at the Pittsburgh Free Dispensary.

ADOLPH KOENIG.

DAMON, Howard Franklin (1833-1884), pioneer dermatologist, was born in Scituate, Massachusetts, April 6, 1833; graduated in arts from Harvard in 1858, and received his medical degree from his alma mater in 1861. He was one of the twenty-nine original members of the American Dermatological Association. Shortly after graduation he was appointed physician to the skin department of the Boston City Hospital and in 1860 published a small brochure entitled "Neuroses of the Skin," and in 1863, "Leucocythemia," for which he received the Boylston Prize of that year. In 1869 he edited an "Atlas of Skin Disease," besides being an occasional contributor to dermatological literature. He wrote "Structural Lesions of the Skin," 1869, and an article on the frequency of skin diseases, in 1870.

In an old medical journal of 1869 is advertised "Dr. Damon's photographs of The Diseases of the Skin, with letterpress description, put up in neat portfolio $12." These pictures, considering the date, are wonderfully good. Some of his articles can be found in the "American Journal of Syphilology," edited by H. M. Henry, and in the "Archives of Dermatology," edited by L. D. Bulkley.

Dr. Damon died in Boston, September 17, 1884.

J. McF. Winfield.

DANA, Israel Thorndike (1827-1904), organizer of the Portland (Me.) School for Medical Instruction, was born in Marblehead, Mass., June 6, 1827, the youngest of fourteen children of the Rev. Samuel and Henrietta Bridge Dana. Graduating at the Marblehead Academy, he spent two years in an office in Boston, afterwards studying medicine at the Harvard Medical School where he took his M. D. in 1850. He also took a course of lectures at the College of Physicians and Surgeons, New York. Two years' study in Paris and Dublin followed and Dana began to practice in Portland, Maine in 1852. In 1856, with the assistance of Dr. William Chaffee Robinson (q. v.) and Dr. Simon Fitch (q. v.), of Portland, he established the Portland School for Medical Instruction, and continued with it, in one chair or another, until his death. He also established the Portland Dispensary for the treatment of the poor. From 1860 to 1861 he was professor of materia medica and therapeutics at the Medical School of Maine; professor of the theory and practice of medicine there from 1861 to 1869 also professor of pathology and practice of medicine from 1879 to 1897. He was very active in assisting in the founding of the Maine General Hospital, and from its opening until he retired from practice, was at the head of the medical staff. Bowdoin gave him her honorary A. M. in 1889.

In 1868 he was president of the Maine Medical Association, for which he wrote the annual oration, and year after year a long list of carefully written medical papers, among which were included one on dropsy, a second on the pathology of phthisis, and a very able one on pneumonia in 1893, when he was sixty-six. He gradually became interested in diseases of the heart and lungs, of which he made a specialty. He prepared the articles on dropsy and on inflammation of the intestines for Wood's "Reference Handbook of the Medical Sciences."

Dr. Dana was twice married, first September 28, 1854, to Carrie Jane Starr, and in October 26, 1876, to Caroline Peck Lyman, who cared for him devotedly in his declining years. He had ten children, of whom three died young. The lives of three others were brought to a sudden close after reaching maturity. The last and heaviest blow of all came at a time when his health was already beginning to fail from advancing years, in the tragically sudden death of his son, Dr. William Lawrence Dana, who, a most promising surgeon, went home from a medical meeting in the best of health, and was found dead the next morning. From that time there was to be no recovery for the devoted father. He became affected about four years before his death with a gradual loss of mental power, and died April 13, 1904.

James A. Spalding.

DANDRIDGE, Nathaniel Pendleton (1846-1910), Cincinnati surgeon, was born in Cincinnati, Ohio, on April 16, 1846. His parents were Dr. Alexander Spotswoode Dandridge, a physicial of high professional and social standing in his day, and Martha Eliza Pendleton. Both the Dandridge and the Pendleton families were among the early settlers of Virginia, of English and Scotch stock, and are identified in many ways with the most important events in its history.

Dr. Nathaniel Pendleton Dandridge received his elementary education in a private school in Cincinnati, and later entered Kenyon College, Gambier, O., from which he was graduated with the class of 1866. The scholastic year of 1866-67 was spent as a student in the Medical College of Ohio. In the sum-

mer of 1867 he went abroad, where he studied medicine in Paris in 1867-68 and in Vienna in 1868-69. At that time these were the most famous medical schools in the world. Returning to the United states with what was at that period much more than an ordinary medical education, Dr. Dandridge entered the College of Physicians and Surgeons of New York, and after taking the winter course of 1869-70, received his degree of Doctor of Medicine from the institution in 1870.

Returning to his home in Cincinnati, in 1872, he was appointed pathologist to the Cincinnati Hospital, a position which he held for eight years, during which time he taught pathology as he had learned it from the lips of the great masters in Paris and Vienna, and enriched the museum of the hospital with many specimens intelligently and carefully prepared by his own hands. This appointment, coming so soon after his pathological and clinical studies abroad, laid a sure and broad foundation for that remarkably comprehensive knowledge of general surgery which later brought the profound admiration and respect of his colleagues and the profession at large.

In 1880 he was appointed surgeon to the Cincinnati Hospital, and in the same year was made professor of surgery in the Miami Medical College (recently merged with the Medical College of Ohio to form the Medical Department of the University of Cincinnati). It is as the incumbent of these two positions that he will be most vividly remembered by his juniors in the medical profession of Cincinnati and the surrounding states. His lectures were clear, concise, illuminated by the sound common sense that characterized his argument, and when the occasion permitted it, enlivened by a glow of that genial humor which always rose spontaneously from his heart to his lips. In 1887 he was appointed to the board of examiners of the recently organized Police Department. This position he held until 1896, when he resigned. It was during this period that the present high standard of physical development of the members of the police force was set.

Although Dr. Dandridge's position as surgeon to the Cincinnati Hospital brought him, justly, a wide fame and membership in many learned societies, such as the Southern Surgical and Gynecological Association, the American Surgical Association and the Academy of Surgery of Philadelphia, it is probable that the professional appointment in which he took the keenest pleasure, and to which he unselfishly devoted the greatest amount of time and effort was his service at the Episcopal Free Hospital for Children. His gentle and kindly disposition was seen at its best in the wards of this most excellent charity, to which he was one of the surgeons for many years. Although no lectures to students were conducted in this institution, surgical literature was enriched by Dr. Dandridge by many papers on the surgical diseases of the bones and joints, the necessary observations for which were acquired in the wards and operating room of this hospital. In 1909 he resigned his position as surgeon to the Cincinnati Hospital, and accepted an appointment on the board of medical directors of that institution. Twenty-five years previously his father had been a member of the governing body of the hospital, having served on the board of trustees for a number of years.

In addition to the professional appointments and honors already recorded, Dr. Dandridge was at the time of his death, from diabetic coma, Nov. 6, 1910, a member of the Cincinnati Academy of Medicine, the Ohio State Medical Society, the American Medical Association, the Southern Surgical and Gynecological Association, and an Honorary Fellow of the Academy of Surgery of Philadelphia.

He was never married.

CHRISTIAN R. HOLMES.

DANFORTH, Isaac Newton (1835-1911), professor of pathology in Northwestern University, Chicago, biographer, was a descendant of Nicholas Danforth, who landed in Massachusetts Bay in 1634. His paternal grandfather and three uncles were physicians before him. He was born in Barnard, Vermont, November 5, 1835, passed a colorless childhood on his father's farm, worked in grocery and drug stores, studied medicine with his uncle, Dr. Samuel Parkman Danforth, in Royalton, Vermont, and graduated from the Dartmouth Medical School in 1862, receiving also the honorary degree of A. M. from that school in 1881. After four years of practice in Greenfield, New Hampshire, and serving for a short time as interne at the Hartford (Conn.) Retreat for the Insane, and attending lectures in Philadelphia, he settled in Chicago.

He early acquired a microscope and began the study of pathology, becoming pathologist to St. Luke's Hospital and lecturer on pathology at Rush Medical College in 1870, positions he held until 1881. His work in the

Northwestern University Medical School began in 1882, when he was made professor of pathology, and he continued in this position for nineteen years; and for four years thereafter he was dean of the faculty and professor of internal medicine. As a lecturer he was fluent, often witty and always bright and interesting. For the first ten years of the existence of Wesley Hospital he was chief of its medical staff. For many years he was pathologist to the Cook County Hospital, and consulting physician to various hospitals in Chicago. Besides membership in many societies he was president of the Chicago Pathological Society and first president of the Society of Medical History of Chicago.

Dr. Danforth was a frequent contributor to medical literature, and more especially in later years on the lines of medical history and biography; in 1907 his life of Nathan Smith Davis was published. Dr. Danforth's chief recreation was in the study of history, and his collection of Americana was of more than local repute. In person he was short of stature, slight, full of energy and most industrious. In 1909 Dr. Danforth founded a medical missionary hospital in Kiukiang, China, in honor of his first wife, Elizabeth Skelton Danforth.

He married, June 9, 1869, Elizabeth Skelton, whom he had met at the Centenary Methodist Church, of which he was a lifelong member.

Following the death of his wife, in 1895, he married a second time, June 7, 1898, Mrs. Mary A. Barnes.

His death, which occurred May 5, 1911, was due to valvular heart disease. He was a successful general practitioner and he was one of the first in Chicago and the Northwest to use the microscope in pathology.

DANFORTH, Samuel (1740-1827), early practitioner of Boston, was born at Cambridge, Massachusetts, in August, 1740. He was the son of Samuel Danforth, (Harvard College, 1715), probate judge of the county of Middlesex, who married a Miss Symmes and was descended from Samuel Danforth, the elder, who came to Roxbury from England in 1634, and was second on the list of fellows of Harvard College, 1650-1654. Seven Danforths were in the college catalogue from the year 1634 to 1758.

Samuel's early life was passed in Cambridge. He was graduated from Harvard in 1758 and studied medicine with Dr. Rand, the elder, either in Charlestown or Boston. In 1790 Harvard conferred the honorary M. D. upon him. It is probable that his medical opinions were influenced by Dr. Philip Godfrid Kast. He began to practice in Weston, Massachusetts, but soon removed to Newport, Rhode Island. He returned to Boston in a year or two, married a Miss Watts, of Chelsea, Massachusetts, and settled in Boston. During the Revolution he was a Royalist and at one time his wife and three children were obliged to take refuge with her father. After the evacuation of Boston by the British, Dr. Danforth was treated with some harshness by the inhabitants but in time they forgave all and he acquired a large and lucrative practice.

He was a founder of the Massachusetts Medical Society and its president from 1795 to 1798. He made no claim to a knowledge of surgery, but was a resourceful practitioner of medicine. His manners were polished but not formal, and his carriage attractive yet commanding. He used few remedies and those only whose effects were obvious and powerful—calomel, opium, ipecacuanha and peruvian bark being his favorites. On one occasion he was called to visit a number of persons who had been hurt by the fall of a house frame and on arriving found another practitioner engaged in bleeding the injured. "Doctor," said the latter, "I am doing your work for you." "Then," said Dr. Danforth, "pour the blood back into the veins of these men."

He died November 16, 1827, at the age of eighty-seven, in his house in Bowdoin Square. His portrait by Gilbert Stuart is in Sprague Hall in the Boston Medical Library.

WALTER L. BURRAGE.

DANIEL, Ferdinand Eugene (1839-1914), "The Father of Medicine in Texas", author and editor, was born in Hicksford, Virginia, July 18, 1839. He was graduated from the New Orleans School of Medicine in 1862, but before this had been a private of the line with the Confederate service and immediately after graduation re-entered the army as a surgeon. He had previously studied law for a time and was appointed judge advocate with the Army of the Tennessee as secretary of the army board of medical examiners in Bragg's army and later was attached to the staff of General Hardee, in the Kentucky campaign. As a surgeon in the Confederate service in the Civil War Dr. Daniel served with distinction, not only ministering to the sick and wounded, but by his presence giving constant encouragement to his fellows. His "Recollections of a

Rebel Surgeon," a masterpiece of anecdote, sparkling with wit and repartee, was founded largely upon his experiences during this troublous time.

In 1866 Dr. Daniel moved to Galveston and was one of the founders and teachers in the first medical college in the state of Texas—the Texas Medical College—and a member of its faculty, 1867-1868. In 1885 he founded Red-Back, a Texas medical journal. His constant labors for, and loyalty to, ethical medical organization, through his journal and in the counsels of the Texas Medical Association, of which he was first president after its organization in 1904, justly entitled him to the name of "The Father of Medicine in Texas." In 1906 Dr. Daniel was elected president of the American International Congress on Tuberculosis, which met in New York in 1907. He was a member of the Texas Academy of Science and of the American Public Health League. His articles on the "Criminal Responsibility of the Insane" and "A Plea for Reform in Criminal Jurisprudence" were largely quoted and were translated into foreign languages. As a monument to his scientific side stands his work "The Strange Case of Dr. Bruno." The sting of the mud-wasp producing a state of suspended animation in its prey, served as the basis around which is woven a story that rivals the productions of Edgar Allan Poe or Sir Conan Doyle. As an orator and after-dinner speaker, Dr. Daniel had few equals, leading his audience from laughter to tears by a series of vivid word pictures.

A man of strong convictions and the power to express them, he early gained the reputation of being a fighter, warring always for high ideals in the practice of medicine and uncompromising with those who would offend in the matter of medical ethics. He was the champion of the public health from the day of his first public utterances to the day of his death. He was a gentleman of the old school and his courtliness of manner and genial kindliness permitted antagonism, but never hatred.

Dr. Daniel died, at Austin, Texas, on May 14, 1914, and his wife then assumed the editorship of the "Red-Back Medical Journal," in order to continue the ideals and policies which had so interested her husband during his life.

DARBY, John Thomson (1836-1879), surgeon, of Columbia, S. C. was born at Pond Bluff Plantation, Orangeburg County, South Carolina, December 16, 1836. His father was Artemus Thomson Darby, a physician of some repute, his mother, Margaret Cautey Thomson. He was educated first at Mount Zion Institute, Winnsboro, South Carolina, and thence in the year 1856 went to the South Carolina College in Columbia, then to the Medical College of Charleston, and completed his medical course at the University of Pennsylvania where he graduated with honor in 1858.

Returning to the south at the beginning of the Civil War he was immediately appointed surgeon to the Hampton legion. Upon Hampton's promotion to a cavalry brigade Dr. Darby was assigned to the staff of Gen. I. B. Hood, serving through every grade until he finally became medical director of the Army of the West. In 1863 he was sent by the government of the Confederate States on a secret mission to Europe, from which he returned successful. At the close of the war he went to Germany where he received an appointment on the medical staff of the Prussian Army, thus utilizing the experience acquired on southern battlefields. In the campaign against Austria in 1866 Dr. Darby assisted materially in the organization of the hospital and ambulance corps, for which he was highly commended.

Upon his return from abroad he was immediately elected professor of anatomy and surgery at the University of South Carolina in Columbia, where his reputation as a surgeon increased, and in 1874 he held the chair of surgery in the University of the City of New York. He contributed to medical literature, "A Thesis on the Anatomy, Physiology and Pathology of the Supra-Renal Capsules"; "Campaign Notes on the German War of 1866"; "Horse-hair as a Ligature and Suture"; "Liquid Glass as a Surgical Dressing," and "The Trephine in Traumatic Epilepsy."

Three years before Parry's book on extra-uterine pregnancy appeared Darby presented in the Transactions of The South Carolina Medical Association (1872, p. 97), three cases of that disease. He wrote: "In that variety known as tubal foetation, could it possibly be determined that this state existed, operative measures for the extraction of the foetus would in my opinion, be legitimate."

He married Mary Cautey, daughter of Gen. John G. and Caroline Hampton Preston. He died in New York City of pyemia, June 29, 1879, leaving one son and two daughters.

The epitaph in Trinity Churchyard, Columbia, bears the true record of his life:

"Renowned in his profession
Honored as a patriot
Beloved in all relations of life."

ROBERT WILSON, JR.

DARLING, William (1815-1884), anatomist of New York, was born in Berwickshire, England, the cousin of Grace Darling, the lighthouse heroine. His father failed in business. After a good preliminary education, the son emigrated to this country several years before Captain Marryat made his American tour, the "Boston Medical and Surgical Journal" fixing the date at 1830. He had a hard struggle at first and made his living by tutoring until Valentine Mott, (q. v.) in whose family he was engaged, induced him to study medicine. After a protracted period of study, he took his degree from the University of the City of New York in 1842. While giving private instruction in anatomy, which he had begun before graduation, he made many of Mott's dissections and continued for some years his prosector. He held at various times the positions of physician to the Quarantine Hospital, Sailor's Snug Harbor, and the Emigrant Asylum. While on Staten Island, he laid the foundation of a vast collection of dried anatomical specimens and unearthed many Indian and Negro skulls, among others one with an enormous interparietal bone; in 1877, he was elected correspondent of the Société d'Anthropologie de Paris. By 1856 with rigid economy he had saved sufficient funds to go to Europe and study at the Royal College of Surgeons in London under Owen and Huxley. He was admitted a member of the College in November of that year; after the necessary ten years he became a Fellow, at the time of his death the only Fellow in the United States. Upon his return to America in 1866, he was appointed professor of anatomy in his alma mater, a position held until death. Two years later, he became dean of the New York College of Veterinary Surgeons. He accepted the chair of anatomy in the University of Vermont in 1873. Darling was a profound mathematician as well as a classical scholar and versed in a wide range of poetical literature; like many of the leading doctors of his time, he was noted as an entertainer at banquets. He lived as a bachelor in rooms at the University building, cheek by jowl with his anatomical subjects and died at last of pneumonia, brought on by exposure to inclement weather, on Christmas Day, 1884.

Among his writings are "Anatomography or Graphic Anatomy," 1880, and "The Essentials of Anatomy," with Ambrose L. Ranney, (q. v.) 1880.

HOWARD A. KELLY.

DARLING, Samuel Taylor (1872-1925), pathologist and medical zoologist, was born in Harrison, New Jersey, the son of Edmund Adams and Sarah Ann Patterson Darling and the descendant of a long line of clergymen. He decided to study medicine after trying several fields and graduated from the College of Physicians and Surgeons of Baltimore in 1903, ranking first in his class. After two years as resident pathologist in the Baltimore City Hospital and service in the Ancon Hospital, Panama Canal Zone, he became chief of laboratories of the Isthmian Canal Commission in 1906—a post retained until 1915. During the year 1913-1914, he accompanied General Gorgas on his sanitary mission to the Rand Mines and Rhodesia, South Africa, to study the high mortality of the workers in the diamond mines.

While in Panama, he became interested in parasitic organisms in man and animals, observing three cases of histoplasmosis (1906) which he thought was due to a protozoon but later found to be caused by a fungus. A species of sarcosporidium was named for him in 1913 by Brumpt—Sarcocystis darlingi; two of the few authentic cases of sarcosporidia in man were reported by Darling in 1909 and 1919, and his "blind alley" theory accounting for them is generally accepted.

In 1915, Darling joined the staff of the International Health Board of the Rockefeller Foundation in which he remained until death. His first project was to head a medical commission, 1915-1917, to study the cause of anemia among the Malayans, Javans, and Fijians; the results are published in part in "Hookworm and Malaria Research in Malaya, Java, and the Fiji Islands", 1920. Investigations of the hookworm disease followed, especially on mass treatment, 1920 and 1922, and on its geographical and ethnological distribution, 1920.

Returning from the Far East, Darling accepted the chair of hygiene and the directorship of the laboratories of hygiene in the medical school at Sao Paulo, Brazil, established a splendidly equipped laboratory for teaching and research, and continued his

studies on hookworm and malaria. In 1920, ill health compelled his return home where he became a fellow by courtesy in the department of medical zoology of the School of Hygiene and Public Health, Johns Hopkins University. Two years later, he established a field laboratory to investigate malaria at Leesburg, Georgia, which was attended by many young men from the International Health Board seeking practical field work before assuming charge of their posts throughout the world. Here, too, he did some of his best work as teacher and investigator.

Beginning in 1903 with a paper on typhoid orchitis, he wrote widely on the malaria organism and its mosquito vectors, hookworm and other tropical infections, and trypanosomiasis.

Dr. Darling was an honorary fellow of the Royal Society of Tropical Medicine and Hygiene, London, which he was to have addressed in June, 1925. He was president of the Canal Zone Medical Association in 1908 and of the American Society of Tropical Medicine in 1924-1925; vice-president of the American Society of Parasitologists, 1925; also an active member of other home and foreign societies. The University of Maryland Medical School bestowed her honorary D. Sc. upon him in 1923, and the Lebanon Government of Syria conferred her medal of merit posthumously.

While traveling with the League of Nations Malaria Commission near Beirut, Syria, an automobile accident caused his death, May 20, 1925. He was survived by his wife, Nannyrle Llewllyn, formerly of Charlottesville, Virginia, whom he married February 18, 1905. Mrs. Darling has presented her husband's large library to the department of medical zoology of the School of Hygiene and Public Health, Johns Hopkins University, to be known as the Samuel Taylor Darling Library.

DARLINGTON, William (1782-1863), born in Chester County, Pennsylvania, doctor, botanist and author, was one of a famous group of scientists exploring, writing and keeping up a keen scientific correspondence with each other from Europe to America, from America to Europe; news of fresh plants, packets of seeds, graceful congratulations being sent, Linnaeus the brightest star and one whose opinion was first sought.

The seeming hardship of having to work on a farm, the out-door life, may have helped indirectly William Darlington's botanical interests. His great-grandfather, Abraham Darlington, had come over from England when a young man to Pennsylvania, and settled near Chester. William was the eldest child of Edward and Hannah Townsend Darlington and one of five sons. He had simply a common school education, and, hungry for more, persuaded his father to let him study medicine with Dr. John Vaughan (q. v.) of Wilmington, Delaware. He took also private French lessons, studied hard at Latin, Spanish and German and received his M. D. from the University of Pennsylvania in 1804. He had the good fortune of being able to attend the botanical lectures of Dr. Benjamin S. Barton (q. v.), and it is easy to imagine the shoots of his botanic ideas taking root in the firm earth of accurate knowledge.

A voyage to India as ship's surgeon gave him leisure for study and reflection, but does not seem to have given him "travel fever" also, for the following year he settled down to practice in West Chester after marrying Catherine, daughter of Gen. John Lacey of New Jersey. In 1812 international science yielded to international strife and Darlington became major of the "American Grays," organized to defend Philadelphia. Shortly after he figures as a politician advocating the abolition of slavery, and, resigning, received the thanks of the secretary of war and a nomination as visitor to West Point. He served on the Board of Canal Commissioners to unite two great lakes with the Atlantic, yet in the midst of much civic business he found time to botanize and to found the Chester County Cabinet of Natural Science; to publish, in 1826, his "Florula Cestrica" or catalogue of plants growing round West Chester, Pennsylvania. Also with some confréres he founded and became president of the Medical Society of Chester County.

That which pleased him most was the perpetuation of his name in flower form. Prof. De Candolle of Geneva named a genus after him, but it did not prove to be sufficiently distinct, and another friend, Prof. Torrey of New York, dedicated to him a finer plant, of the order Sarraceniaceæ, which grows in California. Darlington certainly deserved the honor, for a more generous man never lived. This was shown in his gathering together all the letters and memoranda of Dr. William Baldwin, (q. v.) a zealous botanist, who died young while on an expedition up the Missouri. He called the book "Reliquiæ Baldwinianæ," 1843, and six years later made all botanists

his debtors by his loving work shown in "The Memorials of John Bartram and Humphry Marshall," 1849, the careful foot-notes alone constituting valuable references to the botanical side of that period. Between these two volumes came another written as a result of his observation of the unscientific farming going on around him, a book which proved of genuine utility; this was his "Agricultural Botany," 1847.

He willed that his herbarium and all his botanical works, now too little known, like many another collection, should go to his own county museum, and these are still in the museum of the West Chester State Normal School, but while the donor lived they were a source to him of continual pleasure, adding zest to his correspondence with fellow botanists on both sides of the Atlantic. More than forty learned societies elected him a member.

The loss of a soldier son from fever off the African coast and of his wife, occurred in 1845-6. In the spring of 1862 Darlington had a slight attack of paralysis, followed in 1863 by another from which he died on Thursday, April 23, 1863, nearly eighty-one years old and with mind still unimpaired. He was buried in Oaklands Cemetery, Philadelphia, and on his tomb was carved:

Plantæ Cestrienses
quas
dilexit atque illustravit
Super Tumulum ejus
Semper floreant.

A portrait is to be seen in "The Botanists of Philadelphia," Harshberger, 1899, and in the Surgeon-General's Library, Washington.

HOWARD A. KELLY.

DARRACH, May (1868-1917), the founder of the Darrach Home for Crippled Children in New York City, herself a cripple from spinal caries, was born at Newburgh on the Hudson, N. Y. April 19, 1868. Her father was Samuel A. Darrach, born in New York state, her mother Julia Angell, a native of Jamaica, West Indies, whose ancestors were physicians and coffee planters. On her father's side were doctors and ministers, Dr. William Darrach (q. v.) being her great uncle and Dr. Bartow Darrach, with Civil war record, her uncle. Another uncle, Dr. Marshall Darrach of Newark, was an inventor, devoting much of his time to mechanical appliances for the relief of cripples. He was the originator of the wheel-crutch and plaster jacket.

May Darrach's early training was in the school of suffering. Spinal caries prevented her from walking until she was thirteen years of age. Her studies were of necessity very desultory and she was largely self-taught. She spent one year at school in Canada and she studied kindergarten with Madam House-Bolté. She was graduated from the Woman's Medical College and Hospital for Women, New York City, in 1904, but previous to this she had devoted herself to the education of crippled children and with the aid of Mr. Brace of the Children's Aid Society started the first class for cripples in New York City in the Henrietta School on West 65th Street in 1889. In 1899 she opened the Darrach Home for Crippled Children at 118 West 104th Street. This Institution provided a comfortable home for twenty crippled children and gave the inmates a long summer outing at Pelham Bay Park. The children remained at the Institution as long as each needed a home.

She spent much time lecturing and speaking before various societies to interest the charitably inclined in work for cripples, accomplishing a great deal in spite of her serious physical handicap. During the last years she was very much of an invalid and gave up the active management of the Darrach Home but retained her connection as honorary president. She died of pneumonia at Atlantic City, October 18, 1917.

MARY M. PERRY.

DARRACH, William (1796-1865), Philadelphia physician, the third son of Dr. William Darrach, was born in Philadelphia, June 16, 1796, at 7th, and Chestnut Sts. and was baptized by the Rev. Ashbel Green, July 17, 1796 at the Second Presbyterian Church, Philadelphia. His paternal ancestry were of Scotch-Irish descent and settled in Georgetown, Kent County, Maryland, before the Revolutionary War. His mother was the eldest daughter of Thomas Bradford and Mary Fisher. Thomas Bradford was the great grandson of William Bradford, who accompanied William Penn to Philadelphia. He was the first printer in the middle colonies and was printer to the government for many years, and later was a vestryman of Trinity Church in New York.

Dr. Darrach received his early education in Philadelphia and attended the preparatory and collegiate departments of the University of Pennsylvania. He then entered the Junior

class at Nassau Hall, Princeton, where he received the degrees of A. B. and A. M. He was a student in the office of Dr. Philip Syng Physick, (q. v.) where he continued for three years. In 1818 he became resident physician to the Philadelphia Almshouse, where he was associated with Drs. Berrien, Mosely, McClelland, Gwathmey, Freeman and Beesley. While he was there a severe epidemic of typhus fever broke out and some of his notes on this disease are still preserved.

In the spring of 1819 he received the degree of Doctor of Medicine from the University of Pennsylvania. Soon afterwards he sailed for Europe where he spent three years in England, Scotland, France and Italy. Among the men he studied under were John Abernethy, Sir Benjamin Brodie, Herbert Mayo, Sir Charles Bell and Astley Cooper. He was a pupil in the Charter House Eye Infirmary and in the Lock Hospital and attended the lectures of Lawrence, Tyrrell, Babington and Gregory. In Paris he attended lectures at the Jardin des Plantes, College de France and Duplessis and L'Ecole de Medecin. He followed the clinics at the Hotel du Dieu, La Charité and L'Hôpital de St. Louis. He also studied comparative anatomy with Blainville and diseases of the skin with Alibert. In addition he received instruction in surgery from Roux, Boyer, Caffroir, Larrey and Scrapa in Italy.

After his return from Europe he started as a general practitioner and continued till the time of his death. He early became a physician to the Philadelphia Medical Dispensary, a position he maintained for several years, and was then elected its consulting physician. He was appointed physician and surgeon to the Eastern Penitentiary, the duties of which he fulfilled for ten years.

He will be remembered by cases reported to the Pathological Society of Philadelphia, and especially by his folio lithographed plates, "Drawings of the Anatomy of the Groin," Phila., 1830. The drawings were made by Chasal from dissections by Darrach while in Paris in 1820. The dissections were facilitated by forcing air into the different planes of the tissues and they were made from the standpoint of the anatomist and the surgeon interested in cutting for a strangulated hernia.

He was a member of the Philadelphia Medical Society, of the County Medical Society, the College of Physicians and of the Academy of Natural Sciences. From 1843 to 1854 he took an active part in supporting the Pennsylvania Medical College as a member of the faculty and as president for part of the time. He occupied the chair of theory and practice of medicine.

He married April 26, 1826, Margaretta Monro, the daughter of Dr. George Monro. She died in 1841. There were seven children: Dr. George Monro Darrach, Dr. James Darrach (still living in 1916 in his 89th year) and Dr. William Darrach, Jr., and four daughters. In 1845 he married Miss Gobrecht who bore him six children. He was a member and an officer in the Presbyterian Church.

He died May 6, 1865.

WILLIAM DARRACH.

DAUGHERTY, Philander (1835-1904), a pioneer Kansas surgeon, was born on March 10, 1835, in Greencastle, Indiana. His father came from Ireland when a boy and afterwards married Harriett McNary of Marysville, Kentucky, but died when Philander was four, and the boy did as most medical aspirants have done, just got what education he could between farm work and teaching school. But when sixteen he studied medicine with his uncle, Dr. William McNary, in Martinsville, Illinois, then attended Rush Medical College, taking his M. D. there and finally settling down to practice and remaining in Junction City, Kansas, for thirty-five years.

He was one of the first in Kansas to take up antiseptic and aseptic surgery and to do total extirpation of the breast for carcinoma, his pioneer surgical work being remarkable for the period in which it was done. He also wrote a considerable number of articles, not only on his own subjects but in political, sociologic and philosophic vein.

On March 4, 1855, he married Susan Alice Mitchell and had one son and three daughters. His second wife (in 1870) was Mrs. Sarah Sage, but he had no more children. Daugherty died of apoplexy on May 23, 1904, at his own home.

M. MORGAN CLOUD.

DAVEIS, John Taylor Gilman (1816-1873), one of the earliest practitioners in diseases of the eye in Maine, was born in Portland, Maine, March 21, 1816, the son of Charles S. Daveis, a distinguished lawyer, and Frances Ellen Gilman, a daughter of Governor Gilman, of New Hampshire. Gilman Daveis, as he was generally called, was educated in the public schools, studied medicine in Portland under the direction of Dr. John Taylor Gil-

man (q. v.), and graduated from Bowdoin College M. D. in 1837 and with the same degree in the same year from the University of Pennsylvania. Bowdoin conferred the degree of A. M. on him in 1858. Immediately after graduation he settled in Portsmouth, New Hampshire, practiced there for five years, and then returned to Portland, where he practiced successfully for thirty years. Among the cases which early helped him to local fame and practice was one of club-foot, which he cured after it had been repeatedly treated in vain by others, and also a successfully operated case of squint. As an oculist he gained more than a local recognition, and did many successful operations. He read before the Maine Medical Association one or two excellent papers on ophthalmology.

He owned a good medical library, and read much contemporary literature, being known as one of the best read physicians in Maine.

He wore a broad black tie, in a bow knot, and his coat always had a black velvet collar. Small tabs of beard ornamented each cheek, and he had a radiant, agreeable face. It is curious that so little can be learned concerning a man so widely known. Dr. Daveis was president of the Maine Medical Association in 1857-58. His fatal illness came without a warning, for while preparing to operate upon a patient, he was seized with a violent pain in the right shoulder, which rapidly extended downwards and involved his entire side, so that he had to leave his patient and take to his bed. Pneumonia set in, and he died in a few days on May 9, 1873.

JAMES A. SPALDING.

DAVID, Aaron Hart (1812-1882), founder and editor of the "Canada Medical Journal," and founder of two medical schools was born in Montreal, Canada, on October 9, 1812. He was the son of Samuel David, a retired merchant, who was Major in the 42nd Batt. Canadian Militia and served with it during the war of 1812 with the United States—receiving the war medal. After receiving a liberal education, Aaron David was indentured to Dr. William Caldwell, in January, 1829, and in the fall of the same year he entered as a student of medicine in the Medical Faculty of McGill University—then opening its first session. In 1833 Dr. David went to Edinburgh and in 1835 he graduated at the University of Edinburgh, being twenty-fourth in honors, in a class of 117 graduates. After travelling a short time on the continent Dr. David returned to Montreal and began the practice of medicine, marrying in 1836. From 1837-1839 he was assistant surgeon of the "Montreal Rifles" and served with it during the whole of the rebellion, being present with his regiment at the battle of St. Eustache. In 1841 he removed with his family to Three Rivers, where he speedily acquired a large and lucrative practice, but in 1844 he returned to Montreal, where he practiced up to the time of his final illness.

In 1852, in conjunction with several other physicians, he organized the St. Lawrence School of Medicine, and in the same year he and Dr. Macdonnell founded and edited "The Canada Medical Journal." In 1870 he, with nine other doctors, founded a new school of medicine, the University of Bishop College, Faculty of Medicine, absorbed by McGill University in 1905. He became dean in 1870 and from the first session filled the chair of theory and practice of medicine and retained this post until 1880, when he became emeritus professor. He was one of the original members of the Canadian Medical Association and in 1869 was elected its general secretary.

He was life member of the Natural History Society, member, by diploma, 1833, Medical Society of Montreal; licentiate Royal College of Surgeons, Edinburgh, Scotland; extraordinary member Medical Society of Edinburgh; graduate University Lying-in Hospital of James VI. College, Edinburgh; M. D. of same college; commissioned to practice as a physician, surgeon and man-midwife, signed by Earl of Gosford, Governor General of Canada; corresponding member Gynecological Society of Boston, Mass.; honorary member of the American Medical Association of the United States, 1880, and many others.

Dr. David died November 5, 1882. His funeral took place November 8, and was one of the largest Montreal had ever seen.

He wrote much for the medical journals, one of his last efforts being a paper read before the Medico-Chirurgical Society, October 5, 1882, entitled "Reminiscences Connected with the Medical Profession in Montreal During the Last Fifty Years," in which he sketched in an entertaining fashion the lives of many of the leaders of medicine in his professional experience.

Among the entire profession he was beloved and respected as a man of the most sterling honor. To the young men of the profession he was ever exceedingly kind and although a fiery medico-politician, those he fought most bitterly loved him best. The

many honorable positions which he held show the estimation in which he was held by his confréres

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DAVIDGE, John Beale (1768-1829), surgeon, founder of the University of Maryland, was born in Annapolis in 1768, his father an ex-captain in the British Army, his mother Honor Howard of Anne Arundel County. At an early age he was deprived of his father, and his mother wanted to apprentice him to a cabinet-maker. But, resolved to have an education and obtaining aid from friends and coming into possession of some slaves through the death of a relative, he entered St. John's College and there took his A. M. in 1789, beginning to study medicine with Dr. James and Dr. William Murray, of Annapolis, then spending several years in Edinburgh, where he devoted himself especially to the study of anatomy. His voyage to Scotland was made in a sailing vessel, and among his shipmates were Dr. Hosack, Dr. Brockenbrough, and Dr. Troup; encountering very rough weather, they were compelled to work hard at the pumps to keep the vessel from sinking. From motives of economy, like many students of the time, he took his degree (April 22, 1793) at Glasgow rather than Edinburgh. About this time he married Wilhelmina Stuart of the Firth of Solway, a lady several years his senior. After practicing for a short time in Birmingham, England, he returned to Maryland, and finally selected Baltimore as his permanent home. In 1797 a severe epidemic of yellow fever raged in the city and there was a public discussion of the disease by the physicians in the newspapers. Davidge bore a prominent part, and early in the following year republished his views in a volume which was freely quoted in later works upon the subject.

He was one of the first attending physicians to the Baltimore General Dispensary on its foundation in 1801. In 1802 we first note his advertisement of private courses of medical lectures, and these courses were continued annually until 1807, when, being joined by Dr. James Cocke (q. v.) and John Shaw (q. v.) his school was chartered as the College of Medicine of Maryland. In 1813 a charter for a University was obtained, and this institution became the department of medicine, Dr. Davidge holding the chair of anatomy and surgery from 1807 to his death, and for a number of years he was also dean.

His first wife dying, Dr. Davidge married Mrs. Rebecca Troup Polk, widow of Josiah Polk, of Harford County, Maryland, who survived him with four of his children, a son by his first wife and three daughters by his second.

His most important writings were: "Treastise on Yellow Fever," 1798; "Nosologia Methodica" (in Latin), two editions, 1812 and 1813; "Physical Sketches," two volumes, 1814 and 1816; "Treatise on Amputation," 1818. He edited "Bancroft on Fevers," 1821, and a quarterly journal entitled, "Baltimore Philosophical Journal and Review." 1823, of which only one number appeared. His important operations were amputation at the shoulder-joint soon after 1792 (Reese); ligation of the gluteal artery for aneurysm; ligation of the carotid artery for fungus of the antrum; total extirpation of the parotid gland, 1823. He invented a new method of amputation which he called the "American."

In person, Prof. Davidge is represented as being short and stout, with blue eyes, florid complexion and homely, rugged features, small hands and feet and a graceful carriage. He walked with a slight limp after 1818, in consequence of a fracture of the thigh bone. His lectures were described by Prof. Lunsford P. Yandell (q. v.) as being "models of simple elegance," but "he seemed to forget the English idiom the moment he took pen in hand." His style of writing was stiff, affected and obscure, and marked by obsolete modes of spelling and expression. He had very positive views on medical subjects and believed menstruation to be a secretion of the uterus excited by ovarian irritation. He opposed the support of the perineum on the ground that nature is sufficient for her own processes. He also declared himself against the speculum vaginæ because it smacked of immoral curiosity.

He died at his house in Lexington street on August 23, 1829, of malignant disease of the antrum of Highmore.

His great-great-grandson, Walter D. Davidge, an attorney of Washington City, has an oil painting of him.

EUGENE F. CORDELL.

DAVIDSON, John Pintard (1812-1890), was born in Pinckneyville, Mississippi, December 8, 1812, the son of Dr. Richard Davidson, of Virginia, a surgeon in the United States army, who came to New Orleans in 1804. John Pintard took his M. D. at the University of Pennsylvania in 1832 and returned immediately to New Orleans and entered the Charity Hospital. At the outbreak of hostili-

ties between the North and South, he went out as captain of the Alexander Rifles, Crescent Regiment, commanded by Col. Marshall J. Smith.

During the epidemic of yellow fever in 1875 at Shreveport, he was one of the experts selected with Drs. Bruns (q. v.) and Choppin (q. v.) to be sent to that place. He was also sent to Brunswick, Georgia, as an expert on fever and also sent to the plantations below New Orleans, when the National Board of Health pronounced an epidemic prevailing to be yellow fever. Dr. Davidson declared the fever at both places to be "rice fever," a fever peculiar to those living on rice and cultivating rice plantations. He was president of the State Board of Health in 1880 and chairman of the Board of Medical Experts on yellow fever.

One remarkable trait was his forgetfulness of himself when the lives of others were concerned. About the year 1848 or 1849 Asiatic cholera broke out on the plantation of Mr. Calhoun, some miles above Alexandria, on Red River. He was called in and upon investigation found that a large number of the slaves were being fed on rotten meal; he at once separated the well from the sick, and moved all to the pine woods and changed their food and water, after which he lost not a single case, but came near losing his own life. He was stricken with the disease, and in trying to reach the house of a friend was found on the roadside by a faithful servant, who took him to Dr. Lucketts, where he was for several days at death's door. During the epidemic of yellow fever in 1853, he sent all his children out of town and filled his house with sick, and was, during the greater part of the time, the only physician about.

He was prominent in the state medical society and once served as president of the New Orleans Medical and Surgical Association.

DAVIDSON, William (1810-1875), counted as one of the most learned men of his time in southern Indiana, was born in 1810 in Wick, Caithness, Scotland, and went as a boy to the parish school and afterwards to Edinburgh University, becoming a licentiate of the Royal College of Surgeons there in 1833 and taking his M. D. in 1835. While a student he became acquainted with Sir James Simpson and the friendship lasted throughout life. In 1835 Davidson came to the United States, landing in New York provided with letters of introduction to James Gordon Bennett and other prominent Scotsmen who advised him to practice in New York, but, preferring a western home, he settled first in Kingston, Ohio, where he married Malinda Griffiths, whose people had come from Wales to Pennsylvania with William Penn, then, finally, in 1837 moved to and remained for the rest of his life in Madison, Indiana. During the Civil War he acted as surgeon to an India regiment and to a military hospital at Munsfordsville, Kentucky.

It is a matter of record that the claim to priority in the use of chloroform in labor west of the Alleghany Mountains should be accorded either to Dr. Davidson or Prof. Miller of the University of Louisville, but I, as pupil of Davidson, can confidently give him the credit.

Apart from his diagnostic skill and ability as a lecturer Dr. Davidson was a thorough classical scholar and book-lover who wrote a little for the medical journals; a good scientist too, particularly in geology and botany. The "Orthis Davidsonia" was named after him. A courtly, good-looking man, he was welcomed as guest or friend. He had four children, Victoria, Anna, Marion, and William R., who became a doctor. These, with his wife, were all living when Dr. Davidson died of cerebral hemorrhage on August 12, 1875.

L. J. Woolan.

DAVIS, Charles Henry Stanley (1840-1917), physician, archeologist and author, of Meriden, Connecticut, was born at Goshen in that state, March 2, 1840, the son of Dr. Timothy Fisher and Moriva Hatch Davis. He graduated M. D. at the New York University in 1866, studied medicine in Boston, Paris and London and settled in practice at Meriden, where he married Caroline Elizabeth Harris in 1868. In 1870 Dr. Davis became clerk to the Meriden City Medical Association and held this office until his death, practicing his art and also serving in the following capacities: physician to the Curtis Home for Orphans and Old Ladies (1886-1908); physician to the State School for Boys (1895-1900); also trustee, secretary and treasurer (1894-1899); member of the Connecticut House of Representatives (1873, 1885, 1886); mayor of Meriden (1887-8); city treasurer (1898-9); and president of the Board of Education (1898-1908). His interest in archeology began early and he became editor of the "Biblia Journal of Oriental Archeology" in 1887, retaining the position through life and acting as associate

editor of the "American Antiquarian and Oriental Journal" also, after 1906. From 1882 to 1912 Dr. Davis was corresponding secretary of the Meriden Scientific Association. A list of his publications shows the variety and scope of his interests. It follows: "History of Wallingford and Meriden," 1870; "The Voice as a Musical Instrument," 1873; "Grammar of the Old Perisian Language," 1878; "Classification, Education and Training of Feeble-Minded, Imbecile and Idiotic Children," 1880; "History of Egypt in the Light of Modern Discoveries," 1896; "The Egyptian Book of the Dead," 1897; "Greek and Roman Stoicism and Some of Its Disciples," 1903; "How to be Successful as a Physician," 1905; "The Self-Cure of Consumption Without Medicine," 1907; "The Non-Operative Treatment of Hernia," 1909; "Grammar of the Modern Irish Language," 1909; "Some of Life's Problems," 1914.

Dr. Davis died at the Connecticut State Hospital, November 7, 1917, from duodenal ulcer with perforation.

DAVIS, Edward Hamilton (1811-1888). Better known as as archeologist than as a physician, Edward Hamilton Davis was born in Ross County, Ohio, January 22, 1811, graduating from Kenyon College in 1833, and in medicine from Cincinnati Medical College in 1838. He settled in Chillicothe and continued in practice there until 1849, when he removed to New York City, where he lived until his death. His youth was spent in the Scioto Valley, so renowned for its ancient earthworks, and the first school he ever attended was situated on a mound near the Circleville group. Living in the same county, and cognizant of the labors of Mr. Atwater and other pioneer explorers, his attention was directed at a very early age to the subject of American antiquities. From 1829 to 1833, while a student of Kenyon College, he conducted a series of explorations in the mounds of that vicinity, an account of which was given in a paper read before the Philomathian Society. Afterwards, by request of the professors, this paper was enlarged, and delivered as a literary performance at the college commencement of 1833.

During that year he had several interviews with Daniel Webster, then making a tour of the West. That great statesman was deeply interested in the subject of western antiquities, and was pained to witness their rapid disappearance under the plow of the pioneer. He suggested the formation of a society to purchase and preserve some of the most remarkable works of the mound builders. The opinion of such a man was well calculated to stimulate the youthful mind of Davis to continue these researches. For fifteen years he was diligently engaged in making surveys, opening mounds, collecting and arranging the results of his labors.

A portion of Davis's collection was sent to New York in order to have engravings made and printing done. In 1848 the result of his extensive explorations appeared in a work entitled "Ancient Monuments of the Mississippi Valley," which formed the first volume of the "Smithsonian Contributions to Knowledge." While editing this work Mr. Squire prepared and read before the Ethnological Society a paper embodying the principal facts of the new book, and it was published with their proceedings. Dr. Davis bore the entire expense of these investigations, viz., the traveling, surveying, and opening of over two hundred mounds, amounting without any allowance for time to nearly $20,000. All the remuneration he ever received for all his time, labor and expenditure was fifty copies of the book, given him by the Smithsonian Institution, and the $10,000 received for his collection, purchased by Mr. Blackmore, of England, who built a museum for its reception and dedicated it to his native town, Salisbury, where it now remains. Davis contributed to the medical journals, and in 1850 prepared a "Report on the Statistics of Calculous Diseases in Ohio." In 1841 he operated successfully on a man thirty-five years old for strabismus, and always claimed that his was the first one of the kind in Ohio.

Davis came to New York in 1849. In 1850 he was elected professor of materia medica in the New York Medical College and lectured there for ten years. Failing health compelled him to retire from practice in the eighties. The chief cause of his death, May 15, 1888, was debility from old age. He left four children, two sons and two daughters.

DAVIS, Gwilym George (1857-1918), orthopedic surgeon of Philadelphia, was born in Altoona, Pennsylvania, July 20, 1857, the son of Thomas Rees and Catherine Fosselman Davis and a descendant of Rev. David Davis, poet and divine of Castle Howell, Wales. After a preliminary education in the public schools and Central High School of Philadelphia, he entered the medical department of the University of Pennsylvania and was graduated in 1879. When his term as resident at the Pennsylvania Hospital expired, he went

abroad and studied in London. He became a member of the Royal College of Surgeons of England in 1880 and received the medical degree "cum laude" from the University of Göttingen in Germany in 1881. On his return, he was assistant surgeon to the Orthopedic Hospital of Philadelphia and surgeon in 1896. Meanwhile, in 1884, he was appointed outpatient surgeon to the Episcopal Hospital where he rendered, as was ever his wont, faithful and effective service. He maintained an active association with the Children's Hospital during 1887-96 and was surgeon to St. Joseph's Hospital in 1889 and to the German Hospital in 1892-96. He was also orthopedic surgeon to the Philadelphia Hospital from 1901 to 1914. At last in 1900, Dr. Davis was able to indulge more fully his natural desire to teach, as associate professor of applied anatomy at the University of Pennsylvania. Upon becoming professor of orthopedic surgery in 1911, he gave up all his general surgery. During the World War, he was a member of the Advisory Council to the War Department in the section of orthopedic surgery and directed and conducted intensive courses in that department for army officers who had been sent by the Surgeon-General to the University of Pennsylvania. This continuous and exhausting work overtaxed Dr. Davis's strength. He went to his camp at Seboanock on Moosehead Lake, Maine, in June, 1918, for a much needed rest, developed an acute illness and died of pneumonia in three days, on June sixteenth.

An unusual knowledge of anatomy enabled him to devise operations since associated with his name,—such as the Davis' fascia lata operation, subastragaloid arthrodesis to stabilize the foot, and the transverse horizontal section for paralytic calcaneo-cavus, and, especially, in reconstructive surgery operative procedures dealing with infantile paralysis. Between Davis and John B. Murphy (q. v.) the honors of being our greatest arthoplastic surgeon may well be divided. Dr. Davis was a member of most of the local societies, also of the American Surgical Association, and the Society of Clinical Medicine. He was president of the Philadelphia Academy of Surgery and of the American Orthopedic Association. He became a Fellow of the College of Physicians of Philadelphia in 1889 and edited its annual transactions for several years being Chairman of the Committee of Publications from 1895 until his death. He was the author of articles and monographs in journals and of the "Principles and Practice of Bandaging" (1891) also of an excellent, comprehensive "Applied Anatomy" (1910), which was translated into Italian.

He never married.

Dr. Davis was spare of habit, alert, always responsive, with a deep sense of obligation in the discharge of duty to the sick. He had a rare spirit and there flowed within him a gentle undercurrent of humor ever ready to bubble up. His conversation was marked by a piquant, slightly foreign tang. He was an enthusiastic sportsman. Troutfishing at his summer camp in Maine and duck shooting in the South during the Christmas holidays, were his rest and recreation. He moved among men, loved and honored by all who knew him.

DAVIS, Henry Gassett (1807-1896), pioneer orthopedic surgeon of New York, was born in Trenton, Maine, November 4, 1807. He was a descendant of Dolor Davis, a Cape Cod man; graduated at the Yale Medical School in 1839, practiced in Worcester and Milbury, Mass., until 1855, when he went to New York. Dr. Davis was a good observer and clinician and had a keen and original mind. He early became interested in the study and treatment of fractures and deformities, and forcibly advocated the use of continuous "elastic traction" for the relief of joint irritation and the correction of deformity. He applied traction by means of adhesive plaster with the weight and pulley, and other mechanical devices, and seems to have had considerable success. He contributed numerous papers to the medical journals, and in 1867 his book on conservative surgery was published in New York. His work and writings made a profound impression on several younger men working in the same field in the early sixties, among them, Louis A. Sayre (q. v.) and Charles Fayette Taylor (q. v.) In fact, Dr. Davis is often looked upon as the founder of the traction school of orthopedic surgery, which dominated the field for a generation or more. His views on the nature and treatment of chronic joint disease, club foot, congenital dislocation of the hip, and the deformities following infantile paralysis, are interesting reading even now; they are marked by much shrewdness and common sense, and were far ahead of his time. For example, in a paper on the treatment of abscesses (Transactions of the American Orthopedic Association, vol. vi, 1893), Davis advocates in addition to traction the opening and evacuation of the ab-

scess, washing it out with warm water and injecting it with "a French preparation of chlorine." It was kept open by a tent and covered by a compress, secured by a roller bandage. "The object of the compress was to bring the walls in close contact so that they might unite. This union took place in every instance where this plan was followed and in no way interfered with." He further says, "If we could have a preparation made from the chloride of lime and prepared of proper strength it would answer the same purpose," and says that he had successfully used the chlorine treatment for fifty years, or since about 1854, anticipating in a remarkable manner the Carrel-Dakin treatment of the present day.

Dr. Virgil P. Gibney says: "When I was a medical student and during my first years in hospital work, Dr. Henry G. Davis was the pioneer in orthopedic surgery in this country; he was the first one who ever devised a hip splint for the protection of the joint and especially for traction. It was he who believed that the joint surfaces could be separated and the bones of the hip thus placed under control." Dr. E. H. Bradford, (q. v.) addressing the American Orthopedic Association in 1889, said: "It is hardly an exaggeration to say that before his time the general treatment of hip disease in common surgical practice was the actual cautery or the seton, and we all know the results which we can gain by treatment which has grown from his suggestion. Whether we know it or not, we are all followers of the teachings of Dr. Davis."

He wrote "Conservative Surgery," 314 pp., New York, 1867.

Dr. Davis died November 18, 1896, at Everett, Mass., aged 89 years. He contributed papers of value to the Transactions of the American Orthopedic Association to within a few years of his death.

HENRY LING TAYLOR.

DAVIS, John Staige (1824-1885), anatomist, was the son of John A. G. and Mary J. Terrell Davis. His father, a lawyer of Charlottesville, Virginia, who in 1830, was elected to the chair of law in the University of Virginia, removed with his family to that institution. John was born in Albemarle County, October 1, 1824. In the cultured and refined atmosphere of the university he acquired his education, graduating A. M. before the completion of his sixteenth year. One year later, July 4, 1841, he took his M. D. there, and after spending 18 months in the study of practical medicine in Philadelphia, settled in Jefferson County, Virginia, December, 1841. Here he practiced until January, 1847, when, having been elected demonstrator of anatomy in the university, he returned to Charlottesville. From January, 1845, to July, 1856, he filled the position of demonstrator of anatomy in the University of Virginia, and in the latter year was elected professor of anatomy, materia medica and botany. With the exception of the chair of botany, which in 1867 was transferred to another school, he held this professorship until his death. He was commissioned July 3, 1861, surgeon in the Confederate States Army, and served as such in the military hospital at Charlottesville.

Dr. Davis was one of the foremost teachers of anatomy America has known; "As a practitioner," says a colleague, "he was not only fully abreast of the latest advances in medical science, but was also skilful and judicious in their practical application." He was, moreover, possessed of a beautiful Christian character and the highest sense of duty. He was a churchman without cant, a Christian without hypocrisy.

He was twice married, first to Lucy L. Blackford, who died on the first of February, 1859, leaving a daughter and a son, Dr. William B. Davis of the United States Army. His second wife, whom he married on the second of September, 1865, was Caroline Hill. Three children were born, the eldest of whom was John Staige Davis, who became professor of medicine in the University of Virginia.

Dr. Davis died at his home in the university on the 17th of July, 1885, of pneumonia, secondary to hemiplegia, in the sixty-first year of his age. There is a portrait in the possession of his son, Dr. John Staige Davis, Jr., at the University of Virginia.

JOHN H. CLAIBORNE.

DAVIS, Nathan Smith (1817-1904). Untiring, irrepressible, uncompromising and incorruptible, Nathan Smith Davis occupied for half a century a shining place in the foremost rank of the medical profession of the United States. He was father of the American Medical Association and author of a "History of Medical Education and Institutions of the United States" (1851). In Chicago, which became his adopted home in 1849, he soon distanced all rivals in the race for fame, popularity and material success.

He was born in Greene, Chenango County, New York, January 9, 1817. His parents,

Dow Davis and Eleanor Smith Davis, were pioneers, and the first sixteen years of his life were spent on a farm. From early childhood he was spare of habit, his apparently frail body being dominated by an unusually active and tireless mind. His forehead was high and broad, and his head, which seemed too large for his body, gave external evidence of his chief characteristic, an intense and dominating intellectuality. His intellectual superiority first manifested itself in his work at the village school, and led his father to give him the advantages of a higher course of study at Cazenovia Seminary in Madison County. He began the study of medicine in the office of Dr. Daniel Clark of Smithville Flats, and continued it in the office of Dr. Thomas Jackson of Binghamton until he graduated in 1837 from the College of Physicians of Western New York at Fairfield before he was twenty-one years of age. His thesis on "Animal Temperature" was selected by the faculty to be read at the annual commencement exercises.

Dr. Davis practiced in Vienna, New York, 1837-8, and in Binghamton from 1838 to 1847. In 1838 he married Anna Maria Parker of Vienna, New York, by whom he had three children, a daughter and two sons. Both of the sons became physicians. The elder, Dr. Frank Davis, showed promise, but died of miliary abscess of the kidneys after about ten years of practice. The younger son, Dr. N. S. Davis 2d, (q. v.) was associated with his father in practice and teaching and, later, succeeded him in Northwestern University Medical School. A grandson, Dr. N. S. Davis 3d, began a successful career in Chicago, in internal medicine, see page 305.

At Binghamton Davis soon became prominent in medical matters. He was secretary of the Broome County Medical Society from 1841 to 1843, librarian from 1843 to 1847, and member of the board of censors for several years. From 1843 to 1846 he represented the county society in the New York State Society. He offered resolutions at the state society in 1843 calling for a lengthening and grading of the medical course of instruction. The discussions of these resolutions led to the calling of a national medical convention in New York in 1846, the beginning of the American Medical Association. The acquaintance he formed during the time of his activities in the state medical society and in the organization of the American Medical Society and in the organization of the American Association led him to move to New York City in 1847. Here he took charge of the dissecting room of the College of Physicians and Surgeons, lectured on medical jurisprudence in the spring course and took editorial charge of the "Annalist," a semi-monthly medical journal. In 1849 he moved to Chicago to accept the professorship of physiology and general pathology in Rush Medical College. In 1850 he was elected to the chair of the principles and practice of medicine and of clinical medicine. Mercy Hospital, which was opened to the public through his initiative, was the first public hospital in Chicago. In 1851 the Sisters of Mercy took charge of it, and have controlled it since, in affiliation with the Northwestern University.

In 1859 he and a few other Rush College professors founded the medical department of Lind University. Upon the extinction of that college they founded, in 1863, the Chicago Medical College, of which he was professor of the principles and practice of medicine, and later emeritus professor until his death. He was dean of the faculty until he ceased active work in the college. Here his pioneer ideas about systematic medical instruction were carried out, and Chicago Medical College became the first medical college to adopt a three years graded course. In the 70's, mainly through his efforts, the college became the medical department of Northwestern University.

Dr. Davis was one of those who organized the Illinois Medical Society and the Chicago Medical Society. He was also one of the founders of Northwestern University, the Chicago Academy of Sciences, the Chicago Historical Society, the Illinois State Miscroscopical Society, the Union College of Law, and the Washingtonian Home. He was an honorary member of many medical and scientific societies in this and foreign countries, and was honored by most of the societies to which he belonged by election to official positions.

His ability shone brightest perhaps as a writer and orator. Besides having edited the "Annalist" at New York, he was editor of the Chicago "Medical Journal" from 1855 to 1859. In 1860 he founded the Chicago "Medical Examiner" and edited it until it became merged with the Chicago "Medical Journal" in 1873. He was the editor of the "Journal of the American Medical Association" from its establishment in 1883 until he resigned in 1889. At different times he was also editor of the "Northwestern Medical and Surgical Journal," of the Eclectic Journal of Education and Literary Review," of the

"American Medical Temperance Quarterly." He wrote a textbook entitled "Lectures on the Principles and Practice of Medicine," 1884, second edition 1887, Chicago; a textbook on "Agricultural Chemistry," New York, 1848, for which he received a prize from the New York State Agricultural Society; "A History of Medical Education," Chicago, 1855; "Clinical Lectures on Various Important Diseases" (two editions), edited by his son, Frank H. Davis, and many monographs upon medical subjects, of which those on alcohol, temperance and medical education attracted most attention.

As an orator he excelled, and he made good use of his oratorical ability. Temperance was one of his favorite topics, and he lectured frequently on subjects connected with hygiene and popular science. As a medical lecturer he had few equals in his day. His exposition of a subject in the classroom was clear and systematic, and but few of his students began practice without knowing how to use the Davis treatment in successful competition with their rivals. But it was when giving advice to his students and discoursing upon their duties and opportunities, and revealing to them the ideas of conduct and achievement which they saw carried out so faithfully in him that he became eloquent and inspiring. As his student, the writer does not remember so much what he said about achievement, as how he made him feel about it. The words are gone, but their influence remains. Our knowledge was acquired from all of our professors, but our inspiration came from him.

Like many leaders Davis was both an example and a warning, and like Benjamin Rush he was no innovator, but embodied the best traditions of his age. With the conservatism of age he opposed new things such as the hypodermic syringe, and the clinical thermometer, exclaiming "Why do I need a thermometer, can't I tell fever with my hand?" To the class of 1879 he cried out in his lecture on typhoid fever, "some day some Dutchman will come along and tell us that typhoid fever is caused by a bug," and sure enough these prophetic words were fulfilled the very next year in Eberth's discovery.

Dr. Davis died June 16, 1904, at the ripe age of 87 years, and is remembered as one of the greatest and most influential Chicagoans of his time. He was ever active as a leader and promotor of reforms and improvements in public and private life. He was a family physician in the old and best sense of the term. Although he had a large consultation practice, he never refused to visit the poor, and never made his charges out of proportion to their means. His capacity for work was extraordinary. His private practice and consultation work were enough to monopolize the energies of an ordinary man; his college and hospital and medical organization work was enough for another; while his editorial duties, his medical writings and scattered work on temperance and other public reforms would be considered sufficient to take up the time of still another. Probably no man ever made better use of his evenings and nights than he. Every moment not utilized in sleep was utilized in work. Such was his devotion to his work and so ardent his desire to accomplish his ideals that he could not bear to think of amusements and vacations. Different kinds of work constituted all of the change he required. He was glad to get home at night from the cares of his practice to the peace of his editorial or other literary work, and in the morning he was glad to see his patients again. The world is changing. This type of man is becoming a rarity. What have we to make up for it? It is good for us to preserve the records of such lives that we may compare notes and have a standard for self criticism in these days that are so different.

HENRY T. BYFORD.

DAVIS, Nathan Smith, 2d (1858-1920), the son of Nathan Smith Davis, (q. v.) and of Anna Maria Parker Davis, was born September 5, 1858, in Chicago. From Northwestern University, he received his A. B. in 1880 and A. M. in 1883. During his academic course, he achieved distinction in natural history to which he devoted most of his leisure, and, with a fellow student, he published a descriptive catalogue of the reptilia and batrachia of eastern North America. Because of impaired health, he went to South America, where he secured valuable specimens of herpetology, ornithology, and geology. He began the study of medicine with his father in 1880, and was graduated from the Chicago Medical College in 1883, securing the thesis prize. Within a year, he was appointed a member of the visiting staff of Mercy Hospital. During the spring and summer of 1885, he studied pathology in Heidelberg and Vienna. His practice in Chicago centered more and more in respiratory diseases and diabetes.

Dr. Davis' teaching career began early as associate professor of pathology in his Alma Mater from 1884 to 1886, during which time

he inaugurated the first laboratory course in pathology given there. In 1887, he was made adjunct professor of the principles and practice of medicine and clinical medicine in the Northwestern University Medical School, succeeding to the full professorship the following year; he also served as dean for some years. In addition, he was appointed attending physician to Wesley Hospital in 1899 and to St. Luke's in 1909. Great interest in the improvement of the Pharmacopeia resulted in his election as Vice-president of the U. S. Pharmacopeial Convention, 1910-1920; he wrote many articles on this subject. He served the American Medical Association as secretary of the section on Practice of Medicine in 1887, as chairman of the Section on Pharmacology and Therapeutics in 1900, and as a member of the House of Delegates in 1902 and 1903. He was a member of the Ninth International Medical Congress and Pan American Congress; chairman of the board of scientific governors of the Chicago Academy of Science; president of the Chicago Medico-legal Society; trustee of the Northwestern University, Chicago Young Men's Christian Association, and of Wesley Hospital; and one of the organizers of the Society of Medical History of Chicago in 1909. He was the author of "Diseases of the Lungs, Heart, and Kidneys," 1892, "Consumption: how to prevent it and how to live with it," 1894, and "Diet in Health and Disease;" contributed sections on the lungs and heart for the "International System of Electro-Therapeutics," on the therapeutics of renal diseases for the "System of Practical Therapeutics," and numerous articles for Wood's "Reference Handbook;" while he edited for several years the department of therapeutics for "Medicine;" and wrote numerous medical papers.

On April 16, 1884, Dr. Davis married Jessie, the daughter of Judge Hopkins of Madison, Wisconsin. Of their three children, two are living.

Although failing health compelled retirement from practice and necessitated a change of residence from Chicago to California, yet even during declining years he sacrificed himself to his interest in medical progress and natural history. On December 21, 1920, he died from lymphosarcoma.

A son, Nathan Smith Davis, 3rd, born June 25, 1889, in Chicago, took his A. B. degree from Harvard in 1910 and was graduated from Rush Medical College in 1913. Internal medicine is his specialty. He is the author of "Diverticula of the Duodenum" and "Neurocirculatory Asthenia." During the World War, he served first as lieutenant and then as captain in the Medical Corps of the army.

DAVIS, Reese (1837-1895), Pennsylvania Surgeon was born July 5, 1837, of Welsh parentage, in Warren, Bradford County, Pennsylvania, the ninth child in a family of eleven. His father being a farmer, young Reese had only such educational advantages as his winter attendance at the district school afforded. However, after a somewhat rudimentary education, at the age of twenty-one he entered the Susquehanna Collegiate Institute at Towanda to prepare for college. One year was spent at Marietta College in Ohio, and he graduated from Hamilton College at Clinton, New York, in 1863. Then followed one year in the Medical School of Michigan University. He entered the Bellevue Hospital Medical College in New York in 1865 and graduated in 1867, his professional life beginning in LeRaysville, Pennsylvania, and continuing to 1871, at Wilkes-Barre, Pennsylvania, in which place he practiced till his death in August, 1895.

A physician and surgeon of great ability, he was the first man in his section of the state to perform ovariotomy, and did this many times successfully at a time when this operation was rare. According to Professor William Goodell (q. v.), who quotes him at great length, Dr. Davis performed the second vaginal ovariotomy on record. This case reported originally in "Transactions of the Medical Society of Pennsylvania," 1874, vol. x, p. 221. Dr. Ashhurst in his "Surgery" quotes Dr. Davis as an ovariotomist and cites the above case. Dr. Davis' paper "On a New Method of Treating Placenta Previa," read before the Pennsylvania State Medical Society in 1876, attracted much attention, and on its merits he was elected an honorary member of the Philadelphia Obstetrical Society. He was on the surgical staff of Wilkes-Barre City Hospital until his death, and president of the State Medical Society in 1886.

Dr. Davis was an extensive contributor of papers to medical literature, writing among others "Vaginal Ovariotomy," 1847; "Placenta Previa," 1876; "Pelvic Peritonitis, Cellulitis and Hematocele," 1875; "Hernia of Liver in Infant," 1876; "Diphtheria," 1878; "Removal of Vesical Calculus," 1880; Potability of the Water of Large Cities," 1885;

"Rabies," 1886; "Median Operation for Stone," 1888; "The Filtration of City Water," 1894.

LEWIS H. TAYLOR.

DAVIS, William Bramwell (1832-1893), expert in the relation of medicine to insurance, was born of Welsh parents in Cincinnati, July 22, 1832. He attended Woodward College and the Ohio Wesleyan University at Delaware, Ohio, where he received his baccalaureate degree in 1852. In 1855 he was graduated in medicine at the Miami Medical College. The Ohio College conferred the "ad eundem" degree upon him in 1858. During the civil war he was surgeon of the 137th Regiment Ohio Volunteer Infantry, and had charge of a military hospital in the West End of Cincinnati.

Dr. Davis was an authority on insurance matters and their relation to medicine, having been the medical director of the Union Central Life Insurance Co., which his brother, John Davis, helped to organize. In 1875 he read his much-discussed paper on "Influence of Consumption on Life Insurance" before the Ohio State Medical Society. It was one of the earliest statistical papers on tuberculosis published in this country. Another valuable paper was "Functional Albuminuria; or Albuminuria in Persons Apparently Healthy, and Its Relation to Life Insurance," which attracted much attention among insurance examiners everywhere. He wrote also: "Revaccination," Cincinnati Medical Society, 1875; "Intestinal Obstruction," 1880; "The Alcohol Question," 1886.

In 1860 he married Fanny R. Clark, daughter of Bishop D. W. Clark of the Methodist Episcopal Church, and they had two sons.

In 1872 he went to Europe for observation and study. Upon his return he assumed the chair of materia medica, which he held until 1888. He died in 1893.

DAVIS, William Elias Brownlee (1863-1902), a gynecologist and an originator of the Southern Surgical and Gynecological Society, of which he was president in 1901, is remembered in his native state of Alabama, where he was born on November 25, 1863, in Trussville, Jefferson County, the sixth in a line of doctors, his father, a Confederate army surgeon, having been killed in the war. The boy's life was that of many another genius; farm work and study, delicate health and scanty means, yet he won through it all, graduated at the University of Alabama, began practice with his brother and took his M. D. at Bellevue Hospital Medical College in 1884.

From the first he devoted himself to gynecology and abdominal surgery, and his sudden death left unfinished a work on "Hepatic Surgery." In 1892 he experimented on 200 dogs for the purpose of determining the treatment of common bile duct obstruction, establishing the principle that sterile bile is inoffensive to the peritoneum, that transperitoneal gauze draining of the common duct is a safe procedure; after removal of calculi from the common duct suture of the duct is unnecessary. By diligent observation and experimentation, far from laboratories, he pursued his way of original investigation. He fully appreciated the need of a medical association, and with his brother organized the Alabama Surgical and Gynecological Society. In 1900 he himself was president of the American Association of Obstetricians and Gynecologists, and also honorary fellow of the state societies of New York, Louisiana and of the British Gynecological Society.

The end came very suddenly, as the result of a railway accident, on February 24, 1902, A monument was erected to him in Birmingham by the Southern Surgical and Gynecological Society, in whose transactions (vol. xvi, 1904) is a biography by Dr. Richard Douglas, (q. v.) and a portrait.

DAVISON, John L. (1853-1917), of Toronto died at the residence of his brother in Napanee, Ontario, April 20, 1917, from pneumonia. Born in 1853, he was the youngest son of John and Jane Swanzy Davison, who went to Canada about 1815 from Ireland and settled at Odessa, Frontenac County. As a boy he attended the public school at Yarker; afterwards he studied at the Newburgh Grammar School and the Toronto Normal School, where he was awarded the McCabe gold medal. He was a teacher in the Provincial Model School, Toronto, for ten years, during which time he graduated in Arts in 1880 in the University of Toronto. He then studied medicine in Trinity Medical College, where he was graduated in 1884, afterwards pursuing post-graduate studies in Edinburgh and London, where he took the M. R. C. S. qualification.

Returning to Canada, he began practice in Toronto in 1885, and the same year was appointed professor of pathology in the Women's Medical College, and the following year professor of materia medica and ther-

apeutics in Trinity Medical College. Appointed visiting physician to the Toronto General Hospital in 1887, he relinquished this post in 1907 in order to facilitate what was considered would be a satisfactory reorganization of the staff of the hospital, and was appointed to the consulting staff. On the federation of Trinity with the University of Toronto in 1902, he became professor of clinical medicine in the latter institution.

For many years he was editor of the "Canada Lancet." In politics he was a conservative; in religion a Presbyterian. He never married.

The reasons for his professional success are not difficult to appreciate. His handsome appearance, distinguished and dignified bearing, his direct, straightforward and honorable attitude toward all with whom he came in contact, his kindly and philosophic outlook on life, were all features of a unique personality which attracted and retained warm friendships. He was an excellent clinical teacher and lecturer, and was the ideal type of the cultured and skilful family physician.

For ten years he lived under the shadow of angina pectoris, which confined his activities within a steadily narrowing sphere, yet, without complaint, he adjusted himself to enforced limitations, which never abated the joy of living. In fact his last years, he repeatedly said, were the happiest of his life, his physical disability giving him more leisure for reading, reflection and for music, especially violin music. He was an expert with rod and gun, and reveled in the beauties of nature.

DAWBARN, Robert Hugh Mackay (1860-1915), professor of surgery in the New York Polyclinic Medical School and Hospital, was by nature an investigator. He carried always the restless manner of a man imbued with scientific curiosity, and he was impatient over any delay at getting to an understanding of the reason for things. At medical society meetings he was active in holding to account anyone who did not substantiate theories as presented, and he good naturedly accepted attacks made upon his own presentation of new work and new ideas. During the first eighteen years of his professional life Dr. Dawbarn conducted a "quiz" class with the particular feature of preparing men for the United States army and navy examinations. It is said that during that period he was responsible for the fitting of nearly half of the number of men who became members of the junior grades in the military services. In the "Medical Record" in 1899 he published an article which excited much attention entitled "Doctors and Politicians" relating to his failure of appointment as police surgeon, after receiving a rating of 100 per cent. in examinations in each of the seven branches of medicine. In 1885 Dr. Dawbarn was appointed and served for two years as an instructor in minor surgery at the College of Physicians and Surgeons in New York. Subsequently he became attached to the teaching staff of the New York Polyclinic Medical School, in which he was professor of surgery and anatomy. For many years he was visiting surgeon to the New York City and the New York Polyclinic Hospitals.

Dr. Dawbarn, the son of Charles and Mary E. Mackay Dawbarn, was born January 11, 1860, in North Castle, Westchester County, New York. The family was originally French Huguenot, but for many generations English. His maternal ancestors, the Mackays, were natives of Inverness, Scotland, before emigrating to New England. The maternal grandfather of Dr. Dawbarn was Dr. Hugh Mackay, who practiced medicine for about forty years near Greenwich, Connecticut. Dr. Dawbarn graduated from the College of Physicians and Surgeons in New York in 1881, receiving the Harsen prize for proficiency in studies. After serving for fifteen months upon the house staff of Mount Sinai Hospital, he engaged in the practice of medicine, devoting himself in later years exclusively to surgery.

He was the author of "An Aid to Materia Medica," published in New York; also a monograph entitled "The Treatment of Certain Malignant Growths by Excision of Both External Carotids," published in Philadelphia. The latter work was an essay for which he was awarded the Samuel D. Gross prize of $1,000 in Philadelphia in 1902. He was the author of various articles on surgery, in Wood's "Reference Handbook of the Medical Sciences," and was a voluminous contributor to medical periodical literature.

Dr. Dawbarn was a member of the County Medical Society, the State Medical Society, the Academy of Medicine, the State Medical Association, the American Medical Association, the Pathological Society, the Surgical Society, the West End Medical Society, the Society of Medical Jurisprudence, and the Physicians' Mutual Aid Society. He also belonged to the American Association of Anatomists.

Dr. Dawbarn married in 1886 Ethel Gordon, daughter of Charles Stuart Sussex Lennox of Brooklyn, New York. She died in 1890, leaving one child, Waring Lennox. In 1893 Dr.

Dawbarn married Carolyn M., daughter of Prof. Edward Lorenzo Holmes, president of Rush Medical College, Chicago, Illinois.

He died July 18, 1915, at his home, 105 West Seventy-fourth Street, of a complication of diseases.

ROBERT T. MORRIS.

DAWSON, Benjamin Franklin (1847-1888), obstetrician, was born in New York City on June 28, 1847, and graduated from the college of Physicians and Surgeons in 1866. While a student during the last year of the Civil War he served as acting assistant surgeon in the Federal Army, and after graduation established himself in practice in New York, paying special attention to surgery, gynecology, obstetrics and diseases of children. In 1868 he founded the "American Journal of Obstetrics," and was editor until 1874, contributing largely to this and other similar publications for many years. In 1875 he published a report of a case of inversio uteri of two years' standing reduced by taxis. About ten years later he gave up the practice of his profession on account of ill health. He was for a number of years professor of gynecology in the New York Post-Graduate Medical School, assistant surgeon of the Woman's Hospital in the state of New York, attending physician of the New York Foundling Asylum, and a member of the New York Obstetrical Society and other medical associations. Later he devoted more attention to gynecology, the practice of which he enriched with many ingenious instruments—an ovariotomy clamp, a spreading sinus speculum, and a galvano-cautery battery. With Prof. Joseph Kamerer he published a translation of "Klob's Pathological Anatomy of the Female Sexual Organs," 1868, and two years later an American edition of Barnes's "Obstetric Operations."

He died on April 3, 1888, at his home, No. 8 East Fifteenth Street, New York, of diabetes, from which he had suffered for years.

DAWSON, John (1810-1866), editor, writer, professor in the Starling Medical College, Ohio, was born at Sharpsburg, Maryland, May 11, 1810, the oldest son of John and Nancy Hays Dawson. The Dawson family moved from Sharpsburg to Berkley County, Virginia, where they lived until 1830, when they emigrated to Green County, Ohio, and settled in the village of Jamestown. Shortly after his arrival in Jamestown, young Dawson made the acquaintance of Dr. Matthias Winans, the physician and leading citizen of the place. On Dr. Winans' advice the younger man took up the study of medicine, and practically became a member of the doctor's family. He eagerly took advantage of the well-stocked library of his friend and patron, and made up to a great extent for the lack of a liberal education which opportunity had denied him, and was soon not only a well-read man, but proficient in Latin and Greek.

In 1835 the Cincinnati College of Medicine and Surgery was organized. To this school young Dawson went for his first course in medicine. In 1838, Dr. Drake and Dr. Gross, having gone to Louisville to join the faculty of the University of Louisville, young Dawson followed them, and there took his second course.

He contributed his first article to the "Western Journal of Medicine and Surgery" under the title "An Epidemic of Typhus Fever in Ohio." This article attracted the attention of the profession, and stamped the author as a vigorous writer and a rising member of the medical faculty. The University conferred on him the honorary M. D. for this first paper. Returning to his home, he entered into partnership with his friend and patron. He continued also to be a student and writer, and a series of articles followed, among them: 'Thoughts on the Tongue as an Element of Diagnosis," "Epidemic Erysipelas," and "On Cold Baths in Typhoid Fever," the last something like half a century too soon to be appreciated.

While practicing at Jamestown, he had one of those clinical experiences that come, if ever, only once in a lifetime. He had a case of obstruction of the bowel in a young man, and fully expected to lose him. One morning when he went into the house he found the patient upon the vessel straining, and was told that he suddenly had a desire to stool. In a few moments the patient said he was through, and was helped back to bed. Upon examination, the doctor found in the vessel a section of the ileum twenty-six inches long. This priceless specimen was lost to him the next year, for while visiting his old friend, Dr. Joshua Martin, at Xenia, during an attack of housecleaning all his collection of specimens were thrown out and lost.

In 1851 Dr. Dawson, feeling that he was wasting his time and talents in continuing country practice, removed to Columbus, Ohio. The following year the faculty of Starling Medical College was organized, and he was made professor of anatomy and physiology, in

company with a remarkably strong set of men as his co-workers. Dr. Dawson filled this professorship for twelve years, and later became one of the professors of surgery, a position he held till the time of his death. The following year and until his death he was editor of the "Ohio Medical and Surgical Journal". As a medical journalist he was eminently a success. His English was both strong and graceful, and the journal, during these years, contained many brilliant and learned articles.

In politics he was a Democrat, and his writings, outside of his professional articles, showed the bent of his opinions. Samuel Medary's "Columbus Crisis" contained a number of these writings. Among them were "Progress of the Races," "Commingling of the Races," and "Ethnology and Politics."

Personally he was reserved and dignified, but never cold or severe; loved by his friends and respected by his enemies; always a hard worker and a friend to the poor, white or black, they admired and loved him.

In the midst of his work he was stricken down in his office by an attack of cerebral hemorrhage, a family fatality, and died September 4, 1866. CHARLES ANDERSON.

DAWSON, John Lawrence (1815-1896), practioner for more than fifty years in South Carolina, was born on his father's plantation at Metkin, Moncks Corner, South Carolina, in March, 1815, the son of Lawrence Monck Dawson, great grandson of Lord Monck. He had his education at the Medical College of Charleston and graduated M. D. from the Medical College of South Carolina, afterwards studying at Paris clinics and finally settling down in Charleston.

He was at one time president of the Medical Society of South Carolina and United States surgeon for the troops stationed there. As registrar of the city he compiled with Dr. de Saussure valuable statistics, the first really good ones the city had had.

He married Jane, daughter of his partner Dr. Simons and had four daughters. When this wife died he wedded Catherine Dawson and had one son and two daughters. Dr. Dawson died at his house in Tradd Street, Charleston, on the seventeenth of September, 1896. ROBERT WILSON, JR.

DAWSON, William Wirt (1828-1893), professor of surgery in the Medical College of Ohio, was born on December 19, 1828, at Dawson's Mills, Berkley County, Virginia, the youngest son of John and Nancy Hays Dawson. The family—father, mother, and eleven children—emigrated to Jamestown, Green County, Ohio, when the boy was one year old, and there he spent his childhood and early youth. When old enough to leave home he was sent to a private school at Xenia, Ohio. After returning home from school at Xenia, he began to work for his father, but finding that rather too strenuous for him, he followed the example of his two older brothers and began to study medicine with Dr. Matthias Winans, of Jamestown. In 1847 he took his first course in Louisville University, but did not return there to finish, going to the Medical College of Ohio, where he was graduated in 1850. As a medical student he was described as a big-headed, large-hearted rollicking country youngster, ready for any fun and at the head of almost all the pranks that students were fond of, but never neglecting any of the clinical lectures, and always a hard worker. His natural bent, even in his student days, was for surgery. After graduation he spent two years near his old home, and then returned to Cincinnati and settled down to practice. While professionally a success from the very first, for the first two years his financial harvest was small. But he had a stout heart; the harder the work, the more determined was he to win. In 1853 he had been made professor of anatomy in the Cincinnati College of Medicine and Surgery, a chair he occupied for three years, and while it had tickled his pride to have been known as a professor in a medical college, it did not appear to increase his paying clientele. In 1860 he obtained the same chair in the Medical College of Ohio, his alma mater, and it was soon after this that fortune came. He remained with the college until 1864, when he received the appointment of surgeon to the Cincinnati Hospital, then known as the Commercial Hospital. With his rise in professional popularity the joyousness of youth returned, the years he spent as surgeon and clinical lecturer at the Cincinnati Hospital he looked upon as the best of his life.

In the summer of 1871 Dr. George Blackman (q. v.) died, and Dr. Dawson was immediately elected his successor as professor of surgery in the Medical College of Ohio. Then came the heyday of his life, intellectually and socially. While not so elegant or eloquent as James Graham, (q. v.), nor so scientifically correct as Roberts Bartholow (q. v.), yet as a teacher he was superior to them all; his terse and forcible manner of presenting facts

never failed to reach the intellectual center of his listeners, and his lectures were the most popular and highly appreciated of any in the city, his clinics at the hospital of the Good Samaritan more popular, if possible, than his teaching at the college. From 1871 to 1880 was the period of his greatest success. During this decade he performed his most brilliant operations, and wrote the greater part of his papers on surgical subjects. In 1888 he was made president of the American Medical Association.

While not a specialist, but a general surgeon in its widest sense, he yet had his pet operations. At one time it was lateral lithotomy, and he claimed that he was the first American surgeon to make one hundred successful lithotomies without a death. He also claimed that his nephrotomy was the first in this country, and the first successful case anywhere.

The principal papers during this time were on abdominal tumors, hernia, carcinoma, Graves' disease and a score or more on his operations, including: "The Complete Removal of the Clavicle with Cure"; "The Removal of Seventeen Fibro-cystic Tumors from the Abdomen"; "Three Cases of Double Ligature of the Carotids and Three of Trephining for Epilepsy." During his early years and up to the time of the death of his wife in 1883, Dr. Dawson was a veritable glutton for hard work. He would sit up reading until one or two o'clock in the morning, and at eight he would be in his consulting-room again. During this period he was bright, good natured and jovial, as famous for his wit as for his learning and professional standing, for he was as popular with the profession as with the people. Soon after the death of his wife he began to lose interest in life and grew gloomy and morose, and in a few years was as peevish and irritable as he had formerly been bright and happy. In the winter of 1893 he had an attack of influenza, but finally got out to work again, yet towards spring he had a second attack and was never well afterwards. Early in the summer he was taken to the Hospital of the Good Samaritan, but it was soon evident that he was a mental wreck, and he was transferred to the College Hill Sanatorium, where he died February 16, 1893.

CHARLES ANDERSON.

Dayton, Amos Cooper (1813-1865), physician and clergyman of Vicksburg, Miss. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 298.

DEADERICK, William Harvey (1773-1858), first to remove the inferior maxilla, was born at Winchester, Virginia, November 10, 1773, and died at Athens, Tennessee, October 29, 1858. He was a graduate in medicine and began practice at Greenville, Tennessee. Shortly afterwards he moved to his farm at Cheek's Cross Roads, Tennessee, where on February 6, 1810, he removed the left inferior maxilla. The patient was a boy (Jesse Lay) fourteen years of age. There was an excrescence or enlargement of the bone which nearly closed the buccal cavity and presented a large tumor outside. The bone was sawn through at the chin and near the joint. The growth was said to have been an osteosarcoma, but the fact that there was no return of it makes that diagnosis doubtful. The scar was, in time, completely hidden by a luxuriant growth of whiskers.

After a thorough investigation the fact was established that Dr. Deaderick was the first surgeon to remove the lower jawbone. His claim that he was the originator of the operation is justly recognized by Mott in his "Velpeau," by Smith in his "Operative Surgery," by South in "Chelius' Surgery," and others; notwithstanding, other claims to priority have arisen, all, however, proven to have been subsequent to Deaderick.

On May 26, 1807, he married Penelope Smith, a daughter of Col. Joseph Hamilton, and had nine children, five sons and four daughters. Dr. Deaderick's second wife was Mrs. Lois Ashworth, by whom he had a daughter, Mary McKim.

After living some years at Cheek's Cross Roads he went to Athens, Tennessee, where he lived many years. His professional contemporaries and his intimates have said that his character embodied many excellent qualities and he was considered one of the best equipped physicians and surgeons of his day, no less distinguished for his exemplary piety and high moral tone than for his professional accomplishments.

CHALMERS DEADERICK.

DEANE, James (1801-1858), physician and geologist of Greenfield, Mass., was born in Coleraine, not far from his future place of residence, February 24, 1801. He was the eighth child of Christopher and Prudence Deane, who had come from Stonington, Connecticut, to Coleraine, in their early married life; Christopher, a farmer, having been a descendant of James Deane, one of the earliest settlers of Stonington. The boy worked

on the farm, studied Latin and later French, under a lawyer, and at the age of nineteen went to Boston in search of employment and when twenty-one settled in Greenfield, as clerk to Elijah Alvord, Clerk of the Court and Register of Probate. Here he lived four years in Mr. Alford's family and finally became a pupil of Dr. Amariah Brigham (q. v.), who at that time was practicing in Greenfield. Deane went to New York in 1829 to enter the College of Physicians and Surgeons, Columbia. After he had received the degree of M. D. from that institution in 1831, he returned to Greenfield and engaged in practice. In 1836 he married Mary Clapp Russell, of that town, and they had four children.

He began to write for the "Boston Medical and Surgical Journal" in 1837, contributing a paper on congenial fissure of the palate and this was followed by eighteen other papers, on a variety of subjects in the same journal, between that date and December, 1855. In the last year the Massachusetts Medical Society published his most important medical contribution, a paper on "The hygienic condition of the survivors of ovariotomy," founded on an extensive correspondence with the leading surgeons of the United States and Europe —in which the performance of the operation was justified to a doubting profession. At this time he was serving as vice-president of the Massachusetts Medical Society, 1854-1857.

In the spring of 1835 slabs of stratified red sandstone were brought from quarries at Turner's Falls, on the Connecticut River near at hand, to be used as sidewalks in Greenfield. Although all recognized "Bird Tracks" in these slabs, it was Dr. Deane who conceived the plan of studying and trying to classify the fossils. To this end he got into touch with Professor Hitchcock of Amherst and Professor Silliman of Yale and began to make drawings of all the specimens of the fossils he could find, publishing a paper in "Silliman's Journal of Science," in 1843 and sending the paper to the "American Journal of Science" in 1844 and another the following year, in which he described tracks that were probably those of a batrachian reptile. In 1847 he showed the track of a quadruped and in 1848 that of another species of quadruped. For twenty years he made drawings, many of them being executed on stone, and he communicated with geologists abroad, publishing articles with numerous plates, from his drawings and from photographs, in the memoirs of the American Academy of Arts and Sciences and under the auspices of the Academy of Natural Sciences, Philadelphia. Every specimen obtained was submitted to him. Altogether he issued ten different memoirs during his lifetime, on fossil footprints in the sandstone of the Connecticut Valley, and after his death, in 1861, a quarto volume of 46 plates and 61 pages of descriptive letter press, was published by Little, Brown and Company, Boston, by the aid of the Smithsonian Institution at Washington. It was entitled "Ischnographs from the Sandstone of the Connecticut River." He drew well and he wrote well and added much to the knowledge of his discovery, while he supported himself by the practice of medicine.

Dr. Deane received the honorary degree of Master of Arts from Amherst College in 1838 and he was a corresponding member of the natural history societies of Montreal and Boston. He was of a tall and commanding figure and had a well-knit and compact frame. His very walk conveyed an idea of strength. He died, apparently of typhoid fever, June 8, 1858, at the age of 57 years.

WALTER L. BURRAGE.

DEARBORN, Henry (1751-1829), the son of Dr. Simon Dearborn, a physician of Hampton, New Hampshire, like his father, was educated to be a physician and practiced many years at intervals in both New Hampshire and Maine, so that although better known as Gen. Dearborn, there can be no doubt that he should be included among the eminent medical worthies of America.

He was born in Hampton, New Hampshire, February 23, 1751, and after having such school education as that small village afforded, studied medicine with Dr. Hall Jackson (q.v.) of Plymouth, one of New Hampshire's remarkable physicians. Dearborn, after doing some practice for two or three years with Dr. Jackson, was entitled "Doctor" and settled at Nottingham Square, in New Hampshire, from 1772 till 1775, where he practiced as a physician. Nottingham Square was a little settlement in the town of Nottingham, on the turnpike road from Portsmouth to Concord. When the war broke out Dr. Dearborn gave up his practice and followed with the troops of Gen. Stark to the Battle of Bunker Hill. When the Revolution was over, he bought a large tract of territory, then called Monmouth, in the district of Maine, a region which is now divided into the city of Gardiner and the towns of Monmouth, Litchfield

and Riverside. His wife was Mary Bartlett of Nottingham, New Hampshire.

Here, besides attending to his farm, he did a little medical practice, but was soon called away to become a man of prominence in the affairs of the nation. He became major-general in 1790, went to Congress for two terms, was secretary of war in 1801, was later on minister to Portugal, and collector of the port of Boston.

With the breaking out of the War of 1812, President Monroe asked him to accept active service again. He began the campaign successfully but met with reverses owing to lack of reinforcements, withdrew from the service and resumed practice. In his later life he retired from Gardiner and died in Roxbury, Massachusetts, June 6, 1829, aged seventy-eight.

JAMES A. SPALDING.

DEBLOIS, Thomas Amory, (1848-1921), Boston laryngologist, was the eldest son of John Amory DeBlois (Harvard 1816) and Emily J. Rousse DeBlois, of Virginia, of French descent. The father, descendant by birth from an old Boston family, was a cotton merchant in Columbus, Georgia, and there the son was born January 27, 1848. When the boy was only seven years of age, in 1855, the father died and the widow brought her young son to Newport, R. I., where he began his education in a private school. When he was twelve, he went to Vevey, Switzerland, for a two-years' schooling at Pension Sillig, and in 1863, at the age of fifteen, he entered the U. S. Naval Academy at Annapolis, graduating in 1868 as midshipman, advancing to ensign the following year and to lieutenant-commander in 1873. The two years 1875-76 he was stationed at the U. S. Navy Yard at Pensacola, Florida. Deciding to study medicine, he entered Dartmouth Medical School and received the degree of M. D. in 1878; the same year he took an additional M. D. at the University of the City of New York City, giving special attention to diseases of the throat under the instruction of F. H. Bosworth, (q. v.). He continued his connection with the Navy until 1881, when he settled in Boston. Before resigning, he started a clinic for diseases of the throat, but was soon ordered South to join his ship for a long cruise. He had not reached the place of embarkation before he decided that medicine had a stronger hold on him than the sea, and on February 1, 1881, he sent in his resignation, returned to Boston and again took charge of his embryo clinic, which had been under the care of a colleague during his absence, who was much surprised to see him return so soon. He retained his clinic until 1890. Another appointment was as physician to diseases of the throat at the Boston City Hospital in 1884, where he had as colleagues F. H. Hooper, (q. v.), J. W. Farlow and G. A. Leland (q. v.), for many years, giving up only when he had reached the age limit of sixty-four. From 1893 to 1906 he was clinical instructor in laryngology in the Harvard Medical School.

He was elected a member of the American Laryngological Association in 1882 and was its vice-president in 1900. He was also a member of the New England Otological and Laryngological Society, the Massachusetts Medical Society and the Boston Society for Medical Improvement. Being much interested in mechanical appliances of all sorts, he devised a number of instruments for use in his specialty and modified others to meet his own requirements, as he was a man of large frame and many of the ordinary instruments were not well adapted for his use without some alteration.

During all these years his interest in naval matters continued and he was associated with Capt. John C. Soley in forming the Massachusetts Naval Militia, the first organization of the kind in the United States. He was also surgeon to the school-ship "Enterprise". A favorite recreation of his was fencing, in which he excelled even in his youth, taking a first prize when at the Naval Academy. Later in life he was one of the most expert fencers at the Boston Athletic Association, where his superior skill was recognized by all. He was of a jovial nature, hospitable, a good raconteur and sociable to a high degree.

He married, at Newport, R. I., October 3, 1871, Louisa D. Anderson, of New York, who died in 1910. Surviving him was a daughter, Elizabeth Amory, and a son, Lewis Amory, a graduate of Harvard, S. B., 1899.

Dr. DeBlois died at his home in Boston, February 27, 1921, aged 73.

JOHN W. FARLOW.

DEBUTTS, Elisha (1773-1831), physiologist and a founder of the University of Maryland School of Medicine, was born in Dublin, of a family among the "Landed Gentry," in the year 1773. His father, John DeButts, was an officer in the English army. In his youth his family emigrated to America and

settled at Sharpsburg in Western Maryland. He attended school near Alexandria, where lived his uncle, Dr. Samuel DeButts, under whom he studied medicine. Later he entered Pennsylvania University and took his M. D., in 1805, the subject of his thesis being "An Inaugural Essay on the Eye and on Vision." After practicing for several years on the Potomac, opposite Alexandria, he settled in Baltimore and was appointed professor of chemistry in the College of Medicine of Maryland in 1809, and held it until his death. He also held the same chair in St. Mary's College, Baltimore. In 1830 he was sent to Europe by the Board of Trustees to procure chemical apparatus for the University. While abroad he lectured with great éclat before the Royal Institution in London, a copy of his address being requested. He died April 3, 1831, of pneumonia.

Prof. DeButts was tall and spare; his health never robust, and he had a cast in one eye. Besides his graduating thesis only two short articles are known: "An Account of an Improvement made on the Differential Thermometer of Mr. Leslie" (1814), Transactions of American Philosophical Society, 1818, pp. 301-306, with plate; "Description of Two New Voltaic Batteries," "Silliman's Journal", viii, 1824, pp. 271-274. The Baltimore "Federal Gazette" mentions a highly important discovery in electricity made by him during the session of 1823-24.

His friend, Bishop Henshaw, of Rhode Island, wrote: "As a teacher of chemistry, whether we look at the learning and perspicuity of the lectures in which he inculcated the lessons and doctrines of philosophy or at the brilliancy and success of the experiments by which he illustrated them, he was, perhaps, unequalled, certainly unexcelled."

Dr. DeButts had a son, John DeButts, who became a physician of Queen Anne County, Maryland, and died in 1894. There are said to be several oil portraits of the father extant. One of these is reproduced in Cordell's "History of the University of Maryland," 1891 and 1907.

EUGENE F. CORDELL.

DECAMP, William H. (1825-1898), Michigan surgeon and conchologist was born in Auburn, New York, November 6, 1825, the son of John DeCamp of Mt. Morris, Livingston County, New York, his mother Sarah Miller of Auburn, New York. A general education was obtained at Munda, New York, and in 1843 he began medical studies there with Dr. Lewis G. Ferris and finished at Geneva Medical College whence he received his M. D. in 1846, at once beginning practice at Oak Grove, Allegheny County, New York, but in 1850 removing to Hunt's Hollow, Livingston County, where he gained considerable surgical practice. His health failing, in 1854 he removed to Grand Rapids, Michigan, and opened a drug store, which in 1857 was destroyed by fire, with all his possessions; so he resumed practice, which increased till the opening of the war when he entered the army and was commissioned surgeon of the first Michigan Regiment of Engineers and Mechanics till mustered out at the close of his term of service. After the battle of Perrysville, Dr. DeCamp had charge of the wounded in Gen. Bragg's army. From October 10, 1862, to February 10, 1863, he was medical director at Harrodsburg, Kentucky. On his discharge from the army he resumed practice at Grand Rapids, making a specialty of surgery. In 1868 he was president of Michigan State Medical Society. Outside his profession Dr. DeCamp made researches in conchology, mineralogy, botany, ornithology—especially notable was his collection of Michigan shells. His were the studies which resulted in developing the vast salt industries of Michigan. On examining the water of an artesian well near Grand Rapids he found ninety per cent of salt. Calling a meeting of some public-spirited citizens he laid his observations before them and they took the matter to the Michigan Legislature, which voted a bounty of ten cents per bushel of salt produced in Michigan.

On November 4, 1846, he married Emeline C. Griffiths, of Wyoming, New York.

He died in Grand Rapids in 1868 from organic heart disease.

LEARTUS CONNER.

DEKAY, James Ellsworth (1792-1851), physician and eminent naturalist, was born in Lisbon, Portugal. In 1812, he was studying medicine in Guilford, Connecticut, then a great seaport town with a large West India trade; in the spring of 1818, he visited Europe with Joseph R. Drake, the poet doctor (q. v.); and the following year he must have received his medical diploma from the University of Edinburgh with a thesis "De Errosis Scaturigine in Experimentis Physiologicis." The summer of 1819 found him in America in intimate association with Drake, Cooper, and Halleck, when the first wrote his wonderful poem "The Culprit Fay."

On the last day of July, 1821, he married the daughter of Henry Eckford, Drake's father-in-law, and accompanied by Halleck traveled to Quebec. Eckford was a naval architect and with him DeKay went to Turkey as superintendent of the naval yards at Constantinople, Eckford being chief of naval construction for the Empire. It was Eckford who built the steamer "Robert Fulton" which made the first successful trip by steam from New York to New Orleans and Havana. DeKay also held negotiations with Brazil relative to the construction of ships of war. He finally settled down at Oyster Bay, Long Island and devoted himself to natural history and wrote often for the New York press. In the cholera epidemic of 1832, he gave his services to the city of New York, in cooperation with Philip Rhinelander. He was a founder of the Lyceum, afterwards the National Academy of Sciences. In 1836, the State of New York ordered a geological survey, covering botany and zoology, and entrusted the work to DeKay; the admirable five volume survey (1842-49) resulted. He wrote "Travels in Turkey" (1838). In 1839, he proposed to Halleck to start a monthly magazine, but the latter had other hopes. With many prominent men, DeKay started the Authors Club in 1837, of which Washington Irving was president and Fitz-Greene Halleck, vice-president. The best insight into DeKay's personal life is secured through the writings of James Grant Wilson's "Bryant and his Friends" and the "Life and Letters of Fitz-Greene Halleck," where he shines in the midst of a delightful coterie and in the intimacy of Drake and Halleck. He and Halleck were with Drake when he died. At the wife's request, he took Drake's poems, which he had not copied the poems to the death bed. "See Joe," said he, "what I have done", but the great soul of the poet with a clearer perception of values at such a time and with eternity imminent and its vast problems reaching down to envelop him, answered, "Burn them, they are valueless."

DeKay died at Oyster Bay, November 21, 1851.

HOWARD A. KELLY.

DELAFIELD, Edward (1794-1875). It is chiefly for his ophthalmic work and his great interest in the blind that Edward Delafield of New York City should be remembered, his energy in promoting the alleviation of disease being shown at a time when thousands went blind through the ignorance of surgeons concerning the eye. He was the son of John Delafield of London who came to this country and married Ann Hallett of New York. Edward, the eldest of eleven children, was born in New York City, May 7, 1794. He was graduated A. B. from Yale College in 1812 and became pupil to a Dr. Samuel Borrowe, following out diligently in New York the prescribed course of the College of Physicians and Surgeons and receiving its M. D. in 1816, with a thesis on "Pulmonary Consumption." Like most young doctors of that period he went over to Europe and studied at foreign clinics, returning to New York City and practicing there over forty years.

He was not a great writer, but he did good work in adding to and editing a new edition of "Travers' Diseases of the Eye" and in contributing articles on ophthalmology to medical journals. As far back as the year 1818 he conceived the idea of a New York Eye Infirmary and talked it over with his associate Kearney Rodgers (q. v.). The talk resulted in their opening two rooms, in 1820; in seven months they had treated 436 patients. The necessity for such a hospital was now obvious and the surgeons who had helped in the crowded two rooms also helped in the organization of the new hospital of which Delafield was for thirty years visiting surgeon. The American Ophthalmological Society also owned him as one of its founders and elected him as first president. While deeply devoted to his ophthalmic work he held to his other subject, obstetrics, and occupied the chair of obstetrics, and diseases of women and children in the College of Physicians and Surgeons thirteen years, being a president of the college from 1858 to 1875. Of a very benevolent turn, he often noticed the dismal condition of shabby gentility to which the widows and children of his deceased confrères were reduced and this led him to found the first society for their relief.

As a practitioner, Delafield possessed, in a high degree, the confidence of his patients. His medical sagacity and extensive acquirements secured him success in the management of disease, and the kindly interest and sympathetic care which he felt for those intrusted to his skill gained for him their affection and gratitude.

In 1821, he married Elina E. Langdon Elwyn, granddaughter of John Langdon, governor of New Hampshire and president of the first Congress. They had six children, all dying before their father. In 1839 he married Julia, granddaughter of William Floyd, a

signer of the Declaration of Independence. Their son Francis is the subject of the next biography. Edward Delafield died in New York, February 13, 1875.

DAVINA WATERSON.

DELAFIELD, Francis (1841-1915), of New York.

There have been few men whose achievements were so great that personal details of their lives are of interest to posterity; but there are many men whose influence upon their own profession or in their own circle, has been so profound that their characters become of great interest, as well as the methods by which and the traits through which they have been able to exert this influence. Of this type was Francis Delafield. His life was, throughout, the ideal life of a physician —devoted exclusively to the three highest functions of a medical man: the healing of the sick, to research and to teaching, and he was one of the last of the great minds in medicine that divided their energies impartially between these three.

Francis Delafield, the son of Edward Delafield and Julia Floyd, was born in New York City August 3, 1841. He was graduated from Yale College in 1860, immediately entering the College of Physicians and Surgeons, New York, from which he was graduated in 1863. He continued his medical studies in Europe with exceptional diligence and steadfastness, and returned to New York one of the best equipped physicians of his day. The importance of postmortem study was being recognized as it had not been before, owing, in great measure, to the influence of Rudolf Virchow, whose cellular pathology and whose teachings had profoundly affected medical science. Delafield, already possessed of a fondness both for practice and for teaching, had acquired in Germany a conviction of the overwhelming importance of practical studies in pathological anatomy. He at once began to devote much of his time to work in the deadhouse, and soon became recognized as an authority in pathology. He became curator to Bellevue Hospital in 1866, and visiting physician there in 1875.

He devoted himself to his professional work with remarkable fidelity, allowing no social or other attraction to draw him aside. By 1876 he already took a commanding position among the men of his own age in medicine and had become recognized as an able diagnostician. In that year he was made adjunct professor of pathology and the practice of medicine in the College of Physicians and Surgeons, New York City, and in 1882, on the retirement of Alonzo Clark (q. v.), he was made full professor. At that time pathology was not a separate department of medicine, but like etiology, prognosis or diagnosis, was merely one of the parts into which it was divided for the sake of convenience of teaching, but it was rapidly coming to attract the interest of the abler minds, who saw that it was the foundation upon which the whole science rested, and they saw too that without it, practice became little better than guesswork.

In 1877 a fund was raised among the alumni of the College of Physicians and Surgeons for the purpose of "advancing the standard of medicine" there, and through his influence it was devoted to the establishment and maintenance of a pathological laboratory in connection with the college, he being appointed director.

In 1872 he published a "Handbook of Post-Mortem Examinations and Morbid Anatomy," and in 1878, together with Dr. Charles F. Stillman, a manual of physical diagnosis. In 1882 he retired from the directorship of the laboratory, resigning it to Dr. T. Mitchell Prudden, (q. v.) who was associated with him in the revision and enlargement of the handbook, which went through a great many editions and was for many years the standard textbook on this subject in America. In 1882 he undertook the study and classification of pneumonia from the point of view of pathological anatomy, and was among the first to insist upon the essential difference between acute lobar pneumonia and broncho-pneumonia. He then turned his attention to the kidneys and developed a classification of the diseases and lesions of these organs. He next took up the diseases of the colon. In all of these fields he used the same painstaking methods; careful abstracting of clinical histories and equally careful study of the corresponding organs in the deadhouse and laboratory. In 1890 Yale University conferred the degree of LL. D. upon him.

Unfortunately his work was done just as the new sciences of bacteriology and biochemistry were being born, and the remarkable changes in medical science that took place in consequence of this, impaired the permanence of his results. Nevertheless, there can be no doubt that the clinical and pathological labors of Delafield constitute one of the important foundation stones upon which modern medical science rests, and though they may in the

future be lost to sight, and even though his name may be neglected, yet they will none the less always be an essential and necessary part of the complex structure which we call "medical science." Moreover, in their day they were of inestimable immediate service to the profession, steadying medical thought and giving physicians something concrete to lean upon. For all knew that Delafield's conclusions were honest—unwavering intellectual honesty was the keynote of his character. This same honesty helped to make him the remarkable effective teacher he was. He taught his own conclusions, and his own classifications, to a degree that probably has been rarely equalled, and to this perhaps he owed much of his impressiveness as a lecturer. He always taught the medicine of Delafield and not the medicine of the library, and no student ever doubted him or questioned him. He had a wonderful way of putting things so that one remembered them, and yet there was no oratory, and never levity.

Early in his academic life he decided it was best to retire from his professional and hospital duties at the age of sixty, and it was characteristic of him that, unlike most men, when this time came, he carried out the program he had planned in spite of being in perfect physical and mental vigor, and against the wishes of all his fellow teachers. He continued to practice as a consultant with marked success until failing health compelled him reluctantly to become less active in the profession, which had been almost his sole interest, but he never retired.

He died July 17, 1915, at the age of 73.

WALTER B. JAMES.

DELAMATER, John (1787-1867), peripatetic lecturer on medicine and organizer of the Western Reserve Medical Department. His family, of Huguenot descent, had settled in Holland as refugees at an early date. His father was a farmer, and John, born in Chatham, New York, April 18, 1787, was expected to follow the same vocation, but a slight though permanent injury received in early life incapacitated him for the severe labor of the farm, and it was decided to educate him for a profession. His father preferred the ministry; he himself inclined to law, and perhaps as a compromise between two opinions, the boy finally decided to study medicine. Of the details of his medical education we have, however, no information. On December 1, 1806, John Delamater was licensed to practice medicine by the Medical Society of Oswego County, New York, and returned immediately to Chatham, his birthplace, entering into a partnership with Dr. Dorr, his uncle. After a sojourn in Chatham of two and one-half years, he removed to Florida, in Montgomery County, New York, and began a medical career, which in diversity, strenuousness and duration rivaled that of the famous Daniel Drake, (q. v.). In 1814 we find Delamater practicing in Albany, New York, but in the following year he removed to Sheffield, Berkshire County, Massachusetts, where his success brought him to the notice of the faculty of the Berkshire Medical Institution situated at Pittsfield in the same county. Accordingly, in 1823, he was called to the chair of materia medica and pharmacy in that institution, and for three years delivered the annual courses of lectures. His distinguished success as a teacher led to his call in 1827 to the chair of surgery in the College of Physicians and Surgeons of the western district of New York, situated at Fairfield in Herkimer County. Here for the next ten years Dr. Delamater worked, and from 1837 to 1839 he lectured upon the theory and practice of physic and on female diseases, and during the session of 1839-40 on the theory and practice of physic and midwifery. At this time the impaired health of his family induced him to change his locality, and in 1841 he removed to Geneva, New York, where from 1841 to 1843 he lectured on general pathology and materia medica in Geneva College. But the activity thus far depicted by no means covers the entire facts of his medical career up to this point, and he himself says: "Within the period intervening between the years 1828 and 1842, both inclusive, I accepted appointments and, in accordance therewith, delivered the following lectures in addition to the annual courses above named, viz: six courses on the principles and practice of physic in the Medical School of Maine, connected with Bowdoin College; one course on materia medica and three courses on the principles and practice of physic in the Medical School of New Hampshire, connected with Dartmouth College; one course of ten weeks —twelve lectures weekly—on surgery and midwifery in the University of Vermont; and four courses on pathological anatomy, midwifery and the theory and practice of physic in the University of Willoughby, at Willoughby, Ohio; and, finally, in January and February, 1838, I delivered about sixty lectures on surgery in the Medical College of Ohio, located at Cincinnati, Ohio." Truly the cata-

logue reads like the diary of one of the peripatetic professors of the middle ages!

During the time he was lecturing in Geneva Dr. Delamater was also occupying the chairs of pathological anatomy and midwifery, or the theory and practice of physic, in the University of Willoughby, Ohio, and when, in 1843, the professors in the latter school resolved to remove to Cleveland and organize there a new medical school, Delamater, was naturally, the leading spirit in the transfer and occupied for seventeen years the chairs of general pathology and midwifery and the diseases of women in the Western Reserve College, thus founded. In 1860, at the age of seventy-three, he resigned active and formal duty as a teacher, but occasionally filled temporary vacancies in the staff of the college until almost the close of his busy and useful life. After his death, the outlines of no less than seventy courses of lectures, in almost all departments of medicine, were found among his papers, and it is believed that during his life he had assisted in the medical education of as many young men as any physician of his day. On his retirement Dr. Delamater was honored with the title of professor emeritus, and received also the honorary LL. D. from the Western Reserve University. His son, Dr. Jacob G. Delamater, was professor of anatomy and physiology in the Cleveland Medical College, 1843-1861.

As a writer his communications are characterized by clearness of thought and expression. Fortunately we have several specimens of his style preserved in the medical journals of his day. Among these we mention: "On Detecting and Diagnosing the Simpler Forms of Valvular Diseases of the Heart" (Cleveland "Medical Gazette," December, 1859), "Reminiscences of Country Surgery" (Ibid., May, 1860), two letters on the subject of ovariotomy addressed to Dr. J. W. Hamilton and published in the "Transactions of the Ohio State Medical Society" for 1859, and most remarkable of all, a series of papers entitled, simply, "Dr. Fisher's Case," but containing, in addition to a fairly complete medical autobiography, an exhaustive discussion of the pathology and treatment of inversion of the womb. (Cleveland "Medical Gazette," April, 1860, et seq.)

An excellent portrait of Dr. Delamater is found in the faculty room of the medical department of the Western Reserve University, another of less excellence in the parlors of the Cleveland Medical Library Association, and good engravings of his quaint features are published in "Cleave's Cyclopedia" and elsewhere.

HENRY E. HANDERSON.

DE NANCREDE, Charles Beylard Guerard (1847-1921), surgeon of Philadelphia. A French Huguenot of intense republican sympathies, Paul Joseph de Nancrede, born in 1761 at Hericy in France, first came to the United States as a lieutenant in the French army under Count de Rochambeau during the American Revolution and later settled here with his wife. He had three sons, two of whom were doctors. To one son, Thomas Dixie Nancrede, and Mary Elizabeth Bull, Charles Beylard Guerard Nancrede was born December 30, 1847, in Philadelphia, Pennsylvania. Charles' early education was obtained in private classical schools and at a military academy where he was one of those chosen to fire the salutes over Lincoln's grave. The military career he intensely desired being opposed by his father, he studied at the University of Pennsylvania from 1864 to 1866 and was graduated from the medical department in 1869. After graduation, Dr. de Nancrede entered upon the general practice of medicine in Philadelphia, which he subsequently relinquished for surgery.

For thirteen years, Nancrede was assistant demonstrator of anatomy in the University of Pennsylvania, later becoming acting demonstrator and lecturer on regional anatomy and osteo-syndesmology. As indicating the variety and scope of his attainments we may list the following positions he filled: professor of surgery and clinical surgery and surgeon to the University Hospital; assistant to the professor of physiology of the Philadelphia Dental College; resident physician and attending surgeon at the Episcopal Hospital; surgeon and clinical lecturer on rectal and general surgery in the Jefferson Hospital Medical College; attending surgeon at St. Christopher's Hospital for Crippled Children, and chief of clinic in one of the eye and ear services during 1871-72 in the University of Pennsylvania. He was also connected with the Philadelphia Polyclinic, of which he later became emeritus professor of general and orthopedic surgery. In 1889, the University of Michigan elected him to the chair of surgery, which he held until his retirement in 1917. Coming from better equipped hospitals in the East to primitive wooden barracks, without instruments and nurses, he left to the University a well-organized department of surgery. From 1900 to 1913, he was also professor of surgery and

clinical surgery at Dartmouth Medical College during his summer vacations, becoming emeritus professor in 1913. In 1917, he retired from active service in the University of Michigan with the title, emeritus professor of surgery.

Several honorary degrees were conferred upon Prof. de Nancrede, namely: A. B. as of the class of 1868 by the University of Pennsylvania in 1893; A. M. (hon.) by the University of Michigan in 1893 and by the University of Pennsylvania in 1895; M. D. as for a regular graduate by the Jefferson Medical College in 1883, and LL. D. by Jefferson Medical College in 1898 and by the University of Michigan in 1919. He was vice-president (1889-1890) and president (1908-1909) of the American Surgical Association; fellow of the American College of Surgeons; corresponding member of the Royal Academy of Medicine of Rome; recorder and editor of the Transactions of the Pathological Society of Philadelphia; member of the International Society of Surgery, the Philadelphia Academy of Natural Sciences, and the International Congress at Madrid, Spain. As chief surgeon, U. S. V., with the rank of major, his military leaning was indulged by active service in Cuba during the Spanish American War, and for services to the wounded under fire on July 1, 1898, he was recommended for the rank of brevet lieutenant colonel. When the United States entered the World War, his regret was keen that he could not actively participate and was not softened by his appointment in April, 1917, as major in the Officers' Reserve Corps, U. S. A.

Dr. de Nancrede was the first surgeon in Philadelphia to operate for bullet wounds of the stomach and intestines and one of the first to apply practically the Listerian procedure, thus, with Keen and Mears, helping to introduce antiseptic surgery in the United States. He was also one of the first to operate for cerebral abscess and cortical epilepsy and one of the earliest operators for appendicitis. He went through the era of acute discussion as to antiseptic surgery or aseptic surgery and returned to antiseptic methods during the late war.

Many papers and monographs on anatomical, pathological, and surgical subjects were contributed by him to the medical literature. He wrote "Essentials of Anatomy" (1887), "Principles of Surgery" (1899), "Lectures on the Principles of Surgery" (1898) and "American Practice of Surgery" (1908). With his brother-in-law, Frederick P. Henry (q. v.), he wrote on blood cell counting in 1879, and he was joint author of Wood's "Handbook of the Medical Sciences" (1887), Burnett's "Cyclopedia of Diseases of the Nose, and Throat," (1893), the "International Encyclopedia of Surgery" (1881-1895), the "Cyclopedia of Diseases of Children" (1890), "Dennis' System of Surgery" (1895), Park's "System of Surgery by American Authors" (1895), "American Textbook of Surgery" (1892), and Bryant and Buck's "American Practice of Surgery" (1908).

A surgeon and teacher primarily, de Nancrede was a fair artist, art being a resource of great value in illustrating his surgical ideas and in teaching. He was an active member of choral societies and church choirs. Toward the end of his life, nearly blind and partly paralyzed, music was his solace. While in Ann Arbor, he was so active in promoting sports that he was known to the students as the "Father of Athletics."

On June 3, 1872, he married Alice Howard Dunnington of Baltimore, Maryland, and of their nine children, five survived. After the maturity of his children, the family name "de Nancrede" was legally restored because of complications concerning family property in France.

After twenty-eight years of continuous and faithful service to the School of Medicine and Surgery of the University of Michigan, de Nancrede died on April 12, 1921. Military in bearing and in cast of mind, proud of his Gallic ancestry, with broad interests and fixed convictions, his personality was distinctly individual.

DENISON, Charles (1845-1909), climatologist, of Denver, Colorado, was born in Royalton, Vermont, November 1, 1845. His parents were Dr. Joseph Adam and Eliza Skinner Denison of Royalton, both of New England stock. He was one of the most active pioneers in the war against tuberculosis, apparently insuperable obstacles only increasing his untiring energy. He was graduated from the University of Vermont in 1859, and while in Hartford, in 1873, tuberculosis with pulmonary hemorrhages set in, and he removed to Denver and devoted his attention to tht study of climatology with special reference to tuberculosis. For fourteen years he was professor of diseases of the chest and climatology in the University of Denver, and afterwards emeritus professor. He was the author of a valuable work on the climate of Colorado,

entitled "Rocky Mountain Health Resorts," and of a series of climatic maps of the United States. Dr. Denison took part in the International Congress on tuberculosis in London in 1901, and was a frequent contributor to the "Transactions of the Climatological Association," in which he was deeply interested from the date of its organization.

Charles Denison married Ella H. Strong, daughter of Gen. Henry Strong, December 26, 1878, and three children survived infancy—Clara, Elsa, and a son, Dr. Henry S. Denison, of Denver.

Charles Denison died in Denver, Colorado, on January 10, 1909, of gangrene following cholecystitis.

DAVINA WATERSON.

DERBY, George (1819-1874), hygienist, was born in Salem, Massachusetts, February 13, 1819. He was graduated at Harvard University in 1838 and at Harvard Medical School in 1843, then settled to practice in Boston, Massachusetts. In 1861 he was commissioned surgeon in the 23rd Massachusetts Volunteers; he was medical inspector of the Department of Virginia and North Carolina; later surgeon-in-chief of divisions and when his health failed was brevetted lieutenant-colonel of volunteers and in 1868 given command of the National Soldiers' Home at Togus, Maine. He returned to Boston in 1866, became a surgeon to the Boston City Hospital for two years and aided in establishing a State Board of Health, of which he was secretary and executive officer. From 1867 to 1871 he was lecturer at Harvard Medical School. In 1871 he was appointed to the new professorship of hygiene at Harvard, holding the position until his death on June 20, 1874. He was author of "Annual Reports Massachusetts State Board of Health, 1866-1873", also "Anthracite and Health."

DERBY, Hasket (1835-1914), Boston ophthalmologist, was born in that city, June 29, 1835. His family had been well known and influential in Salem for many years. He studied at Amherst College, from which he was graduated in 1855, and three years later took his degree from Harvard Medical School. Then he served as house pupil in the Massachusetts General Hospital for one year, after which he went abroad for four years. While abroad he studied general medicine for eighteen months, but devoted the rest of his time to the study of the eye under that brilliant group of distinguished men who were making ophthalmology a scientific undertaking at that time. In Vienna he worked under von Arlt and Jaeger; in Berlin von Graefe was his master. He also studied under Bowman and Critchett, Greenfield and Hutchinson in London, under Donders in Utrecht, and with Desmarres and Sichel in Paris. Von Graefe, however, had the greatest influence upon his subsequent career and he placed a bust of the distinguished German in his consulting room at the Massachusetts Charitable Eye and Ear Infirmary on his return.

While Dr. Derby was in Europe the Civil War broke out and he was anxious to enter the military service. He completed his studies, however, and on his return volunteered and served under the Sanitary Commission at Fortress Monroe.

In 1862 Dr. Derby settled in Boston and contrary to the custom of the time he did not begin to practice general medicine but devoted himself exclusively to ophthalmology. He was a pure specialist from the beginning. He was also one of the earliest to separate his business from his home, occupying an office in another street. He had a large private practice and his patients had great confidence in him. He was an excellent diagnostician, being prompt, accurate, resourceful and observing. He was also very positive in his opinions and as Dr. David W. Cheever (q. v.) has written, "What he knew, he knew he knew; and there was no latitude allowed." Not only did he know, but he acted on this knowledge. For example, before the discovery of local anesthesia, he operated upon most cases of senile cataract without any anesthetic. Realizing that the nausea and excitement which followed the use of ether were bad for the patient in these cases he got along without it. He inspired his patients with such faith, and his control over them was so great that in very few cases was he obliged to give ether. His skill was very great, and he did a large amount of operating.

Besides his large private practice he devoted himself to hospital service, being ophthalmic surgeon of the Massachusetts Charitable Eye and Ear Infirmary for twenty-five years. He founded the Eye Clinic at the Carney Hospital, and for five years was the only attending ophthalmologist. He was a strict disciplinarian, but he did not fail to recognize ability in his junior officers and always gave them credit for work well done and did what he could to help them in their

private practice. He took great interest in the infirmary and all that pertained to it and was active in forwarding its work.

His studies abroad made him very familiar with both German and French, and he was able to read with ease both languages and to keep abreast of foreign methods. He wrote much in a forceful and practical way, many of his writings appearing in the Transactions of the American Ophthalmological Society and in the "Boston Medical and Surgical Journal." He also had a cultivated taste for the English classics and collected a fine library. He was fond of nature and did much for the development of Mount Desert, Maine. There he was also instrumental in building a rural church, for he was a man of strong religious convictions.

Besides his large private and public practice he allied himself with many civic institutions. For ten years he was a trustee of the Children's Institutions Department of the city of Boston; he was one of the original board of visiting physicians of the Danvers Hospital for the Insane. He was a fellow of the Massachusetts Medical Society, and for some years lecturer on ophthalmology at the Harvard Medical School, and one of the organizers of the New England Ophthalmological Society, of which he was the first president. He was also one of the founders of the American Ophthalmological Society, and later became its president. For many years he was a member of the Deutsche Ophthalmologische Gesellschaft, and had many friends among its members.

Dr. Derby died August 21, 1914, at the age of 79, his health not having been good for several years previously. He was survived by his widow, who was Miss Sarah Mason, and by a daughter and five sons, one of them, Dr. George S. Derby, following in his father's footsteps in the practice of ophthalmology.

GEORGE S. DERBY.

DE ROALDES, Arthur Washington (1849-1918), a blind otolaryngologist and founder of the New Orleans Eye, Ear, Nose and Throat Hospital, was born in Opelousas, Louisiana, January 25, 1849, the son of Dr. Abel and Coralie Testas de Folmont De Roaldes. The de Folmonts were an old South-of-France family. He was educated by the Jesuits in France, "bachellier-des-lettres" in 1865 and then "bachellier-des-sciences." Returning to America, he received his medical degree at the University of Louisiana in 1869 and went back to France for further medical study. His "ad eundem" was received at the University of Paris in 1870. He served with distinction throughout the Franco-Prussian war, rescuing at one time seventeen wounded from a burning house in Bazailles during the heat of battle. In 1872 he returned to New Orleans, and was soon widely known as a general practitioner. In 1887-89 Dr. De Roaldes made a special study of the eye, ear, nose and throat in the hospitals of Europe, and returning again to New Orleans, began to practice otology and laryngology. In 1889 he founded the New Orleans Eye, Ear, Nose and Throat Hospital, also known as "The Senses Hospital," and was a trustee and its surgeon-in-chief for many years. In 1890 he was made professor of diseases of the ear, nose, and throat in the New Orleans Polyclinic.

We cannot enumerate all the honors which came to De Roaldes; he was made a Knight of the Legion of Honor, and when he founded the Eye, Ear, Nose and Throat Hospital, the French government promoted him and made him a grand commander in the Legion. He was a Fellow of the American College of Surgeons, a member of the Institute of Social Sciences, and Chevalier of the Italian Order of St. Maurice and St. Lazare, and commander of the Papal Order of St. Gregory the Great.

He was a man of medium height and weight, of a dark complexion and brown eyes and a Van Dyke beard. His manner was alert, prompt and energetic.

He was twice married, first in 1873 to Laura Pandely, who died in 1874, and in 1885 to Anna E. Miller, who survived him. For the last twenty years of life he was wholly blind, "but," as a friend declared, "despite this handicap he continued the practice of his profession as a specialist, working in surgery by the hands of others. A notable case of his almost uncanny skill, despite his blindness, occurred some years ago, in mastoid disease. The surgery to be employed was of the most delicate nature, and the surgeon assisting Dr. De Roaldes was operating with extreme caution. After the operation had proceeded to the point the operator thought could be followed with safety to the patient, the blind surgeon gently touched the affected part, and said to his coadjutor, "I would go deeper here." A further incision was made, and the need for the additional cut, which exposed diseased bone, was shown.

He died at his home in New Orleans, June 13, 1918.

THOMAS HALL SHASTID.

DeRosset Family

This family furnished North Carolina with six members of the medical profession, all living for the most part in the city of Wilmington and descendants of Armand John DeRosset.

The members of the family practiced continuously for one hundred and forty-six years.

DeROSSET, Armand John, (1695-1760), held the degree of M. D. from the University of Basel.

He was a Huguenot and came from Narbonne, France, to New Liverpool, North Carolina, now called Wilmington, before 1735, with his wife and three children. He founded St. James Episcopal Church and became a leader. One son, Moses John DeRosset (1726-1767), raised a company of troops for service beyond the borders and was mayor of the town.

DeROSSETT, Armand John, 2d (1767-1859), was graduated from Princeton, at that time the College of New Jersey, in 1787 and received his medical degree in 1790 from the University of Pennsylvania. He was a pupil and a great friend of Benjamin Rush; there is preserved an interesting correspondence between them. Dr. DeRossett entered on an extensive practice in Wilmington and kept in active service for sixty-nine years. His reputation extended over the South. His last work was attending a woman of sixty-one years in confinement. For many years he was port physician of Wilmington.

DeROSSETT, Armand John, 3d (1824-1896), was the son of Moses John, 2d, and practiced medicine in Wilmington.

DeROSSETT, Moses John, 2d (1796-1826), had his academic degree from the University of North Carolina in 1816 and his medical diploma from the College of Physicians and Surgeons, New York, in 1818. He practiced medicine in co-partnership with his father. In the yellow-fever epidemic of 1821 he was particularly active and skilful. Though he practiced but six years before his untimely end, he left a splendid reputation.

DeROSSETT, Moses John, 3d (1838-1881), was born in Pittsboro, North Carolina, July 4, 1838. His early schooling was in the city of Geneva, Switzerland, in Diedrich's Academy. After three years he spent six months in Cologne and returned from Europe in 1857, having chosen medicine as his profession. At the age of twenty-one he received his M. D. from the University of New York (1860). He was resident physician in Bellevue Hospital until the Civil War broke out, when he became assistant surgeon in the Confederate Army. After the war he settled in Baltimore where he was appointed adjunct to the professor of chemistry in the University of Maryland and professor of chemistry in the Dental School. In 1837 he removed to North Carolina to practice diseases of the eye and ear, but in a few years went to New York, where he lived until just before his death, which occurred May 1, 1881, in Wilmington, N. C. Dr. DeRosset was a remarkable student, possessing a retentive memory and high intellectual talents. He was a voluminous writer. He joined Thomas F. Wood (q. v.) in 1878 in founding the "North Carolina Medical Journal" and continued as its editor until 1881. He translated Bouchardat's "Annuaire" (1867) and contributed freely to journals. His last paper appeared in the "American Journal of the Medical Sciences," October, 1878, and was entitled "The Muscle of Accommodation and Its Mode of Action."

DESROSIERS, Hughes Evariste (1853-1899), professor of materia medica in Laval University, Montreal, Editor, was born at St. Hughes, Quebec, July 9, 1853, the son of Dr. Jean-Baptiste and Emerande Carties Desrosiers. After graduating at the College de St. Hyacinthe he studied medicine at Laval University and received the degree of doctor of medicine there in 1876. Practice was begun under his father at St. Marcel but after a year he established himself in Montreal where he practiced until he suffered a stroke of paralysis in the fall of 1895. His death took place February 7, 1899.

Becoming a member of the faculty of Laval in 1878 he occupied the chair of materia medica and served as secretary of the faculty. In 1880 he was one of the founders of Notre Dame Hospital, acted as interne and then as visiting physician. Two years later he became editor of the "Union Medicale du Canada," a position he held until 1895; from 1888 to 1895 he occupied the chair of materia medica in the College of Pharmacy. Having prepared a treatise on materia medica and therapeutics for the press, a fire destroyed the book in the printing establishment just as it

was ready to appear and the work had to be begun anew. A revised work was published in 1892 and a supplement two years later.

Dr. Desrosiers married his cousin, Miss Lasalle, in 1883 and they had five children, three of them surviving their father.

DETMOLD, William Ludwig (1808-1894), of New York City, pioneer orthopedic surgeon, was a native of Hanover, Germany, where he was born December 27, 1808. After taking his doctorate in medicine at the University of Göttingen in 1830 he served as an Army surgeon until he emigrated to New York City in 1837. There he established an orthopedic clinic as early as 1841, having previously published an article on orthopedic surgery in the "American Journal of The Medical Sciences," in 1837. He wrote infrequently for the medical journals and managed his dispensary until the opening of the Civil War, when he assisted in the organization of the United States Army Medical Corps and, in 1862, became professor of military surgery and hygiene in the College of Physicians and Surgeons, New York. During the war he introduced a knife and fork for one-armed men, that was supplied by the United States Government as the "Detmold knife." Detmold held his professorship until 1865 when the title was changed to "Professor of Clinical and Military Surgery." The war being over military surgery lost its prominence and Dr. Detmold was made an emeritus professor in 1866.

He published a book on the treatment of club foot and analogous subjects that was one of the milestones of the pre-Listerian epochs of orthopedics. In 1884 he was a founder and the first president of the New York County Medical Association. At one time he was president of the Medical Relief Fund for Widows and Orphans.

His death from paralysis occurred at his home in New York, December 26, 1894, one day before his eighty-sixth birthday.

DETWILLER, Henry (1795-1887), Pennsylvania physician, and botanist, a convert to homeopathy after twenty years in practice, was also a natural scientist. He was born in Langenbruck, County Basel, Switzerland, December 13, 1795, beginning to study medicine when only fifteen under Dr. Laurentius Senor and matriculating at the University of Freiburg. Being very fond of natural science he was seized with a desire to explore the regions of America, so left Basel in 1817 and acted as ship's doctor to several hundred emigrants who went as far as Amsterdam. Passing an examination at the medical board there he obtained the same post on the "John of Baltimore," taking over some four hundred emigrants to Boston. A prolongation of the voyage round Bermuda in July heat brought on sickness, and when Philadelphia was reached Detwiller was left there in charge of the quarantined vessel and of another in like plight. While in Philadelphia he became acquainted with a French physician, Dr. Monges, and was often called in consultation for the family of General Vaudame and other French refugees. On his advice, added to that of Joseph Bonaparte, he settled in Pennsylvania, choosing Allentown, then having moved, to Hellertown, Pennsylvania, he began seven years later to practice homeopathy. In 1836 he revisited his alma mater and took the degree which his youth had prevented his taking before going to America. During his long residence at Hellertown he found time for natural history and collected his "Flora Sauconensis" chiefly from the upper and lower Saucon. His ornithological specimens, the mammals, reptiliae, cheloniae, etc., represent nearly the whole fauna of Pennsylvania. The greater part was donated to public institutions and museums in Europe, especially the University of Basel. He was one of the organizers of the American Institute of Homeopathy and assisted in forming the Pennsylvania State Homeopathic Society.

He died at the age of 92, in 1887, at Easton, Pennsylvania, where he had practiced over thirty years. His wife, whom he married in 1818, was Elizabeth Appel, of the neighborhood, who died seventeen years later, leaving three sons and four daughters.

DEWEES, William Potts (1768-1841), Philadelphia obstetrician, was so famous that no parturient woman of the time considered herself safe in other hands. His great-grandparents were among the early Swedish immigrants at Delaware Bay. His mother was the daughter of an Englishman, Thomas Potts, who bought much land here and founded Pottstown on the Schuylkill, where William was born on the fifth of May, 1768. Early left fatherless he had only an ordinary school education, and after attending medical lectures in the University of Pennsylvania began practice with an M. B. degree when only twenty-one, gaining patients by his talents and his handsome face and winning ways. He specialized in midwifery and did good work

in days when Mrs. Gamp was nurse. There was no systematic teaching in obstetrics and Dewees grew restless under this negligence, and collecting a band of pupils gave lectures on midwifery and strengthened his position in 1806 by taking his M. D. from the University of Pennsylvania with a thesis on "Lessening Pain in Parturition." Shippen notes this thesis as marking an era in the history of medicine. Finally, in 1810, after Wistar, James Chapman and Dewees had spent illspared time in pleading for it, a chair of midwifery was established in the university with the provision "it shall not be necessary, in order to obtain the degree of doctor of medicine, that the student shall attend the professor of midwifery." T. C. James (q. v.) was chosen the first professor, Dewees becoming adjunct professor in 1825 and professor in 1834.

He had married Martha, daughter of a Dr. Rogers, of New England, but she died young, and in 1802 Deweees married Mary Lorrain, a Philadelphian, and had three daughters and five sons. An attack of pulmonary hemorrhage in 1812 made him resign his work and invest his money in land at Phillipsburgh and retire there. His money was lost but his health restored and he came back to gain speedily his old position and popularity, though in 1834 he had an apoplectic attack and the next year had to resign his professorship. S. W. Williams in his American Medical Biography speaks of his "relaxation in the pleasures arising from social intercourse necessitated by want of sleep, irregular hours and laborious occupation." On the eighteenth of May, 1841, worn out by anxiety and disease, he died in Philadelphia, at the age of seventy-three, leaving behind good text-books as his lasting memorial.

In 1824 appeared his "System of Midwifery," which ran through twelve editions. "It deviated from the principles of the English authorities, and, while resting upon those of Baudelocque, who was the exponent of the French school of obstetrics, presented so much of original thought and observation as to bestow a high reputation upon its author." Other works of his were: "A Treatise on the Physical and Medical Treatment of Children," 1825 (ten editions); "On the Diseases of Females," 1826, also ten editions; and "Practice of Medicine," 1830.

DEWEY, Chester (1784-1867), botanist, geologist, chemist and lecturer in medical colleges, was born in Sheffield, Massachusetts, October 25, 1784, son of Stephen Dewey and Elizabeth Owen; he was descended from Thomas Dewey, first settler of that name in Dorchester, Massachusetts, about 1634. He was graduated A. B. at Williams College in 1806, and studied divinity under Dr. Stephen West of Stockbridge, Mass.; was licensed to preach, and settled as minister in Tyringham, Mass.; the next year he was called to Williams College as tutor, and thus began a long career as a teacher. He was professor of mathematics and natural philosophy in Williams College (1810-1827); principal of Berkshire Gymnasium in Pittsfield, Mass. (1827-1836); principal of the High School, afterwards known as the Collegiate Institute, in Rochester, New York (1836-1850); professor of chemistry and the natural sciences in the University of Rochester, N. Y. (1850-1861) and emeritus professor from 1861 until his death. His connection with the medical profession was as teacher, not as practitioner. He was professor of chemistry, botany and natural philosophy in the Berkshire Medical Institution from 1823 to 1852 and lecturer in the Medical School in Woodstock, Vermont, from 1842 to 1849. He was chaplain of the First Massachusetts Infantry in the war of 1812. He never abandoned the ministry, but for more than fifty years preached in many places as his services were needed in the churches.

He was the author of "History of Berkshire County" (1829) (in part); and of "Herbaceous Plants of Massachusetts" (1840), published by the State. He contributed to O'Reilly's "History of Rochester" (1838), to "Silliman's Journal of Science" and other scientific and to lay periodicals. For sixty years he regularly recorded meteorological observations. Yale University conferred on him the degree of A. M. in 1809; Williams gave him A. M. in 1909, honorary M. D. in 1825, and LL. D. in 1850; in 1838 he received a D. D. from Union College.

Early in life Dr. Dewey became an enthusiastic student of botany, and contributed very largely to the scientific knowledge of the carices. Dr. Asa Gray (q. v.) classed him with Schweinitz and Torrey, (q. v.) and speaks of his work on Caricography as an "elaborate monograph patiently prosecuted through more than forty years." He further says that in connection with the two botanists above mentioned "he laid the foundation and ensured the popularity of the study of the sedges in this country." His "Caricography," begun in 1824, was continued down to the

close of 1866, when it terminated with a general index to species.

When Dr. Dewey left college in 1806, a remarkable impulse was just being given to scientific inquiry, resulting in an almost simultaneous development of chemistry, zoology, botany and geology. As a teacher of the Natural Sciences he kept fully informed and abreast of the times, and this was the case up to the end of his life. All through his career he was in correspondence with the most eminent leaders in scientific investigation, both in this country and abroad. Up to 1847 the text books on botany in common use were arranged after the Linnaean method, but the natural system had been slowly making its way, and Dr. Dewey was in full accord with it. Wood's "Class-book of Botany," the first in this country containing a flora arranged with the natural orders, was dedicated to Dr. Dewey, and in the preface the author says: "To the Rev. Professor Chester Dewey, to whom I am permitted to dedicate this volume, I am indebted for that part of the flora which relates to the difficult, yet deeply interesting, family of the carices. He has not only granted me access to his former excellent monograph of that genus, but has prepared the article for the present work with his own hand."

In his work in Rochester, Dr. Dewey examined and re-examined the flora of the region, while at the same time he was training the youth to share his interest in botanical pursuits. His last labors were the orderly arrangement of his large collection of sedges which had been accumulating on his hands for so many years. This collection, at his request, went to Williams College. His life was one of unremitting toil in many fields of research. He had an insatiate desire to acquire knowledge, then to disseminate it among the people in language adapted to their understanding.

Dr. Dewey married Sarah Dewey in 1810; they had five children. She died in 1823 and in 1825 he married Olivia Hart Pomeroy of Pittsfield, Mass.; they had ten children.

Dr. Dewey, active in scientific observation almost to the day of his death, died in Rochester, December 15, 1867.

FLORENCE BECKWITH.

DEWOLF, James Ratchford (1819-1901), Nova Scotia alienist, was born at Wolfville, Nova Scotia, in 1819. His education was obtained at Horton Academy, and his professional training at Winsor, N. S., and at Edinburgh University, from which he was graduated M. D. in 1841, and in the same year obtained the L. R. C. S. (Edinburgh). He was in general practice from the time of his graduation in 1841 at Kentville, N. S., and at Brigus, Newfoundland until 1844, when he settled in Halifax. There he practiced to the time of his appointment to the superintendency of the Nova Scotia Hospital for the Insane in 1857, and, being fully imbued with the then developing idea that kindness, tact, appeal to the patient's sense of honor and of the esthetic counted for much in promoting recovery, he at once instituted at the hospital a system of treatment which was free from the restraint, seclusion and abuses even at that time still common, and he soon established for the Nova Scotia Hospital the reputation of being one of the most advanced institutions in the world for treatment. He devoted himself to his calling with a rare degree of unselfishness, and conscientiously labored in season and out for what he considered would lead to better the conditions of the insane. After twenty years of active work of this kind he retired to private life, but never lost interest in their cause. Up to the very last he continued to keep in touch with the literature of insanity and to follow closely the work of the hospital with whose history his name is so honorably associated. Dr. DeWolf's mission was undoubtedly the care of the insane, and the memory of his faithful labors will not perish. He died at Halifax in 1901.

He always took an active interest in the organization of the Medical Society of Nova Scotia, was its first secretary, and was chosen president in 1866.

Dr. DeWolf married Eleanor Reid Sandifer, of Cambridge, England, and had four children. His son, George H. H. DeWolf, studied medicine, and practiced in England and also for a short time in Nova Scotia.

DONALD A. CAMPBELL.

DEWOLF, Oscar Coleman (1835-1910), Chicago sanitarian, eldest son of Dr. Thaddeus DeWolf and grandson of Captain James DeWolf of the army of the Revolution, was born August 8, 1835, at Chester Center, in the Berkshire hills of Massachusetts. After a two years' course, he was graduated from the Berkshire Medical College, of Pittsfield, Mass., in 1857. He took another course of study at the University of the City of New York in 1858. After two years further study in Paris in the clinics of Nélaton, Trousseau and other

great teachers of the time, Dr. DeWolf returned to America at the opening of the Civil War and offered his services to his country. He was appointed assistant surgeon of the first Massachusetts Cavalry in 1861, and in 1862 became surgeon of the second Massachusetts Cavalry and served throughout the war. In 1866 he began the practice of medicine in Northampton, Mass., where he continued until 1874. During this time he delivered a course of lectures in a medical college in Cleveland, Ohio, and was given an honorary degree of Master of Arts by Williams College. He removed to Chicago in 1847 and engaged in active practice there. On July 19, 1876, the city council of Chicago passed an ordinance creating a department of health, to take the place of a board of health. This ordinance created the office of commissioner of health and placed the entire authority of the department in that official. Dr. DeWolf was appointed to this position by Mayor Heath, on the suggestion of Dr. Bowditch of Boston, and filled the position with conspicuous ability until 1889. His administration was characterized by courage, progress, intelligence and dignity. It gained for him a national and international reputation.

When Dr. DeWolf became commissioner of Health the Chicago River was very foul. Thousands of cattle were housed and fed at a distillery in the vicinity of Chicago Avenue and the north branch of the river. The offal was either dumped into the river, or carried in scows onto the lake and dumped there. The population was increasing at a rapid rate. Immigration was large, and Chicago, being a distributing point for the West, northwest and south-west, the immigrants here, for the first time since leaving their homes in Europe, unpacked their baggage and liberated any concealed contagion they carried with them. Small-pox was traced to this source and contagious diseases were rife. Health laws were limited in scope. Dr. DeWolf faced all these problems with rare courage, intelligence and method. He undertook a thorough reformation of the slaughtering and rendering business in the city. The fight with the packers was bitter and prolonged, but the final result was that all were driven outside the limits of the city and that healthful, sanitary measures were established.

In 1882 Dr. DeWolf was made professor of state medicine and public hygiene in the Chicago Medical College, now the medical department of Northwestern University, and filled the chair until 1892, when he resigned. In 1882 the British Association for the Advancement of Science made Dr. DeWolf an honorary member of their body, a compliment that had previously been paid to but two of his countrymen. When Dr. DeWolf retired from the office of commissioner of health, after more than twelve years of service, his practice was gone and his means limited. He was fifty-four years of age. His efforts to regain a practice were not immediately successful and he became interested by the claims of the "Keeley Cure" for drunkenness. He secured the right to use the remedy in England and in 1892 opened a house for the cure of inebriates in the west end of London. Patrons flocked to him. Officers of the army and navy, members of Parliament and many from the ranks of the nobility were his patients. He met the Prince of Wales and he prospered beyond his dreams. He received many letters from people of rank who regarded his work as a philanthropy and he so regarded it. He never knew the formula, but used it as Dr. Keeley, at Dwight, Illinois, directed.

Dr. DeWolf was married to Miss Harriet Lyman of Northampton, Massachusetts, in 1867. They had no children.

In 1903 he sold out his place and practice for a fortune, returned to America and took up his residence in his old home at Chester Center, Massachusetts. Here he gave a handsome library to the town and lived the life of a country gentleman, until his death, which occurred March 28, 1910.

DEXTER, Aaron (1750-1829), first professor of chemistry and materia medica in Harvard, a founder of Harvard Medical School, was born in Chelsea, Mass., November 11, 1750, a date which was to be "Armistice Day", 168 years later. Dexter was a peaceful man and could not have appeared on life's scene on a more appropriate day. His family came from Dedham, Mass. but were residents of Malden, nearer to Cambridge, at the time when Aaron entered Harvard College in 1772. He took his A. B. in 1776 and proceeded to study medicine with Samuel Danforth, a chemist, in Boston. From him he absorbed a love for the science. It has been said of him that during the Revolution he made several voyages to Europe as ship-surgeon, was captured and exchanged, but as his name does not appear among the medical men of the Revolution in J. M. Toner's book with

that title, it is probable he has been mistaken for William Dexter, who was surgeon's mate from Massachusetts. Aaron Dexter settled in Boston toward the close of the war and soon acquired a large practice. On May 22, 1783 he was chosen professor of chemistry and materia medica in the newly formed Harvard Medical School, he, with John Warren and Benjamin Waterhouse (q.v.) forming the entire faculty. He had been an incorporator of the Massachusetts Medical Society two years earlier and served it for ten years as librarian; he was one of five to plan the Massachusetts Humane Society for the resuscitation of those apparently drowned, a society which is in active life today, and he was a fellow of the American Academy of Arts and Sciences and of the Massachusetts Historical Society. In 1786 Harvard conferred on him her honorary M. D. and in 1805 Dartmouth did the same. In 1791 his professorship was endowed by the will of Major William Erving, he having been a patient and friend of Dexter, as the Erving Professorship of Chemistry and Materia Medica. Dr. Dexter became emeritus professor in 1816 and was succeeded by John Gorham. (q. v.)

Dexter was noted for his urbanity and kindliness in his dealings; he gave long and valuable service to the school he had helped to found, and also to many literary and charitable institutions.

He was married to Rebecca, daughter of Thomas Amory of Boston, early in his professional career. On February 28, 1829 he died of the infirmities of old age at his home in Cambridge, aged 78. Dr. Oliver Wendell Holmes related the following incident in his address at the one hundredth anniversary of the founding of Harvard Medical School, in 1883: At one of Dr. Dexter's lectures on chemistry he said to the class: "This experiment, gentlemen, is one of remarkable brilliancy. As I touch the powder you see before me with a drop of this fluid, it bursts into a sudden and brilliant flame,—" which it most emphatically does not do as he makes the contact. "Gentlemen," he says, with a serious smile, "the experiment has failed, but the principle, gentlemen, the principle remains as firm as the everlasting hills."

WALTER L. BURRAGE.

DICK, Elisha Cullen (1762?-1825), Virginia physician the elder of two sons, only children of Archibald and Mary Barnard Dick, was born on his father's farm in Delaware County, Pennsylvania, about 1762. His father was a farmer of abundant means, a man of influence and culture who contributed largely to the fund for the support of the Pennsylvania Hospital in 1771. A slave owner, he emancipated and made provision for his slaves by his will. He was assistant deputy quarter-master general of the army during the War of the Revolution. The boy's educational advantages were excellent, as he continued at school until he became a good classical scholar. He studied medicine with Dr. Benjamin Rush, (q. v.) and later with Dr. William Shippen, (q. v.) attending lectures at the University of Pennsylvania, and graduating M. B. March 21, 1782, receiving later his M. D. Two days after this his father died and he fell heir to one-half the paternal estate.

Dr. Dick selected Charleston, South Carolina, in which to practice, but stopped over in Alexandria, Virginia on his way, and was persuaded to remain in that city.

He was elected Mayor of Alexandria in 1804, and filled the office for several terms; was colonel of a cavalry regiment, and commanded in what is known as the Whiskey Insurrection in Pennsylvania. His eminence as a physician is attested by the fact that his services were constantly sought by his brother physicians, and that he was called in consultation with Dr. Craik in the last illness of the illustrious Washington. With Drs. Craik and Brown, the other consultant, he stood at the bedside of the "Father of his Country" when he breathed his last. He had the faculty of winning the confidence of his patients, being a man of polished manners, of musical and sympathetic voice, and quick in diagnosis and treatment. He rather avoided surgical cases. A great reader, he was familiar with obscure and rare cases, and the latest and best remedies.

In his later years the doctor purchased a farm near Alexandria, and lived there until his death in 1825. He was buried in the Friend's burying-ground in Alexandria, the grave being unmarked, as he had a great abhorrence of ostentation and worldly pride.

Only two articles on professional subjects are known to have been published by Dr. Dick. The first of these, "Yellow Fever at Alexandria," appeared in the "New York Medical Repository," vol. i, 1803, and is an account of the epidemic of yellow fever which occurred in Alexandria in 1803. The second, "Facts and Observations Relative to the Disease Cynanche Trachealis, or Croup," was

written in 1808, and was published in the "Philadelphia Medical and Physical Journal," vol. iii, p. 242.

There is in the library of the surgeon-general an autograph letter "On Treatment of a Case of Enterocolitis, called Cholera of Infants," by Dr. Dick, which is dated July 27, 1815, and is addressed to James H. Hooe, of Prince William County, Virginia.

Dr. Dick married October, 1783, Hannah Harman, daughter of Jacob Harman of Darby, Pennsylvania. Of the three children born to them, two lived to maturity, Archibald and Julia. Archibald graduated in medicine from the University of Pennsylvania in 1808.

A profile portrait likeness of the doctor, taken by St. Menin, is preserved in the gallery of the Alexandria-Washington Lodge, and another is in the Corcoran Art Gallery in Washington. The original copper-plate, engraved by St. Menin, was in the possession of Mrs. Arthur Crisfield, of Washington, great-granddaughter of Dr. Dick. There is still another portrait in the library of the surgeon-general of the army in Washington.

ROBERT M. SLAUGHTER.

DICKSON, John Robinson (1819-1882), founder of the Medical Department of Queens College, Canada, alienist, surgeon, pioneer and man of affairs, was born in Dungannon, County Tyrone, Ireland, November 15, 1819, son of David Dickson and Isabella Robinson. He studied medicine under W. McLean and at Belfast and Glasgow, and received a license to practice midwifery. In 1838 he moved to Canada and was a partner of John Hutchinson for two years; he then went to New York where he studied especially the treatment of club-foot and other deformities, and attended lectures at the New York University, receiving his M. D. (the first granted by the University) in 1842, when he returned to Canada to settle in Kingston. He was visiting physician to Kingston General Hospital (1846-1854); visiting surgeon (1854-1856); clinical lecturer (1856-1860); and in 1861 was made clinical lecturer on surgery.

Dickson was chiefly responsible for founding the Medical Department of Queen's College (1854), and was professor of surgery; his associates were, Horatio Yates, professor of medicine; John Stewart, professor of anatomy; John Meagher, professor of midwifery; Alexander Harvey, professor of materia medica. In 1860 he went to England and obtained from the London colleges recognition of medical degrees conferred by Queen's University. When the medical Department of Queen's University became the Royal College of Physicians and Surgeons (1866), he secured the charter and was made president and professor of surgery, holding these positions until his death. He was made a fellow of the College at its first convocation.

From 1854 to 1856 he was city alderman and during this time assisted in building a branch line of the Grand Trunk Railway from Kingston Junction to Kingston. In 1862 he became surgeon to the Provincial Penitentiary at Kingston, and during the eight years of service prepared careful and able "Prison Reports."

In 1869 Dickson was appointed superintendent of Rockwood Lunatic Asylum at Kingston (later "The Hospital for Insane, Kingston"), and he devoted himself to the study of the care of the insane, giving great attention to the preparation of his "Asylum Reports." He instituted many reforms, introduced voluntary labor for the inmates, and abolished the use of alcohol and beer, substituting coffee and other drinks. The first in Canada to adopt this latter measure, he was called before the Parliamentary Committee and in a long speech of clear reasoning won over those who opposed him. Ill-health forced him to resign in 1879.

He was a member of the General Council of Medical Education and Registration of Upper Canada (later the Council of the College of Physicians and Surgeons of Ontario) from its formation in 1866 until 1869 and was its first president. In 1867 he was made fellow of the Royal College of Surgeons, Edinburgh.

In 1839 Dr. Dickson married Anne, only daughter of James Benson, of Kingston. They had seven children, five of whom, with his widow, survived him. Two sons and a daughter were physicians; the daughter graduated at the Women's Medical College, Kingston, in 1886, Charles Rea Dickson graduated at Queen's in 1880 and at the University of the City of New York in 1881, another, a staff assistant-surgeon of Her Majesty's Forces, died in service at Allahabad, India.

Dr. Dickson died at Wolfe Island November 23, 1882, and was buried in Cataraqui Cemetery, Kingston.

DICKSON, Samuel Henry (1798-1872), pioneer physician of South Carolina, was the son of a Scotchman who came to America before the Revolution and fought in the South under Gen. Lincoln, teaching school in

Charleston after the war and dying in 1819. Samuel H. Dickson was born in Charleston September 30, 1798, studied there, was graduated A. B. at Yale in 1814, and began the practice of medicine in Charleston during the yellow fever epidemic in 1817. In 1818-19, he attended medical lectures at the University of Pennsylvania and was graduated in 1819. In 1823 he delivered a course of lectures on physiology and pathology before the medical students of Charleston, and in 1824 with David Ramsay and H. R. Frost (q.v.), helped organize the Charleston Medical College, filling at first the chair of the institutes and practice of medicine. He withdrew in 1832, but on the reorganization of the college in 1833, as the Medical College of South Carolina, was reelected. Removing to New York in 1847 he was professor of the theory and practice of medicine in the University of the City of New York for three years when he returned to Charleston at the urgent request of his fellow townsmen and carried on a consultation practice until 1858, in his native city. In that year he was called to the chair of the institutes and practice of medicine in the Jefferson Medical College in Philadelphia, a position he filled until his death, March 31, 1872, at the age of 73. The University of New York gave him the degree of LL. D. in 1853.

Dr. Dickson's writings appeared in the "Southern Quarterly Review," Charleston, and in "Chapman's Philadelphia Journal." He wrote upon the yellow fever in Charleston in 1817, further upon yellow fever in 1827, upon dengue in 1828 ("American Journal of the Medical Sciences,") and heat stroke, 1829 (Ibid.). He was the author of "Manual of Pathology and Practice of Medicine," New York; "Essays on Pathology and Therapeutics," two volumes, New York, 1845; "Elements of Medicine," Philadelphia, 1855. Dr. Dickson wrote also on literary and current topics, and added a graceful style to thoroughness of learning. He delivered many speeches, lectures and addresses.

HOBART AMORY HARE.

DIDAMA, Henry Darwin (1823-1905), professor of medicine in Syracuse (N. Y.) University, was born at Perryville, N. Y. on June 17, 1823, of Dutch New England ancestry. His father, John Didama, came from Holland, and his mother, Lucinda Gaylord, was born in Connecticut. His early training was at Cazenovia Seminary and his medical education was obtained at the Albany Medical College where he graduated in 1846. He began practice in Romulus, New York, but moved to Syracuse in 1851 where he continued in active practice until the infirmities of age caused him to give up.

His principal work was as a teacher, in connection with the Medical Department of Syracuse University, where he held the chair of professor of the principles and practice of medicine from 1873 until 1888; professor of the art of medicine from 1888 to 1893, when he was also dean of the medical college. He was active in medical societies, and a president of the various local societies, as well as of the New York State Medical Association. His unflagging zeal in promoting higher standards of medical education was his most important achievement. As early as 1880 Didama advocated and secured for the Syracuse Medical College a three years' graded course of nine months each to take the place of the old short term lectures and unsystematic work.

Dr. Didama's recreation was travel; he visited most of the interesting places of the world and wrote many descriptive articles for the local press under the "nom de plume" Amos Cottle.

He had a magnetic personality, a high sense of humor and was ever ready to take a stand on public matters.

He married Sarah Miller of Granby in June, 1848. They had three children, none surviving.

He died in Syracuse on October 4, 1905, of chronic cystitis and senility.

FREDERICK W. SEARS.

DILLARD, Richard (1822-1887), of North Carolina, was born December 1, 1822, in Sussex County, Virginia, of Scotch lineage, and inherited the intellectual characteristics of that race. He graduated at the University of Virginia, and took his medical degree from the University of Pennsylvania in 1839. He then came to North Carolina and settled in the town of Edenton, where his long and useful life was spent. During the period of 1861-65 he gave his professional services, and largely of his wealth, to the Confederacy. He was at one time brigade surgeon to Gen. Roger A. Pryor. He was the first honorary member of the State Medical Society, a member of the State Senate in early life, and the choice of his district for a seat in the United States Congress at the breaking out of the war between the states.

He died November 27, 1887, as a result of repeated strokes of paralysis.

He was survived by one daughter and a son, Dr. Richard Dillard.

LIDA T. RODMAN.

DIMOCK, Susan (1847-1875), born in Washington, North Carolina, April 24, 1847, was one of the first among the women of this country to study medicine, and she founded the first training school for nurses. Her father, Henry Dimock, was a native of Limington, Maine; he moved to Washington, North Carolina, and married Mary Owens of that place. Susan, their only child, was precocious. She decided at the age of thirteen to study medicine. In 1864 her father died and with her mother she went to Massachusetts. Through the aid of Miss Bessie Green of that state she was enabled to fulfill her desire. In 1866-7 she was a student at the New England Hospital for Women and Children, in Boston and in 1868, being denied admission to the classes for male students in this country, she went to Zurich and graduated at the University in 1871, going afterwards to Vienna and studying under Dr. Funk, who was so impressed by her talent that he wrote: "Should it be required of me to furnish a pattern for a young Aesculapius about to put forth, I should only say, 'make yourself to be like Miss Dimock.' The question whether a woman can be fit for the study and practice of medicine has been definitely answered by the appearance of Dr. Susan Dimock." After a few weeks study in Paris, she returned to America and took charge of the New England Hospital for Women and Children, Boston, managing this institution with signal ability. There she established the first training school for nurses in America in 1872. She also visited her old home, Washington, North Carolina, and performed several successful operations.

In 1875 this promising career was brought to a sad end by the wreck of the "Schiller" off the English coast, she being one of the many passengers drowned at that time.

The regret at her untimely end was so great that a free bed in the New England Hospital was endowed in her memory by contributions from friends in this country and abroad.

LIDA T. RODMAN.

DIX, John Homer (1812-1884), pioneer ophthalmologist of Boston was born in that city, in 1812, graduated in arts at Harvard in 1833, standing ninth in a class of fifty-six members, and in medicine at Jefferson Medical College in 1836, afterwards, when in practice, devoting himself specially to ophthalmic surgery in which he acquired great skill, and was the first to follow Dieffenbach in the operation for strabismus. He was one of the founders of the American Ophthalmological Society. In 1841 he published "A Treatise on Strabismus," and in 1849 "A Treatise on the Nature and Treatment of Morbid Sensibility of the Retina, or Weakness of Sight," the Boylston prize essay for 1848. Another work was "The Ophthalmoscope and Its Uses," 1856. Dr. Dix built The Hotel Pelham at the corner of Tremont and Boylston Streets, Boston, the first family hotel in this country, and lived in it for many years. He was very fond of music.

He died in Boston August 25, 1884, aged 72.

DIXON, Edward H. (1808-1880), of New York, physician, free lance, and satirist, studied under Valentine Mott (q. v.), entered into practice, and soon became a professional satirist, lampooning the foibles of the profession. Of his entrance into medicine he writes, "In the year 1830 I was sent forth from that ark of safety, the old Duane Street College." In 1832, he was medical superintendent of the old House of Refuge and during the cholera epidemic of that year was a frequent visitor to the Bellevue wards. Later, established in his private hospital in New York, he advertised advice by letter for five dollars. In 1866, he conducted a private class in surgery. He invented a speculum, a polyp ligator, a syringe, an artery forceps, and cataract needles, and in 1832 devised a utero-abdominal supporter. A man of ability, especially as a genito-urinary surgeon, a line in which he was a pioneer in New York, Dixon abandoned scientific medicine to write books and articles for the laity, replete with good sense but squinting ever in the direction of attracting patients for office and private hospital. At this early date he wrote, "If cancer of the uterus is ever to be cured it must be at its earliest beginning," and he wondered if electricity could be made available to cure disease. His apparent constant bad humor brought him into ill favor. Though often dimmed by verbosity and extravagance, Dixon's writings constitute a pitiless exposé of the follies of the traditional useless and often harmful polypharmacy preceding the advent of rational medicine. Like Florence Nightingale, he found the one ray of hope in hygiene and the "vis medicatrix naturae," "air, warmth, light, food, water, exercise, sleep."

The "Scalpel," a quarterly expositor of the laws of health and of the abuses of medicine and domestic life, which he edited from 1849 to 1864, was his chief medium of attack; it was caustic, diffuse, philippic, and curiously addicted to poetry. Its picture of New York City in the first half of the last century is of historic interest. "Scenes in the Practice of a New York Surgeon," 1855, contains some of Felix Darley's delightful characteristic sketches. The series of medical tales is mostly well told tragedies in the experience of the doctor; a chapter of value is that dealing with the cholera epidemic of 1839 in the South, "King Death in his Yellow Robe." Among other writings are: "Woman and her Diseases," 1847 (10th edit., 1860), "A Treatise on Diseases of the Sex Organs, Exposing Quackery," 1845 (7th edit., 1848), "Backbone," 1867, "The Terrible Mysteries of the Ku Klux Klan," by Scalpel, M. D., 1868, and "The Kidney, its Structure, Functions, and Diseases," 1871.

Dixon was a highly original character, a man immersed in his profession, keenly aware of the foibles of even the best men of his day, and always running amuck with the leaders. Gross had no use for him, and he became somewhat of an outlaw and Ishmaelite, even to his own preceptor, Mott.

DIXON, Samuel Gibson (1851-1918), lawyer and sanitarian, was born at Gibson's Point, on the Schuylkil River, just below Bartram's Garden, March 23, 1851. He was descended from a long line of Quakers. His father was Isaac Dixon and his mother Ann Gibson. As a boy, he attended the Friends' School at 15th and Race streets, and later received instruction from private tutors with the idea of preparing for Harvard University. Failure in health, however, necessitated a trip abroad, and upon his return home he decided to devote himself to the study of law. He attended the law school of the University of Pennsylvania, and was admitted to the bar in 1877. He practiced law for six years, but the necessary confinement and strain proved too much for his constitution and once more he was forced to seek rest. Realizing the necessity for a permanent change of occupation, he decided to devote himself to the scientific side of medicine. He received his medical degree from the University of Pennsylvania in 1886, then he studied in the department of bacteriology in King's College, London, in the State College of Medicine, London, and in Pettenkoffer's Laboratory of Hygiene, Munich. In 1888 he was appointed professor of hygiene in his alma mater, established there the first laboratory of hygiene in America, and soon became dean of the auxiliary department of medicine. His duties at the University became irksome to him, however, and he longed for more opportunity for original research. In 1889 he discovered the branched form of the tubercle bacillus and attempted experimental immunity in a guinea pig. In order to further these researches, he withdrew from the university and went to the Philadelphia Academy of Natural Sciences, where, in 1890, he became a member of the microscopical and biological section, and later was elected professor of microscopic technology. In 1891 he was made curator, and in 1892, executive curator; in 1896, president of the Academy. He retained the two latter offices until the time of his death. In 1898 Dr. Dixon was appointed on the Board of Public Education in Philadelphia, and took an active part in inproving the hygienic conditions in the city schools. In June, 1905, he was appointed commissioner of health of the State of Pennsylvania, an office he held for thirteen years. Mention should be made of the fact that Dr. Dixon was a member of the Board of Education of Philadelphia for six years and during the greater portion of this period served as chairman of the committee on hygiene. In 1909 the University of Pennsylvania conferred upon him the degree of Doctor of Laws, and in 1916 Lafayette College honored him with the degree of Doctor of Science. He was vice-president of the Zoological Society of Philadelphia, a director of the Wistar Institute of Anatomy, trustee of the University of Pennsylvania, Fellow of the College of Physicians, in 1917 president of the Medical Society of the State of Pennsylvania, and a member of numerous medical and scientific organizations.

Dr. Dixon made his home in Bryn Mawr, Pennsylvania. He was married in 1881 to Miss Fannie Gilbert, and she and a daughter, Catherine H. Dixon, survived him.

Dr. Dixon died in Philadelphia, February 26, 1918, after a prolonged illness.

He was a prolific writer and bacteriologic and hygienic subjects. He wrote: "Physiological Notes," 1886; also many articles for the medical journals and for the proceedings of the Academy of Natural Sciences. While he was commissioner of health there were collected complete birth and death records, the morbidity statistics were compiled, rural quarantine details were properly classified,

a state laboratory and a division of sanitary engineering were organized, and three large tuberculosis sanitoria opened, and a statewide system of dispensaries for tuberculosis inaugurated.

M. J. Rosenau.

DOANE, Augustus Sidney (1808-1852), editor and translator, of New York, was born in Boston, April 2, 1808, and died on Staten Island, New York, January 27, 1852. He graduated at Harvard in 1825, took his M. D. from Harvard in 1828, studied medicine for two years in Paris, and returned to Boston, but in 1830 settled in New York, where he became a successful practitioner. In 1839 he was appointed professor of physiology in the University of New York, a chair he soon resigned. He was subsequently appointed chief physician of the Marine hospital, practiced again from 1843 to 1850, and was again appointed health officer. He edited "Good's Study of Medicine," translated Maygrier's "Midwifery," Dupuytren's "Surgery," Lugol's "Scrofulous Diseases," Baylis's "Descriptive Anatomy," Blandin's "Topographical Anatomy," Ricord's "Syphilis," Chausier on "The Arteries," and Scoutetten on "Cholera." He also contributed to "Surgery Illustrated," and to other medical publications.

DODD, Walter James, (1869-1916), of Boston, pioneer Roentgenologist, a martyr to his specialty, was born in London, England in the year 1869 and came to America as an immigrant at the age of 15, soon finding a place as an assistant in the chemical laboratory of Harvard College, at Cambridge, Mass. There he worked and acquired a thorough knowledge of chemistry, curbing a tendency to follow the sea and being aided by the college authorities who saw in him much promise. In 1892 young Dodd received an appointment as assistant apothecary at the Massachusetts General Hospital in Boston; four years later he became apothecary and in this capacity undertook experimentation with X-rays. At this time the destructive effects of the rays on the skin and other tissues of the operators in this department were not understood; protective sheets of lead had not come into general use. Dodd got a severe dermatitis as early as 1896 from exposure to the rays on many occasions, two years later he underwent his first operation for the correction of the results of the skin inflammation and before he died he had been under operation as many as fifty times for glands infected by the malignant disease which follows repeated exposure to the Roentgen rays. During the years 1900 and 1901 Dodd studied medicine at Harvard Medical School; in 1908 he received the degree of M. D. at the medical department of the University of Vermont, at that time becoming Roentgenologist to the Massachusetts General Hospital, an official recognition of the position he had held actually for many years. With the organization of the department of Roentgenology in Harvard University he was made an instructor, an office he filled at the time of his death. At the hospital he did ever better work in the increasing field filled by X-ray exposures both in diagnosis and in treatment. He kept his department abreast with the times and was depended on more and more by the visiting staff. Always cheerful, optimistic and progressive even though conscious of a slowly approaching and inevitably fatal malady, he carried on to the end, which came after one of the many operations for infected lymphatic glands, on December 18, 1916. Dodd had a lovable nature, made hosts of friends among those with whom he came in contact,—doctors, students, nurses, attendants and patients. He left a loving wife, who had been Miss Margaret Lea of Moncton, Nova Scotia, and the mourning members of the medical profession at large, including those in England, where he served in his specialty during the World War, all recognizing devotion to duty and cheerful service in the face of physical handicaps.

DOLLEY, Sarah Adamson (1829-1909), of Rochester, N. Y. the second woman in America to receive a medical diploma, was born in that city March 11, 1829, of Quaker and Huguenot descent. Her education was gained in schools conducted by the Society of Friends. At the age of eighteen, having come across a copy of Wistar's anatomy, she devoted a winter to its study and became fired with ambition to be a doctor. Her uncle, Dr. Hiram Corson (q. v.), of Plymouth, Pennsylvania, discouraged her, saying she could never hope to be recognized as a physician, but when she was accepted as a student by another physician, he reconsidered her proposition and took her as a student. Her uncle's influence secured her entrance to the Rochester Medical College—now passed out of existence—from which she was graduated in 1851, the second woman in America to receive a medical diploma.

In 1851 Dr. Isaac A. Pennypacker and Dr.

Hiram Corson sent a communication to the Board of Guardians of the Poor of Philadelphia, recommending that Miss Sarah Adamson be appointed to "such a situation in the Blockley Hospital as will afford her the opportunity of seeing practice." The request was granted as the committee believed that opportunity for the study of obstetrics and the diseases of women and children should be extended to well-educated female physicians, but she was to have no salary and to help where required. She entered upon her work May 12, 1851. In 1853 Miss Adamson returned to Rochester and married Dr. Lester S. Dolley. The story of her work is written into nearly sixty years of the history of Rochester where she had a long and useful career.

Dr. Sarah Dolley and her husband practiced together until his death in the early seventies.

She was ever a potent factor in all work for the advancement of women in medicine. In 1886 she helped organize the first free dispensary in Rochester for women and children, and in 1887 organized and was the first president of the Blackwell Medical Society of Rochester, the first incorporated society of women physicians entirely for scientific purposes, and for several years was the honorary president of the Woman's Medical Society of the State of New York. Dr. Dolley was a member of the Rochester Academy of medicine, and in 1907 was made a life member of the Rochester Academy of Science, the only woman upon whom this honor has ever been conferred. She occasionally addressed medical societies, one paper on "The Value of the Paquelin Cautery," Transactions Monroe Medical Society, 1879, and her address as president to the Woman's Medical Society of New York State in "The Woman's Medical Journal," April, 1908.

Dr. Dolley died in Rochester, December 27, 1909, after an illness of several weeks.

One of her two sons, Charles, became a doctor in the city of Mexico.

ALFREDA B. WITHINGTON.

DONALDSON, Francis (1823-1891), of Baltimore, expert diagnostician in diseases of the chest, was born in that city July 23, 1823, the fifth and youngest son of John Johnson Donaldson, president of the Franklin Bank. He was educated at Dr. Prentiss' School near Baltimore, but his father was unable to give him the advantages of a college training. Just after becoming nineteen he studied under Prof. Samuel Chew (q. v.), and later spent a year or more as interne at the Baltimore Almshouse. Having graduated M. D. at the University of Maryland in 1846, he spent two years in Europe, and in the hospitals of Paris listened to the greatest teachers. He warmly embraced the new rational medicine, then displacing the old empiricism and bloodletting. On his return to Baltimore, in 1848, he was appointed resident physician to the Marine Hospital and after two years' service began to practice, the remainder of his busy life being devoted to this and teaching. From 1852 to 1855 he was attending physician to the Baltimore Almshouse, and from 1858 to 1863 professor of materia medica in the Maryland College of Pharmacy. In 1866 the chair of physiology was created for him in the University of Maryland, hygiene and general pathology being added to the title, with clinical instruction in diseases of the throat and chest. After a service of fourteen years he retired from the didactic part of his chair and in 1888 abandoned teaching altogether.

Dr. Donaldson was an expert in physical diagnosis, and most of his writings, which were very numerous, especially in the form of journal articles, related to the chest and throat. His most important production was a section on "Disease of the Pleura," in "Pepper's System of Medicine," vol. iii, pp. 483-601; he was also the author of a fine memoir of Dr. Charles Frick, in Gross' "Lives of Eminent American Physicians of the Nineteenth Century," 1861.

Besides the positions named, Dr. Donaldson held many others of influence and honor, the most important being: President of the Medical and Chirurgical Faculty of Maryland, 1881-1882; president of the American Climatological Association; consulting physician to the Johns Hopkins Hospital. He was also an associate fellow of the College of Physicians of Philadelphia.

He died in Baltimore, December 9, 1891, of "albuminuria and fatty heart."

He married Elizabeth Winchester, daughter of William Winchester, of Baltimore, who survived him with two sons and three daughters. His oldest son became a doctor.

EUGENE F. CORDELL.

DOOLITTLE, Benjamin (1685-1749), pioneer surgeon of Massachusetts. The only physician in Northfield, Massachusetts, previous to the beginning of the pastorate of Benjamin Doolittle in 1717, had been Patience Miller,

wife of William Miller, tanner. She practiced during the first two settlements, 1673 and 1685, and was said to be a skilful physician and surgeon. The mother of eight children, she died at an advanced age, March 16, 1716, leaving the town without medical aid. Mr. Doolittle came to Northfield to minister both to the spirit and the body, for the two professions were often united in one person in those days, Cotton Mather, speaking of this union in his "Magnalia" as an "Angelical Conjunction." In this case, although a preacher all his life, Doolittle was better known as a surgeon. Coming from Wallingford, Connecticut, he preached his first sermon in Northfield in November, 1717. His grandfather, Abraham Doolittle, had settled in New Haven in 1640.

Benjamin, the son of John and Grace Blaksley Doolittle of Wallingford, was born there July 10, 1695, and graduated at Yale College in 1716. During the year and a half following graduation he must have studied both theology and medicine, for he held himself competent as preacher and practitioner; he was said to be a "regular educated physician and surgeon, furnished with books, instruments and drugs." When he had been settled in Northfield twenty years his medical and surgical practice became so extensive and lucrative that, in the opinion of many of his townsmen, it interfered with his ministerial duties. His reported statement that "he would not lay by doctoring and chirurgery under 400 pounds a year," was one of the complaints. At this time (1737), when Jonathan Edwards had been preaching the "Great Awakening," the Rev. Doolittle's religious doctrines did not find favor. Nineteen of his congregation signed a paper in which they accused him of leanings toward Arminianism and proposed to refer the matter to a "council" to determine whether his views were sound and he should be continued as pastor. Much to their discomfiture he made no reply, and the congregation seethed. The controversy reached a head in February, 1741, when he read a statement from the pulpit in which he said: "Brethren: There has been a great noise about my Principals which has been very wounding to Religion and hurtful to peace and unity among us: and I now make a demand of all those that have anything to object against my Principals to come to me and tell me ye very particular article they object against, to see if I cant satisfy them, and if I dont satisfie them, then to bring it to the church, or else to hold your peace forever hereafter * * * Brethren, if it be your minds that those that have anything to object against my Principals should do as I have now demanded of them, manifest it by lifting up the hand. Voted in ye affirmative." Very likely the Rev. Doolittle showed the same decision of character in his medical ministrations to the settlements about Northfield, the garrisons at Fort Dummer and the Ashuelots and in the battles and skirmishes of the Old French War. On settling in Northfield the town had provided their minister with a house and lot of land, 165 pounds in money annually and "a stock of wood as the state and circumstances of his family shall require." Later, he received several grants of land.

A month before resuming his duties, Dr. Doolittle married Lydia, daughter of Samuel Todd, of New Haven. They had twelve children. As an example of surprising vitality it may be mentioned that Mrs. Doolittle after the death of Mr. Doolittle, married two husbands and lived to the age of ninety-two.

We hear of Dr. Dolittle June 3, 1746, when "Cap. Stevens sent down a troop of men to guard Mr. Doolittle and Dr. T. Williams (of Deerfield) to cut off the arm of one of the soldiers that was sore wounded, broke as they supposed, that the end would not be healed without cutting off one of his arms." Again in September, 1747, when a wounded cadet "was put under the care of Mr. Doolittle, by whose skill his wound was soon cured." Once more, June 16, 1748, when "a ranger, severely wounded in the thigh in an ambush, was brought on a horse the next day to Northfield to be treated by Mr. Doolittle."

In 1743 he wrote and published a sermon entitled: "An Enquiry into Enthusiasm," as we may suppose suggested by his differences with his parishioners two years before. At his death he left in manuscript "A Short Narrative of Mischief done by the French and Indian Enemy on the Western Frontiers of the Province of the Massachusetts Bay, from 1744 to 1748." It was printed as a pamphlet of twenty-four pages by S. Kneeland at Boston in 1750, and has formed the source of much of the history of the Old French and Indian War.

Dr. Doolittle died in his fifty-fourth year, January 9, 1749, when he was "suddenly seized with a pain in his breast" while mending a fence. It is said that his practice extended even as far as Springfield.

WALTER L. BURRAGE.

DORSETT, Walter Blackburn (1852-1915), gynecologist of St. Louis, was born in St. Louis County, Missouri, June 12, 1852, being the son of Henry L. Dorsett, of Virginia, and Georgia Ann Blackburn, of Versailles, Kentucky. His first college course was in civil engineering at the Washington University, and later he took up the study of medicine at the old St. Louis Medical College, now the Medical Department of Washington University. Here he was graduated with the degree of M. D. in 1878, then served for a year as an interne in the St. Louis City Hospital, and became superintendent of the St. Louis Quarantine Hospital in the summer of 1879. The next year he was married to Eleanor C. French at Onley, Illinois, and one son was born of this union, later a practicing physician in St. Louis. From 1880 until 1887 Dr. Dorsett was chief dispensary physician, and from the latter date until 1892, superintendent of the St. Louis Female Hospital. For seven annual sessions he was a member of the House of Delegates of the American Medical Association, and he was chairman of the Section of Obstetrics and Diseases of Women in 1908. At one time or another he was president of the St. Louis Medical Society, Missouri State Medical Association, St. Louis Obstetrical and Gynecological Society and the American Association of Obstetricians and Gynecologists. He counted these among the societies of which he was a member: St. Louis City Hospital Alumni, St. Louis Surgical Society, St. Louis Medical History Club, Surgeons' Club of St. Louis, St. Louis Academy of Science, American Association of Railway Surgeons, Western Surgical Society, Southern Surgical and Gynecological Society, Medical Association of the Southwest.

His hospital service included the positions of attending gynecologist to the Missouri Baptist Sanitarium and the Evangelical Deaconess Home and Hospital, and he was consulting gynecologist to St. Mary's Infirmary, the Rebekah Hospital, and the Alta Vista Hospital at DeSoto, Missouri. He had been for many years professor of gynecology and pelvic surgery in the St. Louis University School of medicine.

Dr. Dorsett was a frequent contributor to medical literature and in his extemporaneous discussions of professional subjects he impressed the listener with his capacity for work and with the wide range of his knowledge. He possessed a charming personality, combining modern push with old-fashioned courtesy, making him a delightfully conspicuous figure at all gatherings which he graced with his presence. As a teacher he possessed a rare ability of awakening interest in his students, and he was able to hold their respect and affection. He died of chronic nephritis, July 27, 1915, after a year of suffering with angina.

DORSEY, Frederick (1774-1858), of Hagerstown, Md., is included in this book as a conspicuous example of a remarkable, fast-disappearing type, namely, the old-fashioned country practitioner. Born in Anne Arundel County in 1774, he moved early to Washington County, Md., where he lived until his death, October, 1858, at the age of eighty-four. He had no regular medical degree, but attended one or two courses of lectures. In 1804 he received a diploma of honorary membership in the Philadelphia Medical Society, and in 1824 an honorary degree of M. D. was conferred by the University of Maryland. He was active to the last, and at the time of his death was associated in practice with his son and a grandson; his family included great-grandchildren. His kingdom was a small one, but ideal, in that he ruled absolutely in the hearts of the people, and was the uncrowned sovereign of a whole countyside and beyond. He lived through the American Revolution and through France's bloody history; he knew George Washington, idolized Jefferson, and Rush was his friend and preceptor; and he himself was the idol of all the early notable families of the County. He lived to see the foot-path become a county road, and this a turnpike and then a railway, and he saw the tide of emigration sweep out of his native state beyond the Alleghanies, over the Mississippi, across the hostile plains and over the Rockies to the shores of the Pacific.

The sun by day, and the moon by night, saw him toiling for nearly seventy years, as he pursued his lonely way in search of the hearth that needed his counsel, or hastened to the anxious expectant mother, covering from sixty to eighty miles in a daily circuit, and officiating in time at upwards of eleven thousand births; he was thus a true medical father to most of the people of his county. It was noted once that out of a party of sixteen dancers he had brought fourteen into the world, and had attended two others on delicate occasions some thirteen times . . . He possessed fortunately the sinews necessary for such arduous and often continuous diurnal and nocturnal duties . . . His knowledge and his judgment seemed miraculous to

trusting, devoted followers; he never halted nor hesitated. He secured the confidence and coöperation of patients by listening to their whims, which he never treated with contempt, and he was ever willing to explain fully the nature of the disease and its treatment even to the most humble.

Dorsey's "Elements of Surgery" states that Dr. Frederick Dorsey, of Maryland, tied the middle meningeal artery with needle and ligature for the first time. He practiced general surgery extensively and early used anesthetics. His chief resources were bleeding, calomel, tartar emetic and antimony; but the first two were the Alpha and Omega of practice.

His drastic methods, better suited perhaps to more vigorous constitutions in ruder times, are illustrated by the comment of a Philadelphia patient, for whom he had prescribed five grains super carbonate soda every two hours, with twenty grains of calomel at night, and forty grains of jalap in the morning; to an enquiry after his health he replied: "Old Dorsey, of Hagerstown, took me through a thrashing machine, and if that don't take the gout out of a man's bones, God knows what will."

A hypochondriac labored under the insane delusion that he had swallowed a spider which was consuming his vitals; all efforts to dispel the crazy notion were in vain, when old Dorsey was summoned. He humored the notion and declared the case a bad one, and laid his strategy to oust the noxious tenant. After much pomp, and parade of preparation, and ejecting the inquisitive from the darkened room and bandaging the patient's eyes, the mouth was pried wide-open and a captive blue-bottle fly, held by a thread to his leg, was sent buzzing across the yawning cavity, while the doctor peered anxiously in. From time to time Dr. Dorsey was heard to ejaculate, "I see him!" "He is coming," and the like. At last the sick man tore off the bandage and sprang to his feet, and there stood the doctor triumphant with the spider captured in his hand. The cure was perfect and lasting. No wonder the more ignorant neighbors marvelled that such wisdom and skill were vouchsafed to mere mortals. While his mother was sick, six miles south of Frederick, a point thirty-eight miles distant, he saw her every day for upwards of forty days preceding her death (remaining at her home overnight on alternate days) and attended his regular practice.

Often gruff of manner and indifferent to professional etiquette, he was benevolent and warm of heart. He advocated burning all the Christian churches and hanging all the ministers, but contributed liberally to both. He attended horse-racing, cock-fighting and fox-hunting, and when sixty went all the way to New York to be present at a main of cocks; he would sometimes make the same visit from home subserve the ends of an Episcopal convention and a cock-fight. He was boyish all through a life which seemed filled with youthful enthusiasm and sunshine, and never became old except in the veneration accorded him. He would rise willingly from bed at all hours to journey to remote parts of the county in inclement weather, even though the patient was poor and could not pay a cent. It is declared that he lost more money by securityship than any man who ever lived in the county.

Dorsey was head man at weddings and at funerals, and baptized children "in extremis." He was a trustee of St. James's College, and a liberal contributor. Simple and often threadbare in dress, he was unaffected and economical in his ways. "Hospitality was one of his shining virtues. A plate, a bed, a cordial welcome, and a long talk were always ready for his friends." He was a great conversationalist, very social, and abounded in anecdotes, his assortment varying from one to twenty miles in length, to suit different rides and companions.

How often extremes met in his long life: Once he hastened from a funeral to a wedding with the long, black scarf streaming from his hat! But one time did his faithful stomach refuse to do its duty, when after tapping a woman for ascites, he sat down to the meal and saw his milk served in the same bowl just used for the tapping. On one occasion, after nine days and nights of incessant toil, with no chance to go to bed, on the tenth day he presided as chief judge at the great horse race between "Industry" and "Bachelor," and was the merriest man on the ground. His memory was extraordinary, recalling in detail every incident of his long and busy life.

When the Cottrells were executed he secured one of the bodies for dissection, and rode at night from point to point to escape detection, with the body slung across his horse or propped up in front. Says his excellent biographer, John Thomson Mason: "I have known him to ride from Baltimore to Hagerstown, with the same horse, in a single day, a distance of upwards of seventy miles, and on the same night to visit, besides, pa-

tients in the country." He had cholera in 1832 and took by his own prescription over two hundred grains of calomel in less than twenty-four hours.

It is not too much to say that so identified was he with the places he so long had visited in all seasons, over more than two whole generations, that when he quitted the scenes of his labors, the very country itself seemed to have lost one of its greatest charms, and an aching void was created never to be filled for those who knew him well; for the times are different now, and we shall never see his like again.

HOWARD A. KELLY.

DORSEY, John Syng (1783-1818), of Philadelphia, surgeon and writer, came of an old English family — the D'Orseys — some of whom had crossed the Atlantic and settled in Maryland. His father, Leonard Dorsey, was a successful merchant in Philadelphia, where John was born, December 23, 1783. It is hardly necessary to say he was a bright scholar, for after receiving his classical education at the Friends Academy at the age of fifteen he began at once the study of medicine under his illustrious uncle, Philip Syng Physick, (q. v.). His entrance into the medical world was coincident with the end of the most terrible epidemic of yellow fever which had ever stricken Philadelphia, and young Dorsey, who had taken his M. D. in 1802 from the University of Pennsylvania at the age of nineteen, was appointed one of the resident physicians at the City Hospital and entered into the fight against the scourge, the suggested danger not troubling him at all, for the Academy of Medicine held the view of Dr. Deveze, who in 1799 had maintained that yellow fever was not contagious. A hundred years later the same opinion was reaffirmed and the non-contagious nature of yellow fever established by a commission. While thus in the very midst of the battle Dorsey improved every opportunity of studying the disease and performed numerous autopsies, making careful bedside observations.

It was extraordinary that a youth not quite twenty should display such independent thought and action in so intricate a field as medicine, but it was a result of his inherent ability and the early training and being made to carefully enter up cases. Some of these books have been kept. The composition is simple, but the descriptions clear and accurate, presaging the future author of the first important American text-book on surgery.

In November, 1803, young Dorsey sailed for Europe with the intention of spending his time in the then two great medical centers, London and Paris. In London there lived and worked John Hunter, and it was in Hunter's private dissecting room that Dorsey's uncle had long before distinguished himself as a pupil and received from his master the flattering offer of a partnership. Sir Everard Home, Hunter's brother-in-law, gave Dorsey a kindly welcome, and the student at once plunged into hard work, attending diligently Hunter's Anatomical School. With this fine mental equipment he left the following June for Paris, where, through the influence of Boyer, surgeon-in-chief of La Charité, he had permission to dissect in the "Salle de Répos," a fine name for a gruesome place, which took Dorsey's fancy at once. It is curious that he makes no mention of the great French surgeons Sabatier, Dupuytren, Pelletan and Bichet, but enters in his diary "as to French surgery, I have learned nothing from it." In 1804 he returned to Philadelphia and took consulting rooms, but for the first few years, notwithstanding help from his uncle, his income was not at all commensurate with his abilities. The first year he took only $325.75, but in the year of his untimely death, $10,199, this being partly from pupils and the sale of his book, "The Elements of Surgery," published in 1813 and illustrated mostly by the author. This work, the first text-book of surgery in America, received a world-wide recognition, being reprinted in Edinburgh and used as a text-book in her university. "The American Surgeon," says the author, "is or ought to be strictly impartial, and therefore adopts from all nations their respective improvements."

Amid the business of his own practice and helping Dr. Physick, he found time for both music and poetry, most of his poems bearing the impress of rhythmical beauty; one penned in 1805, on "The Incomprehensibility of God," was evidently written with the greatest care. For music he had a warm liking, and was himself proficient on several instruments. Add to this his skill in drawing, his wonderful conversational powers, his genial manners and handsome figure and you have one who stands out from the foreground of the eighteenth century prominent and attractive.

The year 1807 saw him adjunct professor of surgery at the University of Pennsylvania, Dr. Physick requesting this in view of his own uncertain health, and the duties of the new assistant were fulfilled so thoroughly and humanely that his students loved him no

less for his skill than his thought for them. That same year he married Maria, daughter of Robert Ralston, a Philadelphia merchant, and had a son and two daughters. In 1813 Dorsey became professor of materia medica at the University of Pennsylvania, a chair filled with singular ability until in 1818, he was called to fill the chair of anatomy left vacant by the death of Dr. Wistar. Two years before he had sent to a medical journal the particulars of a case of inguinal aneurysm cured by tying the external iliac artery, the first example of the kind which had occurred in this country. The early age of thirty-five saw Dorsey with a prospect of ease, usefulness and increasing fame before him. His own poetic mind must have conjured up a delightful life among devoted friends and admiring pupils, but while the words of a brilliant introductory address were still fresh in the minds of his hearers Dorsey was dying from an attack of typhus which developed the evening of the same day in which he delivered his lecture, November 12, 1818.

"On approaching his bed, at the head of which his mother was sitting," wrote Dr. Janeway, "Dr. Dorsey took hold of a button of my coat and thus addressed me: 'Doctor, is it not remarkable that after having delivered my introductory lecture I was praying to my God that I might not postpone my repentance to a dying bed, and in one hour after that prayer I was smitten with my disease?' " The large room in which he lay was filled with ladies and gentlemen, Physick, Horner, Ralston and several medical students being there also. Dorsey then asked to be baptized, which was done by Dr. Janeway. His last words were: "I have a desire to live and remain with my family, but my desire to be with Christ is far greater." Thus died a man whom a longer life might have seen equalling a Hunter or a Wistar, a man whose short life was so remarkable that it may long attract the reader of medical biographies.

ALBERT ROBIN.

DOUGHTY, William Henry (1836-1905), of Augusta, Georgia, was born in that city, February 5, 1836, the son of Ebenezer Wesley Doughty, a leading business man of Augusta, and Margaret Crowell. He was educated at Richmond Academy, and in medicine at the Medical College of Georgia, where his preceptors were Dugas, Ford, Eve, Campbell, receiving his M. D. in 1855. He practiced in Augusta all his life. He was a surgeon of the Confederate Army, serving with distinction in Macon Hospital, Walker Division Hospital at Lauderdale Springs, Mississippi, and in the Second Georgia Hospital.

He was instrumental in founding the board of health of Augusta, and largely drafted the act of legislature for the board. He was professor of materia medica and therapeutics in the Medical College of Georgia. He wrote: "Adaptation of Climate to the Consumptive for a Permanent Residence"; "A General Comparison of the Eastern and Western Slopes of America with the Southern Slopes of Europe"; "Special Climate of the Pacific Slope"; "Comparison of the Entire Pacific Slope with the State of Florida"; "The Physical Geography of the North Pacific Ocean, the Peculiarities of its Circulation, and Their Relations to the Climate of the Pacific Coast of the United States"; "Report of Two Cases of the Ligature of the Subclavian Artery"; "Atmospheric Distention of the Vagina in the Knee-Chest Posture; Is It the Real Factor, or Simply an Auxiliary in Reduction of Retro-Displacement"; "The Primary Conversion of Occipito-Anterior Positions of the Vertex with Cases Illustrating the Practice"; "The Therapeutic Effects and Use of Mercury as Influenced by the Report of the Edinburgh Committee on the Actions of the Mercury, Podophyllin and Taraxacum on the Biliary Secretions"; "True Method of Treating Dislocations, Upwards and Backwards of the Scapular End of the Clavicle, with Report of a Case Illustrating the Principle Employed."

In 1855 he married Julia Sarah, daughter of Dr. William L. Felder, of Sumter, South Carolina.

He was in failing health for many weeks, but practiced until his death on March 27, 1905. Dr. Doughty was greatly beloved in his community, and at his death requests for permission to toll church bells during the funeral services came from Roman Catholics, and from other congregations, both white and negro.

His son was Dr. William Henry Doughty, Jr., of Augusta.

DOUGLAS, James (1800-1886), pioneer surgeon and alienist in the province of Quebec, was the son of the Rev. George Douglas, a prominent Methodist and a friend of the Rev. John Wesley. He was born at Brechin in Angus, Scotland, May 20, 1800, and his early education was received in Dumfries. During the winter of 1812-1813 he was sent to Wesleyan College at Woodhouse Grove in Yorkshire, but taking French leave from there

returned to Dumfries. The next year his father was stationed at Penrith in Cumberland, and he was bound there for five years as an apprentice to Dr. Thomas Law, an uncle of Lord Ellenborough. In the autumn of 1818, having completed his indenture, he betook himself to Edinburgh as a student of medicine. Even before the close of the session he accepted the position of surgeon to a Greenland whaler, sailing from Hull, which was fortunate in penetrating the Arctic Circle nearer to the North Pole than any ship prior to that date, except those under the command of Sir John Ross. At the close of his Arctic voyage he resumed his medical studies, and received his diploma from the Royal College of Surgeons, Edinburgh, April 7, 1820. At Edinburgh he was one of the first pupils of Robert Liston, and was one of the first to apply his teachings on this continent. After taking his degree in Edinburgh he proceeded to London for the purpose of graduating there also in surgery, and attached himself to Guy's and St. Bartholomew's hospitals to attend the lectures of Mr. Abernethy and Sir Astley Cooper. On receiving his degree as M. R. C. S., London, he entered the service of the East India Company and proceeded to India. He returned to England in 1823, as surgeon of the East Indiaman "Competitor." Tempted by the salary and love of adventure, in 1824, he joined as surgeon and physician, one of those ill-considered and ill-fated colonization expeditions to Central America made from Britain between the years 1820 and 1830. Here he was placed in charge of the short-lived colony known as Poyais Settlement, Honduras, but being severely attacked by fever sailed for the United States, landing in Boston. After a very narrow escape with his life, owing to this illness, he made his way to Utica, N. Y., where he married, and settled down to practice, and was invited to deliver a course of lectures on anatomy and surgery by the Medical College at Auburn. In 1826, the trustees of Williams College conferred upon him the honorary degree of M. D.

An ardent student of anatomy, and aware of the indispensable necessity of material for dissection, Dr. Douglas soon got into trouble in a matter of resurrection, and, being in danger of arrest, made a speedy flitting to Canada in view of the fact that body-snatching was a state's prison offence. After a short stay in Montreal he journeyed to Quebec, arriving there on March 13, 1826, and without delay began work at his profession. The cholera epidemics of 1832 and 1834 brought him into prominence, he having been the first to proclaim the possibility, in fact the great probability, of its crossing the Atlantic. He was thenceforth one of the best and most widely esteemed practitioners in the city. Subsequently, at the request of the commissioner for the Marine and Emigrant Hospital, he took medical charge of that institution, and there, in conjunction with Dr. Painchaud, delivered the first medical lectures ever given in Quebec, Douglas' being on the principles and practice of surgery. He was rated as a brilliant operator by E. D. Worthington (q. v.)

In 1845, the grand jurors having made a very strong presentment on the treatment of the insane by the religious communities, in whose care they were, he, at the solicitation of the government, agreed to take charge of them for a period of three years on the understanding that the government would then have a suitable place provided for them. This agreement led to the creation of Beauport Asylum, of which Dr. Douglas remained the head up to the time of his withdrawal in 1866, a period of 20 years.

During the horrors of 1847, caused by the failure of the potato crop, the frightful famine and the ensuing typhus (ship fever), which made Ireland well nigh desolate, Dr. Douglas took a prominent part in combating the scourge. Hundreds of thousands fled for refuge to America; many died on shipboard, while others landed on the shores of Canada only to succumb to the pestilence. Thousands died at Grosse Isle, at Quebec, and at every port along the waterways. In Quebec a private hospital was opened by Dr. Douglas and Dr. Racey, who anticipated the outbreak. It was situated on the Beauport beach and accommodated masters of vessels and cabin passengers who objected to going into overcrowded public hospitals. Dr. Douglas decided to give up practice, though still retaining his connection with the asylum he had founded, and from 1851 to 1866 spent nine winters abroad, chiefly in Italy, Egypt and Palestine. Dr. O. W. Holmes (q. v.) said on seeing Douglas: "I did not know whether most to fear or admire him but in his head and figure he was the nearest approach to a Jupiter Olympus of any man I have ever seen."

In his later years Douglas unfortunately embarked in gold and copper mining operations in the eastern countries, which were without exception disastrous, and engulfed his whole estate, and left him without proper-

ty or resource at an age when he could not possibly retrieve his fortunes. He bore his reverses, however, without a groan, and, what still more bespoke his manliness, without reflection on others. He gave up his property, and, what was harder still, his reputation for shrewdness, without a murmur. This done, he accompanied his son to the United States, living with him for a time at Phoenixville, Pa., and later at New York, where he terminated a long and useful, though varied and eventful life, on April 14, 1886, in his 86th year.

DOUGLAS, Richard (1860-1908), Abdominal Surgeon of Nashville, born on December 20, 1860, the son of Byrd and Sarah Cragwall Douglas, he was commonly known as "Dixie," because he arrived in this world the year South Carolina seceded. Douglas belonged to the group of young surgeons who derived their inspiration from Lawson Tait and his contemporaries, they who began their work in the abdomen in the early nineties. He was a student under Granville Bantock in London and graduated from the medical side of the University of Nashville in 1881, completing his course in the Jefferson Medical College where he took an M. D. in 1882. From the beginning he gave promise of that brilliance which afterwards characterized his subsequent work, the painstaking care he showed as diagnostician being only exceeded by untiring zeal in his library and his keen interest in operating. He held the professorship of gynecology and obstetrics and later that of abdominal surgery in Vanderbilt University, also he was one of the founders of the Southern Surgical and Gynecological Society, his first paper contributed being one on the subject of "Peritonitis" in 1894, followed by "Splenectomy Statistically Considered," in 1896. His beautiful delivery and thorough mastery of his subject made a refreshing feature in medical meetings. A most exhaustive monograph on "Retroperitoneal Neoplasms" was his thesis in 1898, and his address on "Acute General Peritonitis," when elected president of the Southern Surgical and Gynecological Society, 1898, was equally valuable. He was likewise honored by other societies, being made president of the Tri-State Medical Society of Alabama, Georgia and Tennessee. His "Cysts of the Urachus," one of the best papers he wrote, and "Gun-shot Wounds of the Abdomen" ably embodied his experiences in the Nashville Hospital. Later he became interested in tubercular peritonitis, his last paper before the Nashville Academy of Medicine being on that subject.

He was easily the leader in his state and had phenomenal success, but with the many endowments which nature lavished upon him he was also chastened with a peculiarly irritable disposition, with the result that he had many imaginary and real grievances which embittered his professional life but drew closer his devoted friends, particularly a notable group of young men of his state for whom he had a great fascination. His work on "Surgical Diseases of the Abdomen," 1904, had given him also an international reputation, and his comparatively early death, which occurred from chronic nephritis on February 19, 1908, in Nashville, left a great regret that he had worked too hard and too feverishly for nature to fulfil his exhaustive demands.

WILLIAM D. HAGGARD.

DOUGLAS, Silas Hamilton (1816-1890), initiator of laboratory teaching of chemistry in Michigan, was born in Fredonia, Chautauqua County, New York, October 16, 1816, and had his general education in the Academy there and at the New York University. In 1838 he came to Detroit and studied medicine under Dr. Zina Pitcher (q. v.) in 1841-42, taking a course of lectures at the Medical Department of the University of Maryland, and on June 3, 1842, was licensed to practice by the Censors of the Michigan State Medical Society. At various times he accompanied Dr. Douglas Houghton (q. v.) on his geological surveys of Michigan and was employed as a physician on the staff of Henry R. Schoolcraft, in 1843 beginning to practice at Ann Arbor. The year 1844 saw him assistant to Prof. Houghton in the university, and in charge of chemistry during the professor's absence in the field, a duty which under various titles he conducted during the next thirty-two years after Dr. Houghton's death. For several years he used a private chemical laboratory for teaching, but in 1856 the Regents, at his solicitation, erected a chemical laboratory at a cost of six thousand dollars and made practical chemistry part of the curriculum. This was his great contribution to medical teaching—the initiation of laboratory training for the degree of M. D. He was largely interested in the founding of the medical department, and remained with it until 1877, and had also charge of the erection of the observatory building at the university, the medical building, and other university works, doing good work as well in organizing the Ann Arbor water and

gas works. While on his geological tours he collected a large cabinet of minerals which he gave to the university. The latter years of his life were embittered by a controversy over his accounts with the university, the matter finally reaching the Supreme Court, and being decided in his favor.

His chief writings included: "Common Sense in Ventilation," "Michigan University Medical Journal," vol. i.; "Method of Conducting Postmortem Examinations in Cases of Suspected Poisoning," "Peninsular Medical Journal," vol. i.; "On the Analysis of Waters," "Peninsular Medical Journal," vol. i.; "Michigan Coal; Its Analysis and Value for Gas," "Peninsular Medical Journal," vol. i. He was the author of a system of chemical tables which passed through four editions and which, enlarged by the aid of Prof. A. B. Prescott, M. D., into a text-book on "Qualitative Chemical Analysis," met a wide acceptance (three editions).

On May, 1, 1845, Dr. Douglas married Helen Wells, who with seven children survived him when he died in Ann Arbor, August 26, 1890, from paralysis. There is a portrait in the Faculty Room of the Medical Department at Ann Arbor.

LEARTUS CONNOR.

DOUGLASS, William (1691-1752), a pioneer learned physician of Boston, the first to describe scarlet fever and its epidemiology, was born in Gifford, County of Haddington, Scotland in 1691, the second child of George Douglass, "Portioner" of Gifford and factor for the Marquis of Tweeddale. Not too much is known about Douglass's education; he was A. M., Edinburgh University, 1750, M. D. Utrecht University, 1712, his thesis being entitled "Animalium Hydraulium" also he studied at Leyden. He was familiar with Greek, Latin, Dutch and French besides his mother tongue. He came to Boston in 1716, spent a year in travel in the West Indies and finally settled in Boston in 1718 for the rest of his life. In 1721 he wrote to Cadwallader Colden (q. v.), then of Philadelphia: "You complain of the practice of physic being undervalued in your parts with reason; we are not much better in this respect in this place; we abound with Practitioners, though no other graduate than myself, we have 14 apothecary shops in Boston. All our Practitioners dispense their own medicine. I have resolved to fix here and ramble no more. I can live handsomely by the Income of my Practice, and save some small Matter." It was in this year of 1721 that Boston suffered an epidemic of smallpox and Zabdiel Boylston (q. v.) began inoculating for that disease under the aegis of Cotton Mather. Douglass, in the interests of conservatism, opposed the practice with a ready and trenchant pen, joining with the populace and the profession. His treatise entitled: "The Abuse and Scandals of some late Pamphlets In Favour of Inoculation of the Small Pox, Modestly Obviated and Inoculation further considered in a Letter to A-S-M.D. (Alexander Sandilande) and F. R. S. in London; Boston, 1722," created a furore at the time. By 1730 he had seen the error of his views and published in London: "A Practical Essay concerning the Small Pox," also in Boston, in the same year: "A Dissertation concerning Inoculation of the Small Pox." Of the former, Timothy L. Jennison, M. D. says in his memoir on Douglass, presented to the Massachusetts Medical Society in 1836: "He told us all he knew in concise terms, in the plainest practical language. For this brief original production he appears to have been fairly entitled to the thanks of his contemporaries, as well as posterity."

Douglass seems to have been held in good repute by the physicians of Boston, even although he excited some jealousy and opposition by his controversial spirit. One is reminded of Benjamin Waterhouse a hundred years later. Waterhouse, as Douglass, was the only possessor of a thorough European education. He saw the failings of his contemporaries and did not hesitate like Douglass to express his views with the result that it was many long years before anyone had a good word to say about either of them. It appears that Douglass was a medical consultant and held autopsies at which other practitioners were present; he was the leading spirit in forming a medical society; he favored the regulation of the practice of physic throughout the province and urged the formation of a board of physicians and surgeons to examine all practitioners of medicine; he had a large practice. His great work on scarlet fever appeared in 1736 under the title: "The Practical History of a New Epidemical Eruptive Miliary Fever, with an Angina Ulcusculosa which Prevailed in Boston, New England in the Years 1735 and 1736." Casper Morris (q. v.) in 1858 called this tract the "earliest record by an actual intelligent observer of the disease on this continent;" which "tallies accurately in all respects with more recent observations." Dr. George H. Weaver, of Chicago, observes in his excellent

biography of Douglass (1920): "It seems impossible that any doubt could arise regarding the identity (of this disease) in the minds of anyone who has read Douglass' description and is familiar with the disease"—this apropos of the views of several commentators that it was diphtheria and not scarlet fever. The thesis of twenty pages is the first adequate clinical description of scarlet fever in English and probably in any language. It antedates the publication of Fothergill's essay on scarlet fever by twelve years, and Fothergill refers to Douglass' paper. Douglass estimated that about 4000 people in Boston had the disease in this epidemic and that 114 died. He closes with the statement: "This is a Real History of the distemper as it appeared in Boston, New England, taken clinically from the life and not copied." He attended all the cases he could and saw difficult or extraordinary cases in consultation, and made autopsies, as they were made in those days. He wrote a statement as to the situation caused by the epidemic at a meeting called by the selectmen of the town "in order to inform the neighboring colonies concerning the state of the prevailing epidemic."

Douglass popularized the use of mercurials as therapeutic agents, according to the evidence of Colden; he had wide interests in scientific matters. He made observations regarding eclipses; he began to make a map of New England, based on actual surveys; he gathered a collection of over a thousand plants of the neighborhood of Boston; in 1743 he published "Mercurius Nov-Anglicanus, or an Almanack." Douglass purchased certain "wild lands" in Worcester County, though there is no proof that the town of Douglas owes its name to him, as has been stated by various authors. At his death his estate amounted to $10,617, a considerable sum for those days. During the entire time of his residence in the town he was connected with the Scotch Charitable Society, being vice-president in 1721 and president from 1728 until his death. In 1749 and 1751 there were published volumes I and II of his "A Summary, Historical and Political, of the First Planting, Progress and Progressive Improvements and Present State of the British Settlements in North America," a work which was reprinted in Boston and London in 1755 and again in London in 1760, and he had written in 1739 "A Discourse concerning the Currencies of the British Plantations in America. Especially with regard to their paper money; More Particularly, in Relation to the Province of Massachusetts-Bay, in New England."

Douglass was a man of strong dislikes, he was argumentative and disputatious. He quarrelled with the clergy, who controlled the community, he did not hesitate to criticize those with whom he did not agree and got into altercations with Admiral Knowles and with Governor Shirley, nevertheless he must be given credit for unusual work as a pioneer in the study of scarlet fever and smallpox, and for being a man of great learning, of remarkable energy and perseverance, a fearless public-spirited citizen and withal an economist of no mean order.

He died suddenly, in Boston October 21, 1752. He was never married. His sister, one "Catherine Kerr, formerly Douglas, widow, the natural and lawful sister and only next of kin of deceased", as the record has it, at Somerset House, London, was appointed administrator of the "estate of Wm. Douglas, late of Boston in New England, Dr. of Physic, a bachelor, deceased," on April 13, 1753. WALTER L. BURRAGE.

DOWELL, Greensville (1822-1881), noted surgeon of Texas, the son of James and Francis Dalton Dowell, was born in Albermarle County, Virginia, on September 1, 1822. As a boy he went to the local schools and afterwards attended medical lectures at the University of Louisville and took his M. D. from Jefferson Medical College in 1846. Up to 1852 he practiced at Como, Mississippi, and finally settled in Galveston. He did a considerable amount of successful surgery, and enjoyed, perhaps, as much reputation as an operator as any of his professional contemporaries in this section. Original, bold and resourceful, with more opportunity and training, his achievements in surgery might have been brilliant. He devised several surgical operations, among them one for hernia, and invented a number of surgical instruments. The first medical periodical ever published in the state, the "Galveston Medical Journal" (1866-1870), was established and edited by Dowell. He was the author of two books on medical subjects, one on yellow fever, the other on hernia. While not included among the classics on these subjects, it is conceded that they contain many valuable truths. To him is accorded priority in directing attention to the momentous fact that yellow fever is transmitted by mosquitoes (1876), five years before Dr. Finlay enuciated his theory on that subject. He was the first to perform the

operation which Hahn, of Berlin, named nephrorrhaphy. Dowell fixed the kidney by a tape suture in 1874, ("Annals of Surgery," vol. xii, p. 87,) seven years before Hahn introduced it to the profession.

For two years he was professor of anatomy in the Soulé University, also lecturer on surgery when that institution became the Texas Medical College. In 1863 he became a surgeon in the Confederate Army and was also on the staff of the Galveston General Hospital.

He married, in June, 1849, Sarah Zelinda, daughter of John H. White, of Como, Mississippi, and after she died, having left him two sons and one daughter, he wedded, in 1868, Mrs. Laura Baker Hutchinson, of Galveston, who was very beautiful. On the night of the wedding the boys resolved to give them a charivari, but the doctor considered the mock serenade an insult. He seized a club and rushed out to disperse the crowd and in the mêlée sustained a severe fracture of the right arm.

Dr. Dowell died on June 9, 1881.

JOHN F. Y. PAINE.

DOWLER, Bennett (1797-1879), early American physiologist, was born in Elizabeth, Ohio County, Virginia, April 16, 1797, the son of Edward Dowler and Eleanor Riggs. He was educated in Virginia, Pennsylvania, and at the University of Maryland, where he was graduated M. D. in 1827. He settled first in Clarksburg, Virginia (now West Virginia), and held the position of postmaster (1832-1836); in 1836 he moved to New Orleans.

In March, 1845, he began a series of physiological experiments on the alligator, demonstrating after decapitation and division of the cord, the power of the segments to recognize and guard against irritants applied to the corresponding sections of the body. He made numerous experiments on human bodies immediately after death, regarding contractility of muscular tissue and capillary and chylous circulation. He attributed post-mortem calorification to the absence of the refrigeration of respiration, stating his views in a series of essays in 1843-4. He was a voluminous writer and produced about 1,100 pages on medical subjects, chiefly physiological; his writings in manuscripts make thirty folio volumes. He early defended the thesis of the vitality of the blood, and opposed the idea of specializing functions of the roots of the spinal nerves, Sir Charles Bell's discovery.

The June, 1859, "The American Medical Gazette" reprinted an article by Dowler on cases of extreme longevity, and he was the author of "Tableau of the Yellow Fever of 1853."

He was co-editor of the "New Orleans Medical and Surgical Journal," 1854-1861, and of the "New Orleans Medical Record" in 1866.

He died in New Orleans in 1879.

DOWNER, Eliphalet (1744-1806), of Brookline, Mass., widely known as the "Fighting Surgeon," was the son of Joseph and Mary Sawyer Downer, of Norwich, Connecticut, and a descendant of Robert Downer, who settled in Newbury, Massachusetts, about the year 1650. Eliphalet was a native of Roxbury, Massachusetts, but at the time of the Revolution owned a house on Washington Street, Brookline, near the famous Punch Bowl Tavern. Drake (History of Roxbury, p. 348) speaks of Downer as a "skillful surgeon, but a hard, rough man." Upon the news of the Lexington fight Dr. Downer shouldered a musket and set out for the scene of action. While harassing the rear of the retreating British, he "came to single combat" with a British soldier, according to Major General Health. (Memoirs, p. 14.) The soldier accosted him with, "you damned rebel, do you dare face?" He did dare, and as they approached each other, both fired and missed. A hand to hand conflict ensued. The soldier's gun being longer, and his acquaintance with the bayonet exercise being greater, it was going hard with the doctor, when he bethought himself of reversing his musket. Stepping back a few paces he felled his antagonist by a blow on the head, the gun breaking in his hands. Then he finished him by running him through with his own bayonet. That night as the doctor related his experiences of the day, he remarked, "It was not ten minutes before I got another shot."

In December, 1775, Downer was surgeon to one of the regiments under Gen. Putnam at Charlestown while the militia were fortifying Lechmere Point. Soon after the evacuation of Boston by the British, he enlisted as surgeon to one of the first privateers fitted out in New England. It is said that he worked one of the guns on board the sloop "Yankee" when two sloops, loaded with rum and sugar, were captured. Later he was on board the "Alliance" when she was taken at sea after fighting seven and a half hours and losing both her masts. He was severely wounded by grape-shot, receiving a compound fracture of the left arm, and was thrown into Portsea Prison near Portsmouth, England. He made

his escape by tunneling and succeeded in reaching France. On two other occasions he was captured by the British and was imprisoned in Dartmoor and Forten prisons but managed to effect his escape. His family, a wife and four children, had a hard time to get the means of subsistence during the three years he was away from home. All this time, it is said, his wife received but one letter from him. On July 9, 1779, Downer was commissioned chief surgeon to the Penobscot expedition, with which he served three months, losing all his surgical instruments, so the Massachusetts Legislature appropriated the sum of fifteen dollars to reimburse him. This was the last of his services on sea or land in the cause for freedom.

At the close of the Revolutionary War he resumed practice in Brookline, and was said to have had a large and lucrative following. He died in Brookline, April 4, 1806.

WALTER L. BURRAGE.

DRAKE, Daniel (1785-1852), pioneer physician of Cincinnati. In a letter dated Louisville, Ky., December 15, 1847, Daniel Drake says: "My father, Isaac, was the youngest son of Nathaniel Drake and Dorothy Retan; my mother, Elizabeth, was the daughter of Benjamin Shotwell and Elizabeth Bonney," and that is all he knew of his ancestry. He himself was born in Essex County, New Jersey, on October 20, 1785. When he was two and a half, his father moved to May's Lick, Kentucky. Here he lived in a log cabin until fifteen years old, attending school from November until March of each winter. Of the classics he knew nothing until he began to study medicine. In the fall of 1800 he went to Cincinnati and began to study under Dr. Goforth (q. v.). At that time a student was required not only to read his preceptor's books, but to fill prescriptions and attend the consulting-room, generally a diminutive drug store. Dr. Drake's first tasks were to read Quincy's "Dispensatory" and grind murcury for mercurial ointment. The latter, he said, was much the easier of the two. At the end of four years he received an autographed diploma from Goforth, signed as "Surgeon-general, First Division, Ohio Militia." It was the first diploma ever granted in the west, and Dr. Drake prized it above all others as an old-time memorial. In the autumn of 1805 he went to Philadelphia to attend University lectures and in the following spring returned to Cincinnati, making the journey on horseback in about thirty days. The year 1806 was spent in Kentucky, and on the twenty-first of December, 1807, he married Harriet Sisson, granddaughter of Col. Jared Mansfield, surveyor-general of the northwest territory. In September, 1809, they lost their first child, Harriet, and in 1816, a second, John Mansfield, born in 1813. Three more children were born, Charles D., Elizabeth M., and Harriet E. Mrs. Drake died September 30, 1825.

Dr. Drake attended his second course of lectures in the University of Pennsylvania in 1815, graduating in 1816, and in 1817 held the chair of materia medica in Transylvania University, Lexington, Kentucky. After the first session he returned to Cincinnati and in 1818 made plans for a college, medical school and hospital, in 1819 visiting Columbus, Ohio, to lay his plans before the Legislature. They were adopted at once, and charters granted for the Cincinnati College, for the Medical College of Ohio, and for the Commercial Hospital. By contract with the Secretary of the Treasury the hospital became also the Marine Hospital of the United States.

The first session of the Medical College of Ohio was held during the winter of 1820-21, with Drake as lecturer on the institutes and practice of medicine, including obstetrics and diseases of women and children. Before the close of the session misunderstanding sprang up, and Drake was expelled by the votes of two colleagues. In 1823 he went back to Lexington, Kentucky, and resumed the chair of materia medica, but in 1825 was transferred to the chair of practice, retained until 1827.

In 1830 he held the professorship of practice in Jefferson Medical College, of Philadelphia. There he created a furor by his eloquence not only among the students, but also the profession. At the end of the term he returned to Cincinnati and founded a medical department for Miami University, which, however, united with the Medical College of Ohio before the opening of the first session. Dr. Drake was assigned a subordinate position, and once more retired to private life.

In 1835 he organized the medical department of Cincinnati College. His colleagues were: Drs. Landon C. Rives, Joseph N. McDowell, John P. Harrison, J. B. Rogers, H. G. Jameson, and S. D. Gross. When the Cincinnati school closed, Dr. Drake was appointed professor of clinical medicine and pathological anatomy in the University of Louisville. In 1844 he was transferred to the chair of practice of medicine, holding it until 1849, when he resigned and once more returned to Cincinnati. In this year he was reappointed pro-

fessor of practice in the Medical College of Ohio, but trouble arose, and in the spring of 1850 he resigned. In the autumn of 1850 he was recalled to Louisville, where he filled the chair of practice of medicine in 1851-52. In the latter year he returned to Cincinnati, and to the Medical College of Ohio, then reorganized. But his work was done, he saw only the opening exercises of the session.

In 1835 he exerted himself to enlist the people of Ohio and the southwest in favor of a chain of railroads from Cincinnati to the coasts of South Carolina and Georgia. He made an elaborate report, showing the political and commercial advantages that would accrue to the states through which the road would pass. The scheme failed through the unwillingness of one of the states to grant the right of way. More than fifty years later his wishes were realized.

Dr. Drake was a voluminous writer. His first work was on the "Topography, Climate and Diseases of Cincinnati," published in 1810, and in 1815 his celebrated "Picture of Cincinnati" appeared. The year 1827 saw him editing the "Western Journal of the Medical and Physical Sciences," which he continued to do until 1836. In 1832 he published a "Practical Treatise on the History, Prevention, and Cure of Epidemic Cholera." His "Discourses" were delivered in July, 1852, before the Cincinnati Medical Library Association, but the crowning glory of his life was "The Diseases of the Interior Valley of North America." In 1822 he announced his intention of preparing it, but it was not until 1837 that he began in earnest the collection of material. In the prosecution of this work he made several tours through the West and South. Finally the first volume of the work was presented to the profession in 1850. The second volume did not appear until November, 1854, two years after the death of the author. "This work is the 'magnum opus' and result of the life-long labor, including extensive personal observations, library research and mature reflection, of a man whose fame, as compared with that of his contemporaries will probably be greater a century hence than it is today, and whose name even now should be among the first on the list of the illustrous dead of the medical profession of the United States."—Billings.

Dr. Drake received many tokens of honor from scientific bodies at home and abroad.

He died in Cincinnati, November 5, 1852, from arachnitis.

A. G. Drury.

DRAPER, Frank Winthrop (1843-1909), pioneer Massachusetts Medical Examiner, was born in Wayland, in that state, February 25, 1843. He was graduated from Brown University in the class of 1862 and was given an A. M. by the same university in 1865, when he had finished service in the army, for he enlisted in August, after graduation, in the 35th Regiment of Massachusetts Volunteers. He saw much active service on many fields in a wide area from Virginia to Vicksburg, Mississippi. In April 1864, while in the Virginia campaign he was made a captain and attached to the 9th army corps. He went through the Wilderness campaign and was in the "Crater" before Petersburg. At the battle of Hatcher's Run he was an aide to General Sigfried and also was under General Terry in North Carolina, being present at the surrender of General Johnston. When Draper resigned from the army in June 1865 he was acting assistant adjutant general, 1st Brigade, 3rd Division, 25th Army Corps. His interesting account of his experiences in the army is embodied in "A Soldier's Narrative", published by the town of Wayland.

On leaving the army Draper entered Harvard Medical School, where he was graduated in 1869 with honors. After serving as house surgeon at the Boston City Hospital he began general practice in Boston and was, for a time, assistant editor of the "Boston Medical & Surgical Journal," the weekly publication which had been issued since 1828; also he was lecturer on hygiene at Harvard Medical School from 1875 to 1884 when he became assistant professor of legal medicine, passing on to the professorship in 1889, a position he held until 1903 when this department was abolished as Draper was retiring from active duties. His chief life work began in 1877 when the old and corrupt coroner system in Massachusetts went out of existence and was replaced by the present medical examiners who investigate all cases of sudden death, a plan which has been a model to the other states of the Union. The act was put on the statute books through the activities of a committee of the Massachusetts Medical Society headed by Benjamin Eddy Cotting, (q. v.) who had just been president of that society. The bill was approved by the Governor on May 9, 1877 and Draper was selected to put it into operation and to develop a standard. He was appointed medical examiner for the large Suffolk (Boston) district and began work at once. From

that time for the next thirty years medical circles of Boston were accustomed to see at their meetings and on the streets a man of military bearing, neither tall nor short, precise in demeanor, with kindly eyes looking out on his friends over a square trimmed beard. He had a genius for detail and accurate record. Calm, unemotional his keen mind made him an exemplary witness in medico-legal cases in court. Attorneys often said that they did not care for which side he appeared in civil suits so long as he was in the case, his evidence being regarded as always fair and impartial. He had an almost uncanny ability to ferret out the essential facts in cases of sudden death to which he was called in his official capacity and to present them to the district attorney or to the court; he gave instruction in this branch to a generation of medical students; he investigated over 8000 deaths and performed over 3000 autopsies, summarizing his experience for the benefit of the profession, in "A Text Book of Legal Medicine", 1905. He had established the medical examinership on a scientific basis, entirely free from the graft and undue publicity which had helped to discredit the coroners, who had been untrained men generally without a knowledge of medicine, so essential in this department. Draper was a pioneer in another enterprise which reflected credit on his native state, namely the first state board of health in the country, established in 1886, serving for six years as a member of the board; from 1873 to 1874 he was a visiting physician at the Children's Hospital, from the latter date to 1886 he acted in the same capacity at the Boston City Hospital. For the Massachusetts Medical Society he was secretary for two years (1873-1875) when he became treasurer, an office he filled to the great benefit of the society for sixteen years, being most business-like in all his dealings, an attribute all too rare in members of the medical profession. In 1900-1902 he was president of the society, delivering an address at the opening of the new home of the Boston Medical Library at 8 The Fenway, the official headquarters of the society in 1901.

As a lecturer Draper was always interesting to his audience; his remarks being to the point and clothed in suitable language; he had a clear and forceful style in writing. He had the courage to express his opinions on proper occasions and was endowed with the tact to differ without exciting animosity. He was modest, companionable and a warm friend to his intimates. In the early seventies he married Miss Fanny Jones. They had two sons, one of whom became a physician. For four or five years before his death he suffered with arteriosclerosis being forced to give up all work but going about with his wife. The end came from a cerebral hemorrhage on April 19, 1909 when he was sixty-six years old.

WALTER L. BURRAGE.

Draper, Henry (1837-1882), astronomer, and previously, for six years, professor of physiology in the University of the City of New York, his alma mater.

See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 330-332.

DRAPER, John Christopher (1835-1885), professor of chemistry in the University of the City of New York, was born in Mecklenburg County, Virginia, March 31, 1835, and died in New York City December 20, 1885. He entered the University of the City of New York in 1852, but leaving the classical department, was graduated at the medical school in 1857. From March, 1856, until July, 1857, he held the office of house physician and surgeon to Bellevue Hospital, and published at that time papers on "The Production of Urea" (February, 1856), and "Experiments of Respiration" (July, 1856). The year subsequent to his graduation was spent in Europe in travel and study. In December, 1858, he became professor of analytical chemistry in the University of New York, holding that chair until 1871. From 1860 till 1863 he was professor of chemistry in Cooper Union, and in 1862 he accompanied the Twelfth New York Regiment to the front as assistant surgeon, serving for three months. In 1863 he was elected professor of natural sciences in the College of the City of New York, and in 1866 professor of chemistry in the medical department of the University of the City of New York, chairs he held until his death. Dr. Draper was a member of the New York academy of medicine, and in 1873 received the degree of LL. D. from Trinity College. He was an occasional contributor to medical and scientific journals, and besides twenty-four original papers, published numerous articles on diet, dress and ventilation in the "Galaxy" (1868-71). In 1872-3 he edited the "Year Book of Nature and Science," and also the department of "Natural Science" in "Scribner's Monthly" from 1872 till 1875.

He published "Text Book on Anatomy, Physiology and Hygiene" (New York, 1866); "A Practical Laboratory-Course in Medical Chemistry" (1882); and a "Text-Book of Medical Physics" (1885).

DRAPER, John William (1811-1882), chemist, botanist, physiologist, of New York. "A native respect for republican institutions" is the reason assigned by an old biographer why John W. Draper left England for America. Be that as it may, he was soon equally well known in both countries. Born May 5, 1811, at St. Helens, near Liverpool, the son of John Christopher, a Wesleyan minister, and Sarah Draper, he was educated at a Wesleyan school, the Woodhouse Grove Academy. A clever boy, at fourteen he was studying Hebrew and the old divines, and intended to be a minister, but a strong bent towards natural philosophy and chemistry drew him away, and at sixteen he became one of the first students at the newly-opened London University, to which flocked men of high learning from all parts of the world. The next year, on the death of his father, he bravely took his father's place as the head of a large family, yet went on with his studies, his first original work being accomplished while he labored with Dr. Turner in the analysis of a fossil hydrocarbon.

His mother's uncle, Commodore Ripley, United States Navy, had settled in Virginia, and in 1833 young Draper joined him there and continued his scientific pursuits and studied at the University of Pennsylvania, graduating M. D. in 1836, his thesis on "Absorption" winning so high an opinion from the faculty that they had it published in the "American Journal of the Medical Sciences." After practicing a short time in Mecklenburg, Virginia, he became professor of chemistry at William and Mary College, Virginia, and soon after occupied the same chair at Hampden Sidney College. Here a fine library and the valuable instruments collected by Pres. Cushing enabled Draper to labor joyfully from early dawn far into the night, his papers on "Absorption," "Glandular Action," and equally valuable ones on "Solar Light" and "Thermo-electricity" attracting attention throughout Europe and being translated into German.

Almost immediately after taking his diploma, he was made professor of chemistry, natural philosophy and physiology in the University of the City of New York. In company with Paine, Mott, Bedford, Pattison and Revere, (q. v.) he inaugurated the New York University Medical College, in 1841, himself occupying the chair of chemistry.

Although he practiced as a physician in Virginia and New York, it may be said of him that he spent much time and patience in perfecting hygiene, as the result of experimentation. During his chemical experiments he did much for photography, in the way of original processes, and he was the first in the state to take a daguerreotype portrait. When the news of Daguerre's photographic discovery came to New York, Draper fitted an ordinary spectacle lens into a cigar case, and began his experiments, first by taking views out of a window, and afterwards, by taking portraits. To shorten the time of exposure, he whitened the faces of his sitters.

In May, 1866, his fine library, his extensive notes and apparatus were all burned, a severe loss to such a book-lover and writer.

Physiology and chemistry, botany and natural history took the greater part of his time. As a lecturer he was concise without being ambiguous, calm and unimpassioned in utterance. "He would explain the phenomena of lightning or manufacture prussic acid in the same tone and way in which he lectured on milk, and having told his story left enthusiasm to his hearers." His biographer gives as two of Draper's virtues, first that he considered smoking "a dirty practice" and second that he "belonged to the Protestant Episcopal faith."

He married Astoria C. P. Gardner in England, a daughter of Dr. Gardner of Rio Janeiro, and had six children. Two of his sons, John Christopher (q. v.) and Henry (q. v.) became distinguished in science. Daniel was a meteorologist of New York, and had the degree of Ph. D.

He died at Hastings-on-the-Hudson January 4, 1882.

Dr. Draper's numerous and valuable experimental researches were published in the "American Journal of the Medical Sciences," in the "London and Edinburgh Philosophical Journal" and in the "American Journal of Science and Arts." He was likewise the author of many literary works and reviews: "A Treatise on the Forces which produce the Organization of Plants" (1844); "A Text-book on Chemistry" (1846); "A Text-book on Natural Philosophy" (1847); and one on "Human Physiology" (1856), which passed through numerous editions. His "History of the Intellectual Development of Europe" appeared in 1852, and was almost immediately

afterwards republished in England and translated into French, German, Italian, Polish and Russian, and has passed through many editions in this country. In some respects, his most important work was the "Conflict between Science and Religion," which attracted great attention, and was translated into all the principal languages. He was also the author of "A History of the American Civil War" and "Thoughts on the Future Civil Policy of America."

In 1874 the American Academy of Science conferred on him the Rumford medal, the highest distinction in their gift, for his researches on "Radiant Matter."

DRAPER, William Henry (1830-1901), first professor of dermatology in the College of Physicians and Surgeons, New York, clinician, was born in Brattleboro, Vt., October 14, 1830, and died in New York City, April 25, 1901. He was graduated in arts from Columbia in 1851, afterwards becoming a student under Dr. Willard Parker and received his M. D. from the College of Physicians and Surgeons of New York in 1855, while in 1854 his alma mater conferred upon him the degree of A. M. He was clinical professor of diseases of the skin at the College of Physicians and Surgeons from 1869-79, and although lectures had been given on this subject before in this college he was the first to hold the professorship and was one of the founders of the American Dermatological Association. After relinquishing his dermatological professorship, he gave his entire attention to clinical medicine, was professor of clinical medicine in Columbia, and is remembered rather as a clinician than as a dermatologist, being consulting physician to St. Luke's, Roosevelt and Presbyterian Hospitals, and visiting physician to the New York Hospital.

He was a member of the New York County Medical Society and president of the Academy of Medicine.

He was a careful, though not voluminous writer, and was the author of a small treatise on dermatology.

J. McF. Winfield.

DRINKARD, William Beverly (1842-1877), ophthalmologist, of Washington, D. C., was a native of Williamsburg, Virginia, where he was born, December 7, 1842, his mother being Mary Frances Martin, daughter of William Beverly Martin. Dr. Drinkard lived in Virginia until 1857, when he came to Washington and attended the school of Mr. Charles B. Young, where he showed fine intellectual qualities. He was a pupil at Georgetown Medical College a short time, and in May, 1860, sailed for Europe and studied at the Lycée Imperial, Orleans, France. Then he went to Paris, and in November, 1861, began to study medicine with ardor and devotion. As assistant in the ophthalmological clinic of Desmarres he had abundant opportunities to study eye disease. Dr. Drinkard also served as interne in the hospitals and came in contact with the eminent teachers of the time—Velpeau, Nélaton, Malgaigne, and others. In 1865 he went to London where he received the degree of M. R. C. S., and in the autumn of 1865 returned to Washington and took his M. D. at Columbian College, District of Columbia. Immediately after graduation he began to practice, being in a short time made demonstrator of anatomy in the National Medical College, and lecturer on minor surgery. In 1872 he was elected professor of anatomy, a chair he held at the time of his death. He was one of the founders of the Children's Hospital, his special department being diseases of the eye and ear.

As an opthalmologist, the great care which he bestowed on his cases, the thoroughness of his clinical examinations, the precision and nicety of his manipulations established the strongest confidence in his ability.

No death ever occurred among the younger members of the medical profession in Washington which was so generally lamented as that of Dr. Drinkard on February 13, 1877.

Daniel Smith Lamb.

DROWNE, Solomon (1753-1834), physician, botanist and public-spirited citizen, was born in Providence, Rhode Island, March 11, 1753, son of Solomon Drowne, who settled in Providence in 1730, a merchant and a prominent citizen. The younger Drowne was graduated at Rhode Island College (Brown University) in 1773, and in medicine at the University of Pennsylvania in 1781; he received a medical degree, also, from Brown in 1804, and A. M. from Dartmouth in 1786. From 1783 until his death he was a fellow of Brown University. He served in several hospitals and in the Revolutionary War. He is said to have "won the regard" of Lafayette, of Count de Rochambeau and of Count d'Estaing, so that invalid soldiers were left to his care when the head of the medical staff returned to France. Drowne went on a cruise as surgeon in the privateer "Hope," and a journal

of this cruise, containing the genealogy of his family, has been published.

In 1784-1785 he visited hospitals and medical schools in England, France, Belgium and Holland, and while abroad met Franklin, Jefferson and other noted men; he returned to Providence and in 1788 moved to Ohio. He took part with General St. Clair in the treaties at Fort Harmar and gave the first anniversary oration on the settlement of Marietta (1789). After this, he was several years in Virginia and Pennsylvania to benefit his health, and in 1801 went to Foster, Rhode Island, where he spent the rest of his life cultivating his botanical garden, doing scientific and literary work, and practicing. He became professor of botany and materia medica at Brown University in 1811, serving until 1834. In the Historical Introduction of the first "Pharmacopoeia of the United States of America, 1820," appears the following paragraph: "The Rhode Island Medical Society at their annual meeting, held on the first of September, 1818, concurred in the formation of a National Pharmacopoeia and appointed Solomon Drowne, M. D., their delegate." He was active in the work of the Rhode Island Society for the Encouragement of Domestic Industry, of which he was a founder. With his son, William Drowne, he published "The Farmer's Guide" in 1824; besides that he held public offices and wrote scientific and literary articles for magazines.

He gave several courses of botanical lectures and made public addresses, one of them being a "Eulogy on Washington," on February 22, 1800. He was an original member of the Rhode Island Medical Society and a member of the American Academy of Arts and Sciences.

He married Elizabeth, daughter of Thomas Russell of Boston, in 1777; they had five daughters and three sons.

Drowne died at Mount Hygeia in Foster, Rhode Island, February 5, 1834.

HOWARD A. KELLY.

DRUMMOND, William Henry (1854-1907), of Canada, known equally as physician and poet, was the son of George Drummond, an officer in the Royal Irish Constabulary, and Elizabeth Morris Soden. He was born at Currawn House, Leitrim County, Ireland, April 13, 1854. Educated at Mohill, Leitrim County, and at Montreal High School, he studied medicine at Bishop's College, graduating in 1884, and was professor of medical jurisprudence, 1893. In 1894 he married May Isabel, only daughter of Dr. O. C. Harvey of Jamaica, and was survived by her and two children.

Dr. Drummond retired from active practice in 1905, to occupy himself with large mining interests which he had acquired in northern Ontario. An outbreak of small-pox in the camp required his presence in Cobalt, and it was while attending to his duty that he was stricken with paralysis. He died in Cobalt amid the wild scenes he loved so well, on April 6, 1907. The end came as a complete surprise to his friends. His splendid physique and fine frame, his cheerful aspect and vigorous habit of life gave promise of an old age which only the slow process of decay should destroy. His untimely death made a profound impression throughout Canada, and also in the United States where he was well known. The "Montreal Medical Journal" summed up the general feeling in the words: "By his vision we see our compatriots in a new and kindly light. So long as men love the open life, the honorable chase of game, the smell of the earth, and the sounds of the forest, his spirit will continue to haunt the Laurentian hills, the blue lakes which lie among them, and the swiftly flowing waters of which he sung." Better known as poet than physician, yet he practiced medicine in Montreal for twenty-three years, and occupied a professional chair for fifteen. He was probably the most widely known of Canadian writers on account of the vogue which his verse, written in the "patois" of the "habitant," obtained. His first volume, entitled "The Habitant," was issued in 1898, and it quickly attained a large sale. It was followed by "Madeleine Voerchères," "Johnny Couteau," and "The Voyageur." His best known pieces are "The Wreck of the Julie Plante," "The Papineau Gun," and "Le Vieux-Temps." Dr. Drummond had the quality of great poets in that he saw beauty in common things, pathos in lowly life, humor in dull uniformity. The vein which he discovered was small, but it was pure and new. He discovered the French-Canadian and embodied him in literature, as well as it could be done. What Burns did for Scotland, he did for Quebec.

ANDREW MACPHAIL.

DRYSDALE, Thomas (1770-1798), early quarantine physician of Baltimore, was born in 1770. He was a student at St. John's College (Annapolis) from April 12, 1790, to August 11, 1790, his preceptor in medicine being Dr. George Brown of Baltimore, whom he de-

scribes as "a person, who truly combines all the merits of a professional character, with all the endearing and respected virtues of a gentleman." Drysdale went on to the University of Pennsylvania and was graduated M. D. on May 12, 1794, with a thesis with a Latin title which may be translated, "Concerning Certain Functions and Inflammation of the Liver." Returning to Baltimore he began to practice.

In 1793 fifteen hundred persons, of whom 500 were negroes, fled from the massacre in St. Domingo and sought refuge in Baltimore, and although the Board of Health declared the city free from yellow fever, Governor Lee proclaimed quarantine against all infected places. In 1794 Drysdale was appointed a quarantine physician, and when yellow fever was epidemic in Baltimore during the summer and part of the autumn he observed the disease with great care and published his observations in a series of letters to Benjamin Rush, printed (not entire) in the "Philadelphia Medical Museum," 1805, vol. 22-42; 121-149, 241-266; 361-373,— the date of the last letter is December, 1794. He gives a graphic account of the appearance and symptoms of the disease. He remarks that "in drinkers of ardent spirits, the fever was excited not only with more facility, but was attended also with more irresistible violence and malignity . . . . Accidental circumstances sometimes excited the disease. A mate of a vessel, having received a blow on the head from a cable, was immediately attacked with the fever. . . . . A gentleman was attacked by the disease immediately after falling into the river. . . . among the causes are cold and sleep, and to these we may add grief and fear." A footnote adds, "The influence of these two are thus noticed by Hoffman in his directions for prevention of the plague. 'Guard against violent passions, endeavoring to preserve a constant firmness of mind, and shaking off all timorousness and dejection!" Drysdale further says: "Sleep . . . . abstracts immensity from the support of life, for it is indeed a tendency to death . . . . . I believe that the proportion of mortality among young equalled that of any other period of life . . . . . " Drysdale had made the correct diagnosis against the contrary opinion of Dr. George Brown, Dr. John Coulter and Dr. Lyde Goodwin. The epidemic started by the water at Falls Point and spread rapidly in the month of August.

A society for the abolition of slavery was formed in Baltimore in 1788; Drysdale later was interested in this and gave the oration on July 4, 1794.

He was an honorary member of the Philadelphia Medical Society.

Drysdale died in 1798.

HOWARD A. KELLY.

DRYSDALE, Thomas Murray (1831-1904), a gynecologist of temporary prominence through his connection with Atlee, and the discovery of the "ovarian cell" was born in Philadelphia, August 14, 1831, the sixth son of William Drysdale, descended from Scotch Covenanters; an uncle was Alexander Duff, the great missionary to India from the Scotch Presbyterian Church. His early education was had at the schools of the Rev. Joseph P. Engles and the Rev. Samuel Crawford. Later he held a position in a drug shop in order to become familiar with pharmacy, and soon after took up the study of medicine with Washington L. Atlee (q. v.), at the same time attending lectures at the Pennsylvania Medical College, from which he received his M. D. in 1852. Drysdale was Atlee's surgical assistant for ten years, and married his daughter, Mary L., in 1857; he has given us an excellent, brief life of his father-in-law in the Transactions of the American Gynecological Society, 1878, with a portrait.

Drysdale was professor of chemistry in Wagner Institute of Science, 1855; professor in the Franklin Institute, 1862; consulting surgeon to Girard College, 1885. He held numerous offices in medical societies and was president of the Philadelphia Obstetrical Society, 1887-88.

Drysdale's title to fame is vested in his discovery of the "ovarian corpuscle" ("On the Granular Cell Found in Ovarian Fluid," Trans. Amer. Med. Assoc., 1873, vol. xxiv), which was alleged to be peculiar to fluids formed in ovarian cysts, in this way affording a much needed diagnostic mark at a time when any opening of the abdominal cavity was highly hazardous and when diagnosis was harder than it is to-day. With the aid of the hypodermic syringe the fluid of the cyst was secured to decide whether the case was ovarian and operable or not. Unfortunately the alleged discovery did not stand the test of time, as the cell was not pathognomonic.

Drysdale died May 26, 1904.

HOWARD A. KELLY.

DUANE, Alexander (1858-1926), New York ophthalmologist, and author, was born Sep-

tember 1, 1858, in Malone, New York; his father, General James C. Duane, was a graduate of West Point and in charge of the engineering there, and his mother, Harriet W. Brewerton, was the daughter of General Henry Brewerton, former superintendent of West Point. His great-great-grandfather, Judge James C. Duane, was the first mayor of New York City.

Private tutoring, stressing mathematics and English, preceded his college preparatory work; he graduated at the head of his class from Union College in 1878. After taking his M. D. from the College of Physicians and Surgeons, New York, in 1881, he was appointed resident physician to the New York Hospital. He practiced general medicine until 1887 when Hermann Knapp (q. v.) and George T. Stevens (q. v.) turned his interest to ophthalmology, a field for which his mathematical bent especially fitted him.

During 1889, he was associated with a Dr. Alfred C. Palmer of Norfolk, Virginia, where he met Susan Williams Galt, whom he married July 14, 1891. They had three sons: Alexander Galt, killed in the World War, Robert Livingston, and William Richard.

In 1894, he was associated with Hermann Knapp (q. v.) as assistant in his office and clinic. For a short time, he taught at Cornell University; he continued teaching men desirous of special instruction in ophthalmology. His consulting practice was large, dealing especially with patients who had difficult muscle conditions. Later, as his strength failed he turned more to writing.

Duane was a strong swimmer and good sailor and early joined the Naval Reserve. During the Spanish American War, he was lieutenant in charge of the Second District Coast Signal Service, U. S. N.; in 1915, he put himself on the reserve list of the Naval Militia, New York, and during 1917-19, served as signal officer on the U. S. S. "Granite State," where he trained details of men in signalling and quartermaster work. He was president of the section on ophthalmology of the American Medical Association in 1917-18 and of the American Ophthalmological Society in 1923. In 1919, he received the D. Sc. of Union College and was a trustee of that college after 1923.

Notable linguistic ability made possible his fine translation of Fuchs's "Textbook of Ophthalmology," 1903 (8th edit., 1924); material additions to each succeeding edition made Fuchs declare the last few to be Duane's. He contributed the medical terms to Webster's International Dictionary, Murray's New Dictionary of the English Language, and Foster's Encyclopedic Dictionary of Medicine; published the "Students' Dictionary of Medical Terms," 1893; and wrote the chapter on ocular muscles in textbooks by de Schweinitz and Randall, Posey and Wright, Posey and Spiller, and Weeks, and about seventy-five articles on his specialty, one of which, "A New Classification of Motor Anomalies," 1896, prize essay of Columbia University, presented a system generally adopted. His "Rules for Signalling on Land and Sea," 1899, was used for years as a textbook in the naval militia. Work on the manuscript of a book on physiologic optics and of another on ocular muscles was left unfinished as he was called to the larger life June 10, 1926.

Duane was scholarly, witty, and greatly beloved by all who knew him, an able botanist, deeply interested in astronomy and music, and an earnest Christian with wide influences.

DuBOIS, Abram (1810-1891), one of the founders of the American Ophthalmological Society, was a graduate of Trinity College (1830) and of the College of Physicians and Surgeons, New York (1835). He was a pupil of Dr. Kearney Rodgers of New York (q. v.), and became his associate at the New York Eye Infirmary in 1843, with which institution he was actively connected for forty-eight years. He was not an author, but was fully devoted to his profession and pursued it with noble aims in a worthy spirit, and made a generous gift to the library of the New York Academy of Medicine.

He died in New York City, August 29, 1891, aged eighty-one years.

HARRY FRIEDENWALD.

DUBOIS, Henry Augustus (1808-1884), was born in New York City, August 9, 1808, and died in New Haven, Conn., January 13, 1884. He was graduated at Columbia in 1827, and at the College of Physicians and Surgeons in 1830, after which for a time he was house physician to the New York Hospital. In 1831 he visited Europe, and there pursued studies under the masters in surgery and medicine. During his stay in Paris he became a member of the Polish committee there, holding weekly meetings at the residence of either Lafayette or J. Fenimore Cooper. It was his intention to join the Polish army, but he was finally dissuaded from that purpose. In 1834 he was one of the few Americans who followed the

body of Lafayette to the grave, and was exposed in the attack made by the "red Republicans" to seize the body. He returned to New York in November of that year, and entered on the active practice of his profession, becoming one of the physicians to the New York dispensary. Impaired health soon caused his removal to Ohio, where he had inherited a large tract of land, on which he laid out and in a great measure built up Newton Falls. While residing in the west he withdrew from active practice, but continued to act in consultation. In 1852 he returned to New York greatly improved in health, and became president of the Virginia Cannel Coal Company, and later of the Peytona Cannel Coal Company. Two years later he removed to New Haven.

Dr. Dubois was a member of scientific societies. Although he published no contributions to medical science, he largely influenced the opinions of his professional brethren especially in reference to scarlet fever. He contended that this disease is an asthenic epidemic, and not amenable to medicines until it has run its course. In 1864 he received from Yale the degree of LL. D. for his reply to the seven English essayists, that was republished in London.

In 1835 he married a daughter of Peter A. Jay, of the New York bar.

His son, Augustus Jay Dubois, educated at the Sheffield Scientific School at Yale and abroad, was professor of civil and mechanical engineering at Lehigh University. He contributed much to scientific literature.

DUDLEY, Augustus Palmer (1853-1905), gynecologist of Maine, was born at Phippsburg, in that state, July 4, 1853. His father, Palmer Dudley, and his mother, Frances Jane Wyman Dudley, were natives of Maine. While a young lad his parents moved to Bath, where he received his education in the city schools. Soon after leaving school at Bath, his parents moved to Portland, and young Dudley became an apprentice to the Portland Company, manufacturers of all kinds of iron and steel machinery. He served his apprenticeship faithfully, and when he left there he could (to use his own words) "build and run a locomotive, make a needle or a penknife." He had other aspirations and ambitions to the extent of reading and reciting in anatomy at irregular intervals in the office of his life-long friend, Dr. B. B. Foster, and he worked with the writer as a regular student. He was always ready to do anything in the line of professional work. At one time he took the position of night nurse at the Maine General Hospital, and improved all opportunities of seeing clinical work at the hospital and with surgeons in private practice.

He took his first course of lectures at the Maine Medical School, where he was, for a time, demonstrator of anatomy. He graduated at Dartmouth Medical School in 1877, and immediately began practice in Portland, where he remained until 1881, when his ambition led him to go to the Woman's Hospital in the State of New York, and there he remained as an interne for a year and a half. From there he went to San Francisco, California, as assistant surgeon in the State Woman's Hospital, returning to New York in 1884. He was appointed instructor in diseases of women at the Post-graduate Medical School in 1887 and visiting gynecologist to Randall's Island Hospital and Northeastern Dispensary; he was afterwards made full professor of gynecology and surgeon at the Post-graduate Medical School, and surgeon to the Harlem Hospital. He was also professor of diseases of women at the University of Vermont, and later professor of gynecology at Dartmouth Medical School, a position he held until death.

He wrote very many valuable papers for publication, some of them being translated for foreign medical journals. Nearly all this literary work was original investigation and a résumé of his clinical teaching. Among the most important papers are: "Vaginal Hysterectomy in America"; "A New Method for Restoration of Lacerated Perineum"; "A New Method for Treating Certain Forms of Displacements." His most prominent papers were upon the conservative treatment of the uterine appendages.

He was a fellow of the American Gynecological Society, British Gynecological Society, Maine Medical Association, New York State Medical Association, New York Academy of Medicine, and the New York Obstetrical Society.

Dr. Dudley married twice; in July, 1884, Susie Stephens, daughter of Jesse Mason, of Victoria, British Columbia, who died three years later of consumption, leaving no children; in 1891, to Cassandra Coon, daughter of W. J. Adams, of San Francisco, California, who with two daughters survived him.

After having an examination which showed tuberculosis, he decided to go to the Swiss mountains, hoping much from the sea voyage and the altitude of Davos Platz. He sailed from New York on July 5, but died in Liver-

pool, England, July 15, 1905. The body was brought to Portland, Maine.

SETH CHASE GORDON.

DUDLEY, Benjamin Winslow (1785-1870), lithotomist and pioneer surgeon, was born in Spottsylvania County six miles east of Lexington, Kentucky, April 12, 1785. His father, Ambrose Dudley, was captain of a company in the Revolutionary War and later became a Baptist minister. Benjamin Dudley received such education as the ordinary schools of his day and place offered. He made no pretensions to either Greek or Latin. His command of French he acquired abroad. He was neither a student nor were his inclinations literary. While very young he was placed under the tutelage of Dr. Frederick Ridgely (q. v.). In this he was fortunate, and it is entirely reasonable for one familiar with Ridgely's life to believe that this physician, besides furnishing Dudley with the best early example, supplied him through his lasting influence with much of the fire that characterized his life.

In the autumn of 1804 Dudley matriculated in the University of Pennsylvania, and among his fellow students were Daniel Drake, John Esten Cooke (q. v.), and William H. Richardson, all of whom were afterwards associated with him in teaching and in practice. At the close of his course in Philadelphia during the spring and summer months of 1805, he worked with Dr. James Fishback, who was both preceptor and partner of Dudley, and characterized as an eloquent, learned, though erratic divine, an able writer, a physician in good practice, an influential lawyer, and an upright citizen. In the fall Dudley returned to the University of Pennsylvania, receiving his M. D. there in March, 1806, just two weeks before he was twenty-one, presenting a thesis on the "Medical Topography of Lexington."

Returning to Lexington he began to practice, but being ambitious, he was dissatisfied with his knowledge and decided to further qualify himself under some of the more famous men of Europe. With this end in view he added some commercial business to the practice of physic, and in 1818 descended the Ohio River to New Orleans in a flat boat. This was just one year before the first experimental steamboat was launched upon those waters. At New Orleans he bought a cargo of flour with which he sailed to Gibraltar. Disposing of his cargo advantageously at that point and at Lisbon, he made his way through Spain to Paris. Nearly four years were spent in Europe, the best part of the time passed in the hospitals and dissecting rooms of Paris. It was here that much of the foundation of his future success was laid, and his knowledge of anatomy was mainly acquired, but his surgical training he received in London. In his manners he was French, in methods English. Larrey, the surgical genius of the Napoleonic wars, came in for a large share of Dudley's admiration, but the hard sense of the English appealed more strongly to him. Abernethy he regarded as the leading surgeon of Europe, and Sir Astley Cooper was his ideal operator. During his stay in Europe he also traveled in Italy and Switzerland and returned to Lexington in the summer of 1814, a member of the Royal College of Surgeons. Dudley had the misfortune to lose his books, instruments and a cabinet of rare minerals by the burning of the Custom House at London. In 1815 he was appointed professor of anatomy and also of surgery in the medical department of Transylvania University. He held both chairs until 1844, after which he retained only that of surgery. His last course of lectures was delivered in the session of 1849-1850, and about this time he also gave up his extensive practice and retired to private life.

After the reorganization of the medical department of Transylvania University in 1817, friction arose between members of the faculty. A duel resulted in which Dudley wounded his opponent in the thigh or, according to others, the groin. It is said he would have bled to death but for Dudley, who asked permission of his adversary to arrest the hemorrhage, which he did by the compression of the vessel with his thumb until it could be definitely controlled, by this act converting an adversary into a life-long friend.

It was as a practical surgeon that his reputation was established. He is credited with having performed lithotomy in the course of his life two hundred and twenty-five times, and it was not until about the hundredth case that he lost a patient. Lithotrity he never adopted, but performed the lateral operation, his favorite instrument being the gorget, invented by Mr. Cline of London. In all his operations he used but two sizes, the smaller seven-tenths of an inch, the latter eight-tenths of an inch broad in the blade. Although an expert operator, he was cautious rather than bold, and conservative rather than venturesome, not inclining to operate at all in doubtful cases. He laid great stress upon the preparatory treatment, to which he was more inclined to attribute his success than to his

superior skill. The period of preparation varied from a few days to two or three months. The time of operation varied from forty seconds to twenty minutes, although he was opposed to the principle of operating against time, and never allowed himself to be thrown off his guard. According to Gross, he was the first in Kentucky to ligate the subclavian artery. This he performed in 1825 for the cure of an axillary aneurysm which was described as "larger than a quart pitcher." The patient left for his home on the twenty-first day, completely cured. In 1841 he successfully ligated the common carotid artery for an intracranial aneurysm, attended with protrusion of the eye, pulsation noise in the head, and wide separation of the cranial bones on the right side, together with the loss of sight, and hearing on the same side. This was prior to the era of anesthetics. The stress he laid upon the use of boiled or boiling water in surgery at that time is worthy of comment. Dudley was an ardent advocate of protracted rest and a low diet in the treatment of chronic inflammation and of the bandage as a means of controlling swelling and muscular action in the treatment of wounds, fractures and dislocations, according to S. D. Gross.

He was not inclined to write, and very likely his contributions to literature were secured largely through his kinsman, Dr. Charles Wilkins Short (q. v.) who, with Dr. John Esten Cooke, (q. v.) established the "Transylvania Journal of Medicine and the Associate Sciences." His most notable and perhaps all of his contributions here follow: "Observations on Injuries of the Head"; "Observations on Hydrocele"; "On the Use of Bandage in Gunshot Wounds and Fractures." These were in the first volume of the "Transylvania Journal of Medicine," 1828. In a later number of the same journal appeared his article upon "Calculous Diseases," reports of his operations for stone, and a paper on "Fractures." His article on the treatment of "Aneurysm" was published in July, 1849; "On the Treatment of Gunshot Wounds," December, 1849; "On the Treatment of Fractures by the Roller Bandage," in 1850, all of which appeared in the "Transylvania Journal of Medicine," also an article on "Treatment of Asiatic Cholera."

He married at Lexington June 10, 1821, Anna Maria Short, daughter of Major Peyton Short, and they had three children, William Ambrose, Anna Maria and Charles Wilkins. The latter studied medicine, but did not practice.

During the last years of his life, his health was greatly impaired owing to an infection he received during an operation. He died at his suburban house, "Fairlawn," near Lexington, January 20, 1870, in the eighty-fifth year of his age, from apoplexy, after an illness of two hours.

In appearance he was a man of slender frame, but of erect carriage and of most courteous and dignified deportment, while as a teacher his popularity was unsurpassed.

There are a number of portraits of Dr. Dudley by different artists, in the possession of his family, but the best is the one by Jouett, owned by Mrs. Robert Peter.

AUGUST SCHACHNER.

DUDLEY, Ethelbert Ludlow (1818-1862), a native of Lexington, Kentucky, anatomist and surgeon, was born February 25, 1818. He was the son of Col. Ambrose and Martha Catherine Ludlow Dudley, the former distinguished in the war of 1812. Dudley first selected law as his profession but soon discovered his preference for a medical career; his father, however, required him to complete his law course, which he did. He then began to study medicine at Transylvania University, graduating in 1842. He continued, however, his studies in the school during the two following sessions under the tutelage of his uncle, Benjamin W. Dudley, (q.v.) who was for so many years the professor of anatomy and surgery, and for whom he acted as prosector during this period. Before the next session he was made demonstrator of anatomy at this University, and in 1847 was promoted to the chair of general and pathological anatomy. In 1849 he originated and continued to edit for three years the old "Transylvania Medical Journal," a new series of the "Transylvania Journal of Medicine," and in 1859 accepted a call to the chair of descriptive anatomy and histology in the Kentucky School of Medicine in Louisville, which was just then being organized and to which many of the Transylvania professors were going for the winter session. By his talents and indefatigable energy he contributed very greatly to the success of this school. In the second year of the Kentucky School of Medicine he was promoted to the chair of surgical anatomy and operative surgery and conducted the surgical clinic at the Marine Hospital for the classes in both the Louisville schools. In

1853 Dudley, with the other Transylvania professors, resigned and returned to Lexington where he continued his duties in the renewed winter sessions of the latter school.

Dr. Dudley married Mary Dewees Scott, a daughter of Matthew T. Scott, president of the Northern Bank of Kentucky, by whom he had two children, a son, Scott, and a daughter, Louise.

Among the most striking characteristics of Dudley was his wonderful energy, his enthusiasm, and these qualities, combined with his unusual mental gifts and his entire devotion to his profession, made his short career a most notable one. At the outbreak of the Civil War, led by his loyalty to the Union he was actively instrumental in the organization of a batalion of "home guards" of which he was commandant. He later obtained authority to organize a regiment, the Twenty-first Kentucky; of this regiment he was made colonel and took with him as adjutant his only son, a boy less than eighteen years of age. He had taken his regiment to the southern part of the state and while physician and surgeon to his men as well as commanding officer, he fell a victim to typhoid fever in February, 1862, at Columbia, Adair County, Kentucky.

JOHN W. SCOTT.

DUGAS, Louis Alexander (1806-1884), founder and professor of surgery in the Medical College of Georgia, was born in Washington, Georgia, January 3, 1806, of French West-Indian parentage. After receiving his early education from a private tutor he began the study of medicine in the office of Dr. John Dent, of Augusta, then studied at the University of Maryland, from which he was graduated in 1827. He passed four years in Europe, then settled down to practice in Augusta. In 1832 he was one of the founders of the Medical College of Georgia, and filled the chair of surgery, retaining this position until the close of his life. He several times served as president of the Medical Association of Georgia, also became editor of the "Southern Medical and Surgical Journal" in 1851, and edited it for seven years. As early as 1856 he pointed out a most valuable diagnostic sign of dislocation of the shoulder joint, embodying it in a paper. During the war he was a volunteer surgeon in many of the military hospitals. He died at his home in Augusta when seventy-eight years old. His first wife (1833) was Mary C. Barnes, and his second (1840) Louisa V. Harriss.

He gave much attention to diseases of the eye, and in 1840 did an operation in certain conditions of corneal staphyloma which met with general favor. This operation was the abscission of the cornea. In the "Southern Medical and Surgical Journal" for 1837 he published a paper on "Purulent Ophthalmia," and he was the author of a dozen important papers on various topics.

DUHRING, Louis Adolphus (1845-1913), distinguished American dermatologist, was born in Philadelphia, December 23, 1845; his father, Henry Duhring, and his mother, Caroline Duhring, were both of foreign birth, the former of Mecklenburg, Germany, and the latter of St. Gall, Switzerland, coming to this country in 1818. His educational training was obtained in private schools in Philadelphia and in the academic department of the University of Pennsylvania. In October, 1863, he entered the Medical Department of the University and spent three years in medical studies, studying under the preceptorship of Dr. William Hunt (q. v.) and Dr. J. J. Levick and graduating March 14, 1867; becoming, immediately after his graduation, a resident physician in the Philadelphia (Blockley) Hospital, where he remained for fifteen months. In July, 1868, a few weeks after his term as interne had expired, he left for Europe, where, during a period of two years, he attended the lectures and demonstrations of the most famous pathologists, dermatologists, and sphilographers in Berlin, Vienna, Paris, and London, in the General Hospital of Vienna, being under the tutelage of Hebra, when that brilliant teacher and clinician was at the zenith of his fame. Thus equipped, Dr. Duhring began the practice of his specialty in Philadelphia in 1870, and immediately organized and opened the "Dispensary for Skin Diseases," and remained in active charge till 1880, and as consultant from that time till 1890. In 1871 Dr. Duhring was elected lecturer on skin diseases in the University of Pennsylvania; this lectureship was changed in 1876 to a clinical professorship, and in 1890 to a full professorship, with a seat in the faculty, Dr. Duhring becoming also a member of its council. In 1870-1871, Dr. Duhring, with the help of Dr. F. F. Maury, (q. v.) started under conjoint editorship, "The Photographic Review of Medicine and Surgery," a monthly journal, a publication which was continued two years; in all, forty-eight rare and interesting cases, with descriptive notes, were photographically presented, some of which appeared later, and a few of

which still continue to appear, as illustrations in text-books. In 1876 a department for diseases of the skin was inaugurated at the Philadelphia (Blockley) Hospital, and Dr. Duhring was made the visiting dermatologist, continuing in sole charge till 1887, when the service, at his suggestion, was divided.

His "Atlas of Skin Diseases" appeared in 1876; it was the work of a master, and in the practical selection of subjects, and in its life-like reproductions, has not been surpassed to the present day. Scarcely had the first few parts of the Atlas appeared when his "Practical Treatise on Skin Diseases" was announced (1877). It was the first American text-book on this subject, and the most scholarly in the English language. As with the Atlas, this treatise was at once accorded a warm and flattering reception, not only in America, but in England and on the Continent of Europe; a second and third edition, somewhat increased in size, soon followed, and the profession of France, Italy and Russia did him the honor of translating and publishing this work in their respective languages; it has also furnished much of the basic material for the publication of a small book in the Chinese language. His fellow dermatological workers of this, as well as other countries, soon were according him the American leadership in this branch, which as time went on, became more and more secure. Dr. Duhring was also a frequent contributor to current medical literature, both as to papers of a clinical and practical type and those of a distinct analytic and scientific character; but the papers—an almost continuous and elaborated series, about eighteen in all, published between 1884 and 1891—which, with his Treatise and Atlas publications, gave him an important and recognized position as one of the leading dermatological thinkers of the world, were those concerning the disease, or disease group, to which he gave the name of "dermatitis herpetiformis," a disease since also known everywhere as "Duhring's disease." His contention aroused at first considerable opposition, but this gradually disappeared, and in the main his views were finally generally accepted and obtain at the present day. In addition to his many other writings, Dr. Duhring was a contributor to several of the encyclopedic publications of comparatively recent years; the most important and most extensive was the chapter on skin diseases, consisting of 150 pages, in "Pepper's System of Medicine." While an occasional contributor and participant—more especially in his early professional life—at the meetings of the various medical societies to which he belonged, such as the Philadelphia County Medical Society, the Philadelphia Pathological Society, the College of Physicians of Philadelphia, and the Pennsylvania State Medical Society, it was particularly in the American Dermatological Association, of which he was one of the founders and twice its president, that his medical activities were displayed. When he retired from active participation in this Association, he was elected to honorary membership; he was also interested in the Section on Dermatology of the American Medical Association. The appreciative feeling of his foreign colleagues for his work and attainments was reflected in his being elected to honorary or associate membership in their special societies, among which may be mentioned those of London (Willan Society), France, Berlin, Vienna, Italy and others.

Unfortunately, about 1885, he had what appeared to be a nervous breakdown, and was obliged to withdraw more or less from continuous work. By 1890 he felt that he had sufficiently improved to warrant a full resumption of his office and University duties. His health was never regained, however, he being obliged to make short breaks occasionally and exceptionally to take somewhat long periods of rest. In spite of being thus hampered, however, he began to satisfy the great ambition of later life—the writing and completion of another book, entitled "Cutaneous Medicine"; this to be issued in about eight parts, to be almost cylopedic in character, and to be based upon his collected material and observations of years. The first part was published in 1895, the second part following in 1898; the manuscript and illustrations of the third part, when just about ready for publication, were accidentally destroyed by fire. Owing to this misfortune and to his gradually failing health, this work was finally reluctantly abandoned. In 1910, he resigned his professorship in the University of Pennsylvania and was immediately made professor emeritus, and also honorary curator of the Dermatological Museum in that institution; and later, in June, 1912, the University conferred upon him the honorary degree of Doctor of Laws. These additional honors were to be enjoyed but a short time, for in March, 1913, he was again taken ill and in two months—May 8—died; his death being directly or indirectly due to an unsuspected constricting band of the ileum, which had apparently been of long duration and of slow-

ly increasing tension, a condition which had probably been more or less responsible for his long-continued impaired health. Dr. Duhring was unmarried and was the last of his immediate family, with but few collateral relatives living; about two-thirds of his rather considerable estate ($1,250,000) he generously bequeathed to his Alma Mater, the University of Pennsylvania, and about one-sixth to the College of Physicians of Philadelphia.

As a teacher, Dr. Duhring was highly regarded and his lectures and clinics were always listened to with attention and respect; here, as also in society discussions, his remarks were succinct, lucid in character, brief and to the point; he was, as all his papers and other publications show, a talented and polished writer, accurate and logical, and gifted with strikingly clear descriptive powers; all his literary work was written by his own hand, without a stenographer or typewriter or other help. As a practitioner, his modest and dignified demeanor, his unfailing courtesy, serenity and quiet self-confidence, commanded the full faith and often affectionate respect and regard of his patient. Personally, Dr. Duhring was of a somewhat reserved disposition, wrapped up in his work, and he lived, especially after his sister's death in 1892, a somewhat secluded life, having practically no real intimates or confidants, and he was not fond of mixing with crowds; yet being cheerful and contented, and with those whom he knew at all well, always a welcome and interesting guest and entertaining companion. Although mild, of unassuming modesty and non-combativeness, he had the courage of his convictions and was always well able to sustain his views and opinions. He had a high conception of the duties and obligations of life, and lived up to it; never an ostentatious churchman, but nevertheless he had sincere religious beliefs, and was a follower of the Protestant (Episcopal) faith. There is a portrait of Dr. Duhring in the Transactions of the College of Physicians, Philadelphia, 1915.

HENRY W. STELWAGON.

DULLES, Charles Winslow (1850-1921), editor and writer of Philadelphia, was the son of John Welsh Dulles, a missionary to India, and Harriet Winslow Dulles, whose father, Dr. Myron Winslow, also missionary in India for forty five years, and a descendant of Elder William Brewster—one of the leaders of the Pilgrim Fathers on the Mayflower. Charles Winslow Dulles was born in Madras, India, November 29, 1850. When he was not yet three years of age his parents returned to America, and he grew up in Philadelphia. After an academic education, he entered the University of Pennsylvania for an arts course which he abandoned to engage in business. Shortly, however, he entered the medical department of the University and was graduated in 1875. The alumni prize of one hundred dollars was awarded for his thesis, "Suprapubic Lithotomy," which aroused interest in that operation and widely influenced its revival here and abroad and was quoted by Gross. After studying in London, Vienna, and Paris during 1876-1877, he settled in West Philadelphia where he remained in practice for over forty years.

Dr. Dulles was consulting surgeon to the Rush Hospital, a manager of the University Hospital, and lecturer on the history of Medicine at the University of Pennsylvania from 1893 to 1908. At one time he was the medical director of the Presbyterian Ministers' Fund. He edited "The Specialist and Intelligencer" in 1880, "The American Specialist" in 1881, and "The Medical and Surgical Reporter" from 1887 to 1890; he contributed to Keating's "Encyclopedia on the Diseases of Children," 1890, and "Diseases of the Bones" to the supplementary volume of Ashhurst's "International Encyclopedia of Surgery," 1896. He was the author of "A Manual of Accidents and Emergencies" and "What to do first in Accidents or Poisoning"—both of which went through many editions, and "Mechanism of Indirect Fractures of the Skull," 1886. He also wrote many papers, both aggressive and provocative, designed to allay popular fear and correct professional error in regard to so-called hydrophobia; the best of these is probably "Diseases mistaken for Hydrophobia." He was a zealous protagonist of the doctrine that hydrophobia is not a specific disease and a vigorous opponent of serum therapy for its cure. It was just at this time that the word "lysso-phobia" was coined for the simulative hysteroneurosis often mistaken for hydrophobia.

The Society of Mayflower Descendants, The Pennsylvania Historical Society, Indian Rights Association, and The Civil Service Reform League shared his interests with his professional societies. He was an active Fellow of The College of Physicians of Philadelphia and of The Philadelphia Academy of Surgery.

On October 5, 1881, he married Mary Bateman, the daughter of a Philadelphia mer-

chant, who with three sons and a daughter survived him. Dr. Dulles died of heart disease May 6, 1921. He was of short stature; had a keen, active, vigorous personality and a kindly disposition.

DUNGLISON, Robley (1798-1869). It happened that when Thomas Jefferson was organizing the University of Virginia in 1824, failing to find a man for the chair of anatomy, physiology, materia medica and pharmacy, he wrote to London to a learned young man only 26, but one who had already written a "Treatise on Children's Diseases," and was editing the "London Medical Repository and Medical Intelligencer," to come to Virginia. This man, Robley Dunglison, born at Keswick, England, January 4, 1798, was destined for a merchant, but fortunately a rich uncle, one Joseph Robley, died and left him enough to become a physician. So when seventeen, after a good education he began to study medicine under a village physician before attending courses in Edinburgh, Paris and London. He was licensed by the Royal College of Surgeons and at the Society of Apothecaries and began practice in 1819. In 1824 he received his medical degree by examination from the University of Erlangen, became accoucheur to the Eastern Dispensary of London and began lecturing on midwifery.

The ship bearing Dunglison with his young wife and children was three months crossing from Liverpool, giving plenty of time for reflection on the step taken—a wise step, for he stayed as professor for nine years at the University of Virginia, going afterwards as professor of materia medica and medical jurisprudence to the University of Maryland. Philadelphia recognized what his value would be and made him professor of the institutes of medicine in Jefferson Medical College, an appointment he held for thirty-two years, becoming emeritus professor only a year before his death at the age of seventy-one.

During the nine years in Virginia his industry was amazing. The "Human Physiology," rejected by Philadelphia publishers, came out at Boston in 1832, and went through eight editions and became at once the book for students. S. D. Gross says, "What Haller's great work accomplished for surgery in the eighteenth century, Dunglison accomplished for physiology in America in the nineteenth." The book is rich in learning, accurate and logical in its statements of facts. His "Medical Dictionary," 1833, a work of profound erudition, earned him a world-wide reputation; 55,000 copies were sold during his life-time, and in 1897 it had reached twenty-three editions. These books were followed in rapid succession by treatises on "Materia Medica," 1843; "Hygiene"; "The Practice of Medicine," 1842, and "New Remedies"; yet this systematic and persistent writer found time to edit "Forbes's Cyclopedia of Practical Medicine" and several foreign works. He founded and edited for five years the "American Library and Intelligencer," and with one William Chapin issued a dictionary for the blind in three folio volumes, and all this besides innumerable articles for the medical and lay journals.

As a lecturer he could hold the close attention of his students to dry details and yet interest them, and as dean for many years he was prompt and faithful. "A fluent talker, an insatiable reader, a rapid writer—rapid to illegibility—and, like the letters of the great Scotsman, Chalmers, his were often put away for the writer to elucidate." "Gentle and attractive in manners and appearance, no one could ever say an unkind word about Dunglison, and his heroically borne illness which made him a constant sufferer six months previous to his death showed of what stuff the eager student was made." Confined to bed, propped up by pillows, his feet resting on the floor, he could not even lie down for an hour. Long the victim of heart disease, no one could witness his distress without the deepest sympathy, yet no murmur escaped his lips; indeed he was cheerful and always delighted to listen to music and hear the latest news from the busy life outside. On April 1, 1869, he went away, his life's volume all frayed by hard usage; the long and last chapter, On Pain, typed sharp and clear by that hard-headed printer Experience.

DAVINA WATERSON.

DUNLAP, Alexander (1815-1894), well known in connection with ovariotomy, was born in Brown County, Ohio, January 12, 1815, and after spending two years in Ohio University, Athens, matriculated at Miami University, Oxford, Ohio, from which he was graduated A. B. in 1836. His medical degree was obtained from the Cincinnati Medical College in 1839. He began practice in Greenfield, Ohio, with his brother Milton, with whom he had read medicine, and upon the dissolution of this partnership (1846) he moved to Ripley, Ohio, and later to Springfield, where he practiced until his death, February 16, 1894.

Dr. Dunlap was president of the Ohio State

Medical Society in 1868; vice-president of the American Medical Association in 1877, and an active member of the American Gynecological Society. From 1875 to 1885 he was professor of surgical diseases of women in Starling Medical College, Columbus.

During his career he made four hundred and twenty-eight laparotomies with a large percentages of recoveries.

Dr. Dunlap's claim for honorable mention is not based upon the number of sections nor upon the percentage of recoveries, both of which would compare badly with the statistics of modern operators, but upon the fact that he was one of the pioneer ovariotomists of the world. It is difficult for one living in the present surgical environment to conceive of the bitter opposition which prevailed against the operation of ovariotomy among many who held high places in the profession in the early forties. The written report of Dr. Dunlap's first operation was sent to the "Western Lancet", of which Dr. John P. Harris (one of his former teachers) was editor, but was returned with the significant comment that "its publication would encourage an unjustifiable and murderous operation, which had already been tried and condemned by the profession both in this country and Europe." The elder Mussey, who then dominated the surgery of this region, took early occasion to rebuke the young man "for doing such things." This first operation, which was done on September 17, 1843, without an anesthetic, resulted fatally on the twentieth day. In the face of such discouragements, without hospital facilities, trained nurses or assistants, without anesthetics or antiseptics, and with limited operative experience, Dr. Dunlap boldly and successfully operated on his second case in 1849. Preceding his first operation, there is the record of eighteen completed ovariotomies, thirteen of which were by McDowell, and one of which (Atlee's) antedated Dunlap's case less than three months; there were also reported a few abandoned operations, but of all these he certainly knew nothing, except the bald fact that McDowell had successfully removed ovarian tumors. It was the privilege of the writer to assist Dr. Dunlap on several occasions. There was nothing spectacular about his methods. He was always a slow, methodical operator, using few instruments and with a technic which was simplicity itself. Undoubtedly his success was due largely to the postoperative care given his patients. Dr. Dunlap did his own nursing, and he did it well. It was not unusual for him to constantly attend the bedside of a patient for a week or more after operating, until the result, for good or bad, was assured.

The later years of his life were full of suffering. Twice he underwent lithotripsy. His son, Dr. C. W. Dunlap, who was associated with him in practice, died before him.

We have from his pen a paper on "Ovariotomy" (Transactions of the Ohio State Medical Society, 1868) and an "Address" before the same society in 1869.

WILLIAM J. CONKLIN.

DUNLOP, William (1791-1848). William Dunlop, eccentric Canadian physician, writer, editor, fighting surgeon and politician, was born in 1791 in Greenock, Scotland. He was surgeon in the Connaught Rangers, and was in the war with the United States (1812-1815), sometimes "laying down the lancet for the bayonet, and inflicting wounds instead of curing them." Incidents of his bravery are told, one of which is that he carried many wounded men out of range of the firing; one borne on Dunlop's back received a mortal wound, which but for being intercepted would have reached the surgeon (Strickland's "Twenty-seven Years in Canada West"). After the Treaty of Ghent Dunlop went to Calcutta, where his conviviality led him to use "brandy and water to keep out the intense heat of India with as much activity as he had formerly employed it to keep off the intense cold of Canada." His accomplishments in India were not limited to medical and military service; he edited a newspaper, and he killed such a vast number of tigers that the name of "Tiger" became a commonly known title for him. An attack of jungle fever sent him home. His next venture was a course of lectures on medical jurisprudence, a great mixture of "fun and learning, of law and science," and full of rough jokes. Under the name of "Colin Ballantyne" he wrote for Blackwood. He went to London and edited a morning paper, the "British Press;" then started a Sunday paper called the "Telescope," devoted to India interests. He edited also T. R. Beck's "Medical Jurisprudence." He became interested in companies of all sorts, and founded a club called "The Pig and Whistle." In 1826, when the Scotch novelist, John Galt, returned to Canada to organize plans of operation for the Canada Company, Dunlop was made "Warden of the Black Forest" for the Company, went to Canada and remained there the rest of his life. When

Galt founded Guelph in Ontario, Dunlop helped to cut down the first tree to begin the city.

Dunlop was constantly consulted by emigrants concerning their affairs, and published a book, "Statistical Sketches of Upper Canada for the Use of Emigrants, by a Backwoodsman," which was extensively reviewed in "Fraser's Magazine" (July, 1832). The reviewer says of it: "A pleasanter little book never came out of the press—full of information of all kinds, full of reading, full of sagacity, full of humor." He wrote "The Autobiography of a Rat" for the "Canadian Literary Magazine." In 1836 he founded the "City of Toronto Literary Club," before which he lectured; he was first representative for the Huron District in the Provincial Parliament in 1841; he was Colonel of the Huron Invincibles in Mackenzie's rebellion in 1837.

Witty and overflowing with a sense of humor, he was not above practical joking. He and a brother (Captain "Sandy" Dunlop) lived together, borrowed money of their housekeeper and also failed to pay her wages. When the sum grew so large that payment seemed hopeless, Dunlop told his brother that the only way to settle the debt was for one of them to marry her; the coin tossed to decide the matter had a head on each side, so when the doctor cried "heads" he won, and the wife fell to the lot of the brother.

Dunlop's remarkable will, full of coarse humor, is recorded in the Surrogate Court of the County of Huron, and is given entire in William Canniff's (q.v.) work.

The only notice discoverable of his interest in religion was at a meeting held at York, Canada, in the cause of the Church of Scotland, where Dunlop moved to "take immediate steps for the erecting of a place of worship . . . and for the calling of a clergyman of that Church to officiate therein as their minister."

He died June 29, 1848, at Cote, St. Paul.

HOWARD A. KELLY.

DUNN, Thomas Dewitt (1854-1898). Of Scotch ancestry, his great-grandfather, Philip Dunn, having come over from Scotland and settled in New Jersey, Thomas Dunn was born in Crawford County, Pennsylvania, on January 30, 1854, the oldest son of the Rev. Thomas H. and Diantha Dunn. He began to study medicine with Dr. Jacob Price, West Chester, and graduated from the medical side of the University of Pennsylvania, 1881, with a gold medal for anatomical work, and began practice the following year in West Chester.

It was largely owing to his exertions that the Chester County Hospital was built, and the work entailed in gaining interest and funds any doctor will appreciate. The long-titled Thomas D. Dunn Bacteriological Laboratory inadequately expresses the equally long hours of affectionate thought given towards its establishment by the founder.

In his capacity of head physician to the Chester County Hospital and Fellow of the College of Physicians of Philadelphia he rendered good public service, and when he died from the result of a carriage accident May 6, 1898, he left a record of fifteen years' good work. His wife, Kate C. Dunn, whom he married in 1883, with one daughter, Rachel, survived him.

Among some fourteen articles, a list of which is given in the "Transactions of the College of Physicians of Philadelphia," vol. xx, 1898, is one on "Two Cases of Glossy Skin," 1888, and "A Case of Leukemia with Rare Lymphoid Growths of Orbit and Parotid Gland" 1894.

DUNSTER, Edward Swift (1834-1888), obstetrician and gynecologist, was born in Springvale, Maine, September 2, 1834, a direct descendant of Henry Dunster, the first president of Harvard College. Soon after his birth his family removed to Providence, Rhode Island, where he fitted for college in the public schools, and in 1856 received the A. B. from Harvard and in 1859 his A. M.

While teaching in Newburgh, New York, in 1856, he began medical studies, and in 1856-57 attended a course of lectures at Dartmouth Medical School but received his M. D. from the New York Medical College in 1859. During 1859 he served as interne at St. Luke's Hospital, New York, and began medical practice in the same city in 1860. In June, 1861, he entered the army as assistant surgeon, serving in the West Virginia and in the Peninsular Campaign under Gen. McClellan, in charge of various hospitals. In February, 1866, Dr. Dunster began to practice, again in New York City, making a specialty of obstetrics and diseases of women and children. He was editor of the "New York Medical Journal," 1866-1872; resident physician-in-charge of Randall's Island Hospitals, 1869-1873; professor of obstetrics and diseases of women and children, University of Vermont, 1868-1871; and he held the same chair at Long Island Medical College Hospital, Brooklyn, New York, 1871-1872; Dartmouth Medical School, 1873-1887; University of Michigan, 1874-1888.

Dr. Dunster was a member of the New York County Medical Society and the Michigan State Medical Society. Dartmouth gave him an honorary M. D. in 1881.

On November 4, 1863, Dunster married Rebecca Morgan Sprole, daughter of Dr. Sprole, of Newburgh, New York, a celebrated Presbyterian preacher of his day, and died in Ann Arbor, Michigan, May 2, 1888, from septicemia.

Besides his writings for the "New York Medical Journal" he contributed papers to medical literature on, "Relations of the Medical Profession to Modern Education," "The Logic of Medicine," "Notes on Double Monsters," "History of Anesthesia," "The Comparative Mortality in Armies from Wounds and Diseases."

LEARTUS CONNOR.

DUQUET, Emmanuel Evariste (1855-1894), Montreal alienist, was born in St. Philomene, Chateauguay County, Quebec, April 3, 1855, the son of Francis Duquet, a farmer. His early education was at Beauhainois College, where he spent three years under the tuition of the Christian Brothers. At the age of 13 he left college to assist his father on the farm, but, with a natural aptitude for study, every spare moment was devoted to his books. By the death of his parents when he was 16 years of age he was thrown on his own resources, and went to Montreal to study a profession. In 1875 he began the study of medicine, and received his degree from Victoria College, Montreal, in 1879. He became a general practitioner at Longue Pointe, a suburb of Montreal, and soon became well known as an exemplary citizen and capable physician. In 1885 he was appointed assistant physician to the St. Jean de Dieu Asylum, better known as the Longue Pointe Asylum, and afterwards devoted himself entirely to the study and treatment of mental diseases. In 1889, upon the death of Dr. Henry Howard, (q. v.) the medical superintendent, he was appointed to the vacancy by the Provincial Government, and held the position at his death.

Although of a delicate constitution, he never spared himself in his untiring efforts to improve the condition of his patients, who numbered fully 1,300. The severe strain from the increasing mental and physical labor connected with so large an institution undermined his health and rendered him unable to resist an attack of pneumonia, from which he died after an illness of eight days, on December 9, 1894, in his 40th year. The classification of mental disorders was his favorite study, and his discussion of it in the psychological section of the International Medical Congress at Washington in 1887 was most favorably received.

During the summer of 1889, Dr. Duquet made an extended tour of Europe and visited many asylums. He also attended the International Congress on Mental Diseases in Paris in August of the same year, where he presented a paper on "Legislation Concerning Insane Asylums in the Province of Quebec." This paper, together with "Notes sur un cas de folie simulé" was published in the proceedings of the congress.

In November, 1889, he was elected an associate member of the Medico-Psychological Society of Paris. In 1890 a similar honor was conferred upon him by the Societé de Medicine Mentale of Belgium.

Dr. Duquet was married in 1884.

DUTCHER, Addison Porter (1818-1884), a prominent physician of Cleveland, Ohio, was born in Durham, New York, October 11, 1818. Of his early education there is no information, but in 1834 he began to study medicine under Dr. John Shanks, of New York City, and subsequently continued with Dr. Edward H. Dixon, of the same place. W. B. Atkinson says he took his M. D. from the College of Physicians and Surgeons of New York City in 1839. Dr. Dutcher's name, however, does not appear among the alumni, so he graduated probably from some other medical college in the metropolis. He settled first in Cooksbury, New York, but removed soon to New Brighton, Pennsylvania, and again in 1847 to Enon Valley, in the same state, where he practiced for seventeen years. In 1864 he was called to the chair of the principles and practice of medicine in the Charity Hospital Medical College, at Cleveland, Ohio, a position which he filled only two years, when he resigned and devoted himself to private practice and literary pursuits.

Dr. Dutcher was president of the Cleveland Academy of Medicine in 1868, and an honorary member of the Beaver County (Pennsylvania) Medical Society, as well as a member of the Pennyslvania Medical Society.

His contributions to medical literature are very numerous. Among them we may mention his treatise on "Pulmonary Tuberculosis" (1876), and papers on "Cough and Expectoration" ("Cincinnati Medical News," vol. i, 1872), "Pain as a Symptom of Pulmonary

Tuberculosis" (Ibid., pp. 153-159). He was also a warm advocate and defender of the cause of temperance.

In 1839 he married Amanda M. Curtis, daughter of the Hon. Richard Curtis, of New York.

Dr. Dutcher died in Cleveland, January 30, 1884.

HENRY E. HANDERSON.

DUVAL, Elias Rector (1836-1885), was born in Fort Smith, Arkansas, on the thirteenth of August, 1836, of distinguished pioneer parents. He received his early education in schools at Fort Smith and later at Arkansas College, Fayetteville, Arkansas, where he was graduated A. B. in 1854. In 1853 his alma mater gave him her A. M., and in 1880 the honorary M. D. was conferred on him by the medical department of the Arkansas Industrial University, he being the first to receive one. He served with Lieut. Steen's command in New Mexico as acting surgeon in the United States Army till March, 1859, when he resigned and began private practice at Fort Smith. In 1861 he was appointed surgeon in the Confederate States Army. In 1864-5 he was first assistant of the Trans-Mississippi department. He was ex-president of the Sebastian County Medical Society and president of the State Medical Society in 1874-5.

Among Duval's published writings are: "Bucnemia Tropica" in the "Louisville Medical Journal"; "Malarial Hemorrhagic Fever" (Ibid.); "Influenza" (Ibid.); "Cerebrospinal Fever" in the "Transactions of the Arkansas Medical Association"; "History of Cholera as It Appeared in Fort Smith in 1866." His last article was "Eclampsia Puerperalis," published in the "St. Louis Courier of Medicine," January, 1886, three months after his death.

Dr. Duval married at Van Buren, May 8, 1860, Angela Medora, daughter of Dr. James A. Dibrell, and had four children—Annie, Benjamin Taylor, Debrell LeGrand, and Angela Medora.

He died on October 7, 1885.

DWIGHT, Thomas (1843-1911), Boston anatomist, son of Thomas and Mary Collins Warren Dwight, was born in Boston October 13, 1843. As a very young boy he was taken abroad by his parents, making his first voyage in a sailing ship, and spent some years in Paris, where he attended school. On his return he completed his education in Boston and entered Harvard College with the class of 1866. After finishing two years of his college course, he entered the Harvard Medical School and obtained his degree of doctor of medicine in 1867, and an A. B., as of 1866, in 1872. After leaving the Medical School, he spent several years of study in Europe. His chief interest, however, was in anatomical science and natural history and part of his time abroad was spent in that study under Rüdinger at Munich. There he obtained his first knowledge and experience of the use of frozen sections in anatomical work, and was one of the first to introduce this method into America. On his return home he continued in active practice for a number of years, but retired eventually in order to devote himself entirely to anatomy. During his active career as a practitioner, he was surgeon to outpatients at the Boston City Hospital, from 1877-1880, and visiting-surgeon at the Carney Hospital from 1876-1883. In 1883 he was appointed a member of the board of consultation of the Carney Hospital, and acted as president of the staff until his resignation in 1898. In 1872 he was made instructor in comparative anatomy at Harvard, and in 1874 instructor in histology, and gave also some instruction in embryology. At this time he was offered the position of lecturer in anatomy at the Medical School of Maine at Bowdoin, and taught there until 1876, being professor of anatomy from 1873-1876. In 1883 he was appointed Parkman Professor of Anatomy at Harvard.

Doctor Dwight was an excellent teacher and a strong, clear and forcible lecturer. His best anatomical work was on the anatomy of the skeleton and the joints and on the normal variations in the body. His study of variations was applied chiefly to the spine and to the hands and feet. He collected a remarkable series of specimens showing the chief variations in the carpus and tarsus, and including several unique cases of variations in these regions. He was the first to find and describe the subcapitatum as a separate and distinct element in both hands. In the foot he discovered an absolutely new element, the intercuneiform bone, and reported also two cases of the secondary cuboid bone, of which only one previous case had been recorded. His collection of spines, showing all possible variations, was practically unique. In 1907 Doctor Dwight published an atlas on the variations of the bones of the hand and foot, based on the specimens in his collection. He contributed the sections on bones and joints as well as those on the gastro-pulmonary system

and accessory organs of nutrition in Piersol's anatomy. He made an extensive study, extending over several years, on the size of the articular surfaces of the long bones as characteristic of sex, proving that the size of the articular ends was smaller in the female and could be used as a means of identification. He wrote several articles on the general range and significance of variations in the skeleton, and also on the question of mutations. One of his earliest publications was an atlas of the frozen sections of a child, which were among the first frozen sections to be made in this country.

Doctor Dwight devoted much of his time to the development of the anatomical part of the Warren Museum in the Medical School, and it was his intention to arrange the specimens so as to show the normal variations of all parts of the body.

He was president of the Association of American Anatomists in 1894 and was also one of the original members of the editorial board of the "American Journal of Anatomy," and held this position until his death. From 1873 to 1878 he was an editor of the "Boston Medical and Surgical Journal." Besides the Association of American Anatomists, he was a member of the American Society of Naturalists, Fellow of the American Academy of Arts and Sciences, a member of the St. Thomas Aquinas Academy of Philosophy and Medicine of Rome, an Honorary member of the Anatomical Society of Great Britain and Ireland, a member of the American Medical Association of the Massachusetts Medical Society and several other Medical Societies in Boston. In 1889 he received the degree of LL. D. from Georgetown University.

He was especially interested in the Society of St. Vincent de Paul, and became its vice-president in 1884 and president in 1887. This position he resigned in 1892, but continued to remain a member. He was chosen president of the Central and Particular Councils of Boston in 1899, and held the former office until his death. He completed a book entitled "Thoughts of a Catholic Anatomist" in the winter of 1911 and had the satisfaction of seeing it published before his death. This book contained his theories on evolution and his opinions on the relations between Catholic thought and science. His devotion and loyalty to his faith were his strongest characteristics. They influenced to a great degree his opinions and his scientific point of view, and enabled him to continue his work with courage and cheerfulness until the very end. His death occurred at his summer home, Nahant, Massachusetts, on September 9, 1911.

JOHN WARREN.

DYER, Ezra (1836-1887), Philadelphia ophthalmologist, was born in Boston, October 17, 1836, graduated at Harvard in 1857, and after studying under Jeffries Wyman (q. v.), Morril Wyman (q. v.) and John Ware (q. v.), entered the Medical School and graduated in 1859. He then studied in Dublin, Bonn, and Vienna, where, under Arlt, his interest in ophthalmic surgery was awakened, and he determined to devote himself to this specialty. With a letter from Arlt to Von Graefe he went on to Berlin in the fall of 1860. Having spent a most profitable winter semester with Von Graefe, Dyer went to London, spent seval months at the Moorfields Hospital, then to Paris to study under Desmarres and Sichel, and finally to Utrecht to visit Donders and Snellen. He returned to Philadelphia in the winter of 1861. During the war he was given charge of all eye and ear cases in the Philadelphia army hospitals.

In 1864 he was one of the founders of the American Ophthalmological Society, and later was appointed surgeon at Wills Eye Hospital, holding the position as long as he remained in the city. Dyer perfected a plan of using the eyes for near work in daily progressive periods of time to overcome asthenopia after long illness, the method being known as "Dyerizing." This was first described in a paper entitled "Asthenopia not connected with Hypermetropia," read before the American Ophthalmological Society in 1865. Again he wrote on this subject in 1876, in a paper read before the International Congress. In 1884 he invented an ingenious and beautiful perimeter. In 1873 he left Philadelphia on account of the health of a member of his family, gave up a large practice, and took up his abode in Pittsburgh, where he soon acquired an enviable reputation. In 1879 and again in 1880 he fell and suffered serious fractures from which he never wholly recovered. He removed in 1883 to Newport, Rhode Island, and died February 9. 1887.

Unswerving integrity, unselfish and enduring loyalty, a child-like faith in those he loved, these were among the characteristics of Ezra Dyer.

HARRY FRIEDENWALD.

DYER, Isadore (1865-1920), of New Orleans, dermatologist and conspicuous leader in his profession, was born November 2, 1865, in Galveston, Texas, the son of Isadore and Amelia Ann Lewis Dyer. He received the Ph. B. from Sheffield Scientific School of Yale University in 1887 and attended the University of Virginia in 1887-88 and Tulane University in 1888-1889. At the latter he was graduated in medicine in 1889. After an internship in the New York Skin and Cancer Hospital, he lectured in the New York Post-Graduate Medical School. In 1892, he went to New Orleans and associated himself with his alma mater as lecturer on diseases of the skin, 1892-1905, associate professor, 1905-08, and professor after 1908. In 1907, he was appointed associate dean and dean the following year. He was also professor of diseases of the skin in the New Orleans Polyclinic from 1893 to 1908 and visiting and consulting dermatologist to the leading hospitals of the city. He founded and was president of the first board of control of the Louisiana Leper Home in 1894, and was largely instrumental in the founding of a national lepers' home.

Dr. Dyer was commissioned lieutenant in the M. R. C. in 1908. During the World War he headed the local examining board; he was discharged as major and shortly afterwards accepted a commission as colonel in the new reserve corps. He was president of the Orleans Parish Medical Society, 1899-1900, of the Louisiana State Medical Society, 1902-03, of the Southern Medical Association, 1910-11, of the American Dermatological Association, 1912-13, of the New Orleans Academy of Science, 1913-14, and of the Association of American Medical Colleges, 1915-16. He was also active as a member of the National Board of Medical Examiners from 1915, served as councilor of the American Society of Tropical Medicine, and was a delegate to several important foreign conferences. He edited the "New Orleans Medical and Surgical Journal" from 1896 and was the author of many articles on his specialty.

On July 31, 1905, he married Mercedes Louise Percival of Havana, Cuba. He passed away from heart disease at his home in New Orleans, October 12, 1920.

EARLE, Charles Warrington (1845-1893), of Chicago, was born in Westford, Vermont, April 2, 1845, and died in Chicago, November 19, 1893, of cerebrospinal-meningitis. He was of English ancestry and a lineal descendant of Ralph Earle of Exeter, England, who came to Rhode Island about 1634. Moses L. Earle, the father of Dr. Earle, moved to Lake County, Illinois, in 1854, when the son was nine years of age. His early years were passed in the country, only such time as could be spared from the labors of the farm being allowed for the studies of the country school. When the civil war began he was 16 years old, but was large and mature for his age, and early in 1861 he enlisted in the 15th Regiment, Illinois Volunteers. In the fall of the same year he was discharged on account of disability, incurred while assisting in unloading a transport of army supplies on the Missouri River. On returning home he attended an academy at Burlington, Wisconsin, until the spring of 1862, when he enlisted in the 96th Regiment, Illinois Volunteers, and continued in the service until the end of the war. He occupied successively the positions of private, orderly-sergeant, lieutenant, aide-de-camp and assistant inspector-general on the brigade staff. After the battle of Chickamauga, he was taken prisoner on Missionary Ridge, and was confined in Libby prison for four and one-half months, when he escaped through a tunnel. After a brief furlough home he returned to the front and took part in the Atlanta campaign.

In the fall of 1865 he entered Beloit College, receiving the degree of A. M. in 1868. He at once entered the office of Dr. William H. Byford (q.v.), of Chicago as a medical student and matriculated at Chicago Medical College, and in 1870 received the degree of M. D. from that institution. The same year, at the organization of the Women's Medical College, Dr. Earle became professor of physiology, and after twenty-one consecutive years of service, on the death of Prof. William H. Byford he became president of the institution. For many years he was professor of diseases of children in this school. During the years when women were striving for a place in the profession of medicine he was one of their strongest advocates and he wrote and published several articles setting forth their special claims. In 1882 he was one of the founders of the College of Physicians and Surgeons of Chicago and became its professor of obstetrics, a position he held at the time of his death. He spent the summer of 1886 in study in European hospitals. In 1892 he was elected professor of obstetrics and diseases of children in Rush Medical College, but resigned soon after beginning his duties.

Aside from his teaching he conducted a large private and consultation practice espe-

cially in obstetrics and diseases of children. Numerous papers upon subjects related to these fields were prepared by him for medical societies and published in current journals. They all bear the imprint of acute observation and wide clinical experience. He also wrote for "Keatings' Cyclopedia of Diseases of Children" and for the "American Text-Book of Diseases of Children."

Throughout his professional life he was a firm believer in the value of medical societies, and at the time of his death he was a member of several national societies, the Illinois State Medical Society, and most of the local societies. His interest impelled his attendance upon the meetings, and he frequently contributed to the programs and filled many offices in these organizations, including the presidency of several.

As in many men of his generation, early life on the farm and the trying experiences of the army developed in him a greater power of endurance and capacity for prolonged physical and mental exertion. He was thus able to perform the arduous duties of private practice during a long day and to devote much of the night to study and literary efforts. Work was his only recreation, and trips from home were taken solely to attend medical meetings. He took a personal interest in each of his students, both men and women, and took particular delight in watching and aiding the progress of the ambitious ones.

Dr. Earle was very fond of music and himself sang well. His large frame, full of physical vigor, with an inherent gentleness, sympathy and cheerfulness, won him the confidence of his patients and the love of children, making him an ideal doctor. Ready to fight for what he believed to be right at all times, and ever ready to defend the weak, he never long held a grudge, and among his warmest friends were men who had fought on the other side in the Civil War.

Dr. Earle married in 1871 Miss Fanny L. Bundy of Beloit, Wisconsin, who died April 13, 1915. Their children were William Byford Earle, who died July 22, 1914, and Carrie, wife of Dr. George H. Weaver of Chicago.

GEORGE H. WEAVER.

EARLE, Pliny (1809-1892), alienist, born in Leicester, Massachusetts, December 31, 1809, was a descendant of Ralph Earle, one of the petitioners to Charles II. of England to form Rhode Island into a corporate colony, whose name appears among the signers of a political compact made at Portsmouth, Rhode Island, April 30, 1639. His father was Pliny Earle of Leicester, Massachusetts, an inventor of cotton machinery. The son was educated at Leicester Academy and the Friends' School, Providence, Rhode Island, and graduated in medicine at the University of Pennsylvania in 1837, afterwards travelling extensively and studying in Europe. For two years he was resident physician to the Friends' Asylum, Frankford, Pennsylvania, and became medical superintendent of the Bloomingdale Hospital, New York, in 1844, resigning after five years' service and going a second time to Europe for special study. In 1853 he was appointed visiting physician to the New York Asylum and lecturer on mental diseases at the College of Physicians and Surgeons. At a later period he delivered a course of lectures at the Berkshire Medical Institution at Pittsfield, Massachusetts, as professor of materia medica and psychology. In 1864 he became superintendent of the Northampton Lunatic Hospital, and held that position till his retirement after twenty-two years of distinguished service. He was one of the original members of the American Medical Association, also of the American Medico-Psychological Association, the New York Academy of Medicine and president of the American Medico-Psychological Association in 1884.

Dr. Earle was never married.

He was a man of marked individuality, active mind, retentive memory and good judgment. His observations and study of hospitals in Europe and America, which were probably more extensive than those of any other American physician of his time, gave him a high rank while a comparatively young man. He died at Northampton, May 17, 1892, at the age of eighty-two.

Leaving out of view the young scholar and poet's contributions to the "Worcester Talisman," "Spy" and other local periodicals, some of which he gathered into his Philadelphia volume of 1841, "Marathon and Other Poems," he also wrote the following:

"A Visit to Thirteen Asylums for the Insane in Europe" (Philadelphia. J. Dobson, pp. 144, 1841). This had before appeared in the "American Journal of the Medical Sciences" for October, 1839 (vol. xxv, pp. 99-134). It was reprinted later with many changes and additions; "History, Description and Statistics of the Bloomingdale Asylum for the Insane" (1848); "Institutions for the Insane in Prussia, Austria and Germany," Utica, New York (1853). These visits were all made in the year 1849, with many others upon which

Dr. Earle did not report, but which served to correct former impressions and to make his comments on the annual reports of European asylums of great value; "The Curability of Insanity," first form of this work in a pamphlet issued by the New England Psychological Society, Boston (1877); "The Earle Family; Ralph Earle and his Descendants," compiled by Pliny Earle, of Northampton, Massachusetts, printed for the family. (Worcester, Massachusetts, Press of Charles Hamilton, pp. xxiv, 480, 1888). This may be considered Dr. Earle's "magnum opus," since it occupied him, at intervals, for half a century, and involved an expenditure on his part of some thousands of dollars. It is a masterly work, of almost incredible labor, and yet deals with only one of the eight or ten families in America named Earl, Earll or Earle. It contains more than 4,000 names of cousins, near or remote, of Dr. Earle, and yet omits more than 1,000 as not coming within the scope of the book.

In addition to these works Dr. Earle wrote some thirty reviews of reports of hospitals, and in 1846, a review of "Esquirol on Mental Diseases", in a New York periodical; a "History of Insane Hospitals in the United States," the first paper read before the New York Academy of Medicine, and published in its records; in 1863 an article in the "American Almanac" on "Insanity"; 1881 an article on the "Curability of the Insane" in the "Proceedings of the Conference of Charities," and in 1892 a long article on the same subject in Dr. D. H. Tuke's "Dictionary of Psychological Medicine," published in London two months after Dr. Earle's death. He published in 1890 in the "Journal of Social Science" his paper on "Popular Fallacies Concerning the Insane."

G. Alder Blumer.

EASTMAN, JOSEPH (1842-1902), a pioneer abdominal surgeon, was born in Fulton County, New York, January 29, 1842. He was a self-educated man, having had very little schooling. At nineteen he was shoeing oxen in a lumber settlement in the foothills of the Adirondacks, and in 1861 he shouldered a musket in response to the call of President Lincoln. He was wounded at Williamsburg and taken to Mount Pleasant Hospital, Washington. Here, a few days later, still weak and trembling under the weight of the knapsack and musket, he was ordered from the ranks of convalescents, leaving for the front. For a time he discharged small duties about the hospital dispensary, washed bottles and read furtively from medical volumes which lay about. Later he was appointed hospital steward in the United States Army, and while thus engaged, attended three courses of medical lectures at the University of Georgetown, where he was graduated in 1865. He was then commissioned assistant surgeon of volunteers. The next year he was mustered out at Nashville, Tennessee, and returning to New York, broke his journey in Indiana, where he remained to practice the profession he had picked up as a soldier. Two years later he married Mary Katherine Barker, daughter of Thomas Barker of Indianapolis.

His medical education was supplemented by attendance at the Bellevue Hospital Medical College. He was for eight years assistant to Theophilus Parvin, (q. v.) the distinguished obstetrician and gynecologist, after which he spent some time abroad. Being the first to appreciate and teach the value of surgical cleanliness in his community, he quickly came into great surgical practice which he gradually limited to surgery of the abdomen.

He was the only American surgeon who had operated for extrauterine pregnancy by dissecting out the sac containing the child, saving the life of both baby and mother (Hirst's "System of Obstetrics," vol. ii, pp. 269 and 270). He originated and perfected many instruments and surgical procedures, which in their day were much used and had a large and honorable part in laying the foundation of modern abdominal surgery. His exceptional work and his model operating-room attracted many of the earnest surgeons of the country. These were impressed by his originality, machine-like precision and the clarity of his surgical judgment. He was surgeon to the Indianapolis Hospital and founder of the College of Physicians and Surgeons of Indianapolis, a component school of the Indiana University Department of Medicine. He taught anatomy in this institution seven years, after which a special chair was created for him in diseases of women and abdominal surgery.

He was president of the Western Surgical Association, chairman of the Section of Diseases of Women of the American Medical Association, and an honorary member of the medical societies of the states of New York and Michigan. In 1901 Wabash College conferred upon Dr. Eastman her LL. D.

His death occurred in Indianapolis, June 7, 1902, caused by carcinoma of the liver. His wife, a daughter and two sons, Dr. Thomas B.

and Dr. Joseph Rilus Eastman, survived him, A tolerably full list of his pamphlets, chiefly obstetrical, can be seen in the Catalogue of the Surgeon-general, Washington, D. C.

JOSEPH R. EASTMAN.

EATON, Horace (1804-1855), Vermont practitioner, the son of Dr. Eliphaz and Polly Barnes Easton, was born in Barnard, Vermont, June 24, 1804, and fitted for college at St. Albans Academy, graduating at Middlebury College in 1825. He studied medicine with his father in Enosburg and attended lectures at Castleton, where he received his diploma, afterwards practicing with his father at Enosburg and then with his brother, Dr. Rollin Eaton, in the same place. He was a skilful practitioner and was held in high esteem by the profession generally. He was a member of the Vermont State Medical Society and its president in 1845. He held nearly all the offices—town, county and state—to which it was possible for his friends to elect him, being State Senator four times, lieutenant Governor three times, and in 1846 elected Governor, holding the office for two years. After his retirement he was elected professor of natural history and chemistry at Middlebury College, a chair he filled for six years, until his death in 1855. It is recorded of him that he was the victim of a wasting and disastrous disease, contracted in the care of a professional brother in a neighboring town. Dr. Eaton was a voluminous writer and delivered addresses and lectures on a variety of subjects.

Gov. Eaton was twice married; in 1821 to Cordelia L. Fuller, and in 1841 to Edna Palmer. They had two children.

CHARLES S. CAVERLY.

EBERLE, John (1787-1838), of Philadelphia, editor of the "American Medical Recorder" and an early work on therapeutics, was born in the county of Lancaster, Pennsylvania, December 10, 1787. Of his parentage little is known except that both father and mother were of sturdy German extraction, tilling the soil and no doubt requiring the same of their children as soon as they were old enough.

Although naturally endowed with a vigorous intellect he had no early educational advantages. It is not known who was his preceptor, probably the family physician; later he matriculated at the University of Pennsylvania, where his name appears in the list of graduates in the year 1809—the year he attained his majority, his graduation thesis being on: "animal life." He at first settled in his native place, but as "a prophet is not without honor save in his own country," he selected Philadelphia as his future field of medical labor. Young, energetic and ambitious, with no acquaintances or friends to render him financial assistance, he soon realized that he must put forth every effort. A previous taste of newspaper work and, perhaps the lack of full employment for his time at first, led to the establishment of the "American Medical Recorder" as a quarterly, with John Eberle as its editor. The first number appeared in 1818. It was ably sustained, and the popularity of the journal constantly increased because of the valuable papers found in its pages, but he had considerable difficulty in securing a publisher. Finally John Webster agreed to embark in the enterprise, and his pluck and energy were a large element in the success of the magazine. Soon after this, in 1822, Eberle's "Therapeutics" appeared from the same press. It was decidedly his best production, was cordially received, and became a text-book.

Eberle was a member of the Philadelphia Medical Society, taking an active part in its discussions and in its business affairs. It met every Saturday evening and the proceedings were so interesting that they attracted not only many of the professors but large numbers of the medical students. The society was no doubt a potent factor leading to the establishment of a second school which was called the "Jefferson Medical College." From the time of its organization Eberle taught materia medica, and also the theory and practice of medicine with marked ability, adding much to the success and popularity of the school, in connection with which he published a work "On the Theory and Practice of Medicine," for which he received liberal compensation. It was comprehensive and original, not a mere compilation of previous or foreign works. That it was well received is manifest from the fact that it passed through five editions and was adopted as a text-book by various colleges. In connection with the larger work he also published a more concise one designed specially for students, being a synopsis of his lectures and known as "Eberle's Notes." The revenues from Jefferson College poorly supported his growing family, for he desired to give his sons better educational advantages than he himself had enjoyed. Hence, disappointed in his favorite enterprise, he was easily interested in a scheme for establishing a new medical school in Cincinnati as a rival of

the Medical College of Ohio, to be known as the Medical Department of Miami University. This project was consummated in 1830, John Eberle, Daniel Drake (q. v.), and T. D. Mitchell (q. v.) being drawn from Philadelphia to take part in the university plan, but before the arrangements were fully matured the rival schools were amalgamated and the Philadelphia professors found themselves in the Medical College of Ohio. During this year the "Western Medical Gazette" was issued, with Eberle, J. M. Staughton (q. v.) and Mitchell as its editorial staff, and fully maintained the reputation of Eberle as a medical editor.

Again disappointed, however, in the attendance and revenue of the new medical college, Eberle accepted the chair of theory and practice of medicine in the Transylvania University, which was being reorganized at Lexington, Kentucky. The invitation was accompanied by the promise of a fine salary, and, knowing his fondness for editorial work, he was also induced to become one of the editors of the "Transylvania Medical Journal," positions he filled ably but only for a short time before he was obliged to resign because of shattered health.

His reputation as a lecturer and teacher had preceded him, and the announcement that he would deliver the introductory address of the reorganized Transylvania University, filled the large hall to overflowing. But his health, broken by the disappointments and trials through which he had passed, made him scarcely able to fill his appointments at all, and during the session many of his lecture hours had to be filled by his colleagues. While in bad health he unfortunately became addicted to the use of opiates, and the pernicious habit possibly hastened the end of a career whose beginning had given promise of such a brilliant future. On the second of February, 1838, he died, having lectured that year for only a portion of one school term. He was buried in the Episcopal Cemetery in Cincinnati.

As a writer he was clear and impressive; as a lecturer sure of attention, being forceful and vigorous, throwing his whole soul into his subject; as a debater he was ready and versatile, his editorial work having stored his mind with choice literature both past and present.

His writings included: "Botanical Terminology; or a Pocket Companion for Students of Botany," being a concise explanation of the terms employed in the classification and description of the vegetable kingdom," Philadelphia, 1818; "A Treatise of the Materia Medica and Therapeutics," four editions, Philadelphia, 1822-1834; "A Treatise on the Diseases and Physical Education of Children," Cincinnati, 1833-1850; "Notes of Lectures on the Theory and Practice of Medicine," delivered in the Jefferson Medical College of Philadelphia, Cincinnati, 1834; "A Treatise on the Practice of Medicine," one volume, four editions, revised and enlarged, Philadelphia, 1838-1849.

FRANK C. WILSON.

EDEBOHLS, George Michael (1853-1908), New York surgeon, was born in that city, May 8, 1853, his parents, Henry and Catherine Edebohls having immigrated from Germany about ten years before. He was educated at De La Salle Institute and at St. Francis Xavier's College, New York and was graduated from St. John's College, Fordham, in 1871, this institution conferring the additional degrees of A. M. in 1886 and LL. D. in 1906. He took his M. D. at the College of Physicians and Surgeons, Columbia University in 1875 and became a member of the house staff at St. Francis Hospital, in lower New York, an institution managed by a Catholic sisterhood. He was connected with the hospital throughout his professional career. Beginning general practice he went to Europe in 1880 with the intention of fitting himself to practice ophthalmology but returned to his native city and gradually developed a practice in gynecology, becoming visiting gynecologist to St. Francis Hospital in 1887. By 1891 he had joined the American Gynecological Society and was active in presenting papers and cases to the society that excited much attention, both from the manner of their presentation and the dominant personality of the author. Edebohls used sound judgment in forming an indication for an operation, he handled the knife gracefully, his touch was deft, his eye keen; dexterity was coupled with coolness; no details escaped his attention; the patient's interest was always uppermost in his mind and he was intolerant of careless assistants or nurses. Besides being an unusual operator Edebohls was an author who used good English in an impressive manner, a successful teacher and an ingenious inventor of instruments. His works on "Renal Decapsulation for Chronic Bright's Disease" and "Renal Decapsulation for Puerperal Eclampsia" won him international reputation. His boldness in advocating these radical measures caused considerable unfavorable comment but he per-

sisted and carried on. His lectures at the Post Graduate Medical School and Hospital, where he was professor of the diseases of women, attracted large numbers of students. He was ready, fluent, instructive, and entertaining as well. He devised an operating table, a leg holder, needle holders, kidney pads for his decapulating work and other devices to help in operative procedures. He was a perfecter of the Alexander operation for shortening the round ligaments, originating several improvements. Among his memberships may be mentioned the American Medical Association, the Medical Society of the State of New York, the German Medical Society, the New York Academy of Medicine, American Gynecological Society, New York Pathological Society (Secretary). In addition he was an honorary member of the Société de Chirurgie de Bucharest and consulting gynecologist to St. John's Hospital, Yonkers and to the Nyack Hospital, Nyack. While on a trip to Mexico in 1907 he was stricken with typhus fever. He and his wife, who was Miss Barbara Lyendecker of New York, had made the journey with their two sons to visit a married daughter. All contracted the typhus and the elder son died of the disease. Edebohls' robust constitution appears to have been undermined. On his return to New York he developed Hodgkin's Disease. Although several tumors of the lymphatics of the neck were removed he died, after a four months' illness, on August 8, 1908 at the age of 55.

Tall and erect, of commanding presence, he was dignified and courtly, though temperamentally retiring and modest. An independent thinker he was a surgeon of great natural talent, an untiring worker and a teacher of more than average ability.

WALTER L. BURRAGE.

EDES, Robert Thaxter (1838-1923), one of the seven founders of the Association of American Physicians in 1885, at that time filling the chair of Jackson Professor of Clinical Medicine at Harvard, was the son of Richard Sullivan and Mary Cushing Edes. His father was a prominent Unitarian clergyman, a descendant of John Edes who came from England and settled in Charlestown, Massachusetts, about 1674. Robert T. Edes was born in Eastport, Maine, September 23, 1838, spent his early life in Dorchester and Bolton, where his father was settled, and took his A. B. at Harvard in 1858 and his M. D. from the same university in 1861. In the following September he entered the United States Navy and served during the duration of the Civil War, chiefly in the West Gulf and Mississippi squadrons, resigning with the rank of passed assistant surgeon. In late life he wrote an account of some of his experiences in a paper with the title: "The Mortar Flotilla of the United States Navy".

On finishing his Navy connections Dr. Edes began the practice of medicine in Hingham, moving shortly to Roxbury. He held the chair of professor of materia medica in Harvard Medical School from 1875 to 1884 when he was advanced to the position of professor of clinical medicine. At this time he was visiting physician to the department of nervous and renal diseases at the Boston City Hospital. His students found him a scholarly and erudite instructor, his differential diagnoses being models of accuracy and thoroughness. On October 10, 1885 Dr. Edes, representing Boston, met at the office of Dr. Delafield, in New York, Osler, Draper, Peabody, Pepper and Tyson to organize the Association of American Physicians, ever since regarded as the leading national medical society of the country. After two years of his professorship of medicine he was induced to go to Washington, D. C. for a consulting practice. In that city he lectured on nervous diseases at Columbian University and was visiting physician to the Garfield Memorial Hospital. Returning to Jamaica Plain, a suburb of Boston, in 1891 he became resident physician to the Adams Nervine Asylum continuing there for six years and then opening a private sanatorium for nervous cases, not far from the asylum. His next move was to Reading and at that time he was visiting physician to the Highland Spring Sanatorium at Nashua, N. H., while he had an office in Boston. Increasing deafness and the infirmities of age caused his retirement in 1915 and he went to live with his married daughter in Springfield. There he died on January 12, 1923 at the age of eighty-four.

Dr. Edes was the author of "The Therapeutic Handbook of the United States Pharmacopoeia", 1883; "Therapeutics and Materia Medica", 1887; articles on diseases of the kidney and on apoplexy, for Pepper's System of Medicine and a number of papers on brain tumors, anemia, abdominal cancer and diseases of the nervous system. His Shattuck Lecture before the Massachusetts Medical Society, in 1895, on "The New England Invalid", caused a great deal of interest at the time. He wrote also: "Mugwumps, by one of Them", "Parson Gay's Three Sermons" and

in later years numerous articles for the "Boston Medical and Surgical Journal" and the Springfield daily papers.

Dr. Edes first wife was Elizabeth T. Clarke of Boston. They had four children. The one son, Richard Edward Edes (A. B. Johns Hopkins University, 1889, M. D. Harvard, 1895), a promising practitioner of Roxbury, died there November 25, 1901. Robert T. Edes's second wife was Anna C. Richardson of Dorchester, whom he married in 1881.

EDWARDS, Emma Ward (1845-1896), a pioneer physician, was born in Newark, New Jersey, June 5, 1845, of New England ancestry and educated at local private schools. At seventeen, her health failing, she was placed under medical care for several years. During this time she determined to become a physician and at twenty-one, health recovered, she was studying under local doctors. There was no regular school of medicine for women in New York until 1868, when the Woman's Medical College of the New York Infirmary was opened. Emma Ward immediately matriculated, and entering the first class graduated in 1870 with the honor of valedictorian. After her graduation she served as clinical assistant, dispensary physician and instructor in "practice" in the college, and was associated with Dr. Loring of New York for a year. She then returned to Newark and took up general practice with unusual success.

In April, 1872, she married Dr. Arthur M. Edwards and removed to Berkeley, California, Her husband becoming incapacitated by illness, she returned with him and the children to Newark in 1878 and built up a phenomenally large practice.

She was a member of the New Jersey State Medical Society and Essex County Medical Society.

To her fine character, coupled with the success she achieved, is partly due the tremendous impulse which the education of women in the medical profession received in the vicinity of New York.

She died of dysentery, March 28, 1896, at Clearwater, Florida.

ALFREDA B. WITHINGTON.

Edwards, Francis Smith (1826-1865), New York physician, numismatist. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 354.

EDWARDS, Landon Brame (1845-1910), was one of the founders of the University College of Medicine, Richmond, Virginia; also founder in 1874, and for many years editor, of the "Virginia Medical Monthly," later known as the "Virginia Medical Semi-Monthly." He was born September 20, 1845, in Prince Edward County, Va., and died at his home in Richmond, November 27, 1910, aged sixty-five. He was the son of John Ellis Edwards, a clergyman, and was educated at Randolph-Macon College and at the University of the City of New York, where he received his M. D. in 1867. In 1863 he enlisted in the Artillery Corps of the Confederate Army and served until the close of the war, and served afterwards as surgeon of the first regiment, Virginia Volunteers. He was a member of the Southern Surgical and Gynecological Association and past president and honorary fellow of the Richmond Academy of Surgery. His work as a teacher began in 1874, when he became lecturer on anatomy in the Medical College of Virginia; in 1875 he was elected lecturer on materia medica and therapeutics and served in this capacity for two years. In 1893 he was made professor of practice of medicine in the University College of Medicine, Richmond, and from 1900 to 1907 was professor of clinical medicine and dean of the medical faculty of the institution and later emeritus professor. His hospital experience began in 1867 when he served for five months as house physician at Charity Hospital, Blackwell's Island, and later as assistant physician to Dr. M. Gonzales Echeverria, at his hospital for nervous diseases, Lake Mahopac, New York.

EDWARDS, William Milan (1855-1905), alienist of Michigan, was born on his father's farm near Peru, Indiana, September 17, 1855; his father, a native of Cincinnati, Ohio, his mother of Louisville, Kentucky. After an early education in the common school at Peru, Indiana, one year at Smithson College, Logansport, Indiana, two years at the University of Indiana, and a two years' teaching engagement at his home district school he began to study medicine with Drs. Ward and Brenton of Peru, in 1884, graduating M. D. from the University of Michigan, in the same year. At once he was appointed assistant physician in the Michigan Asylum for the Insane at Kalamazoo, and in 1891 medical superintendent to fill the place vacated by the

resignation of Dr. George C. Palmer. He was a member of the American Medico-Psychological Association; vice-president, Michigan State Medical Society, 1904; associate editor, "Physician and Surgeon," Ann Arbor, Michigan; non-resident lecturer on insanity, Michigan University, 1898, and author of many papers read before the joint Board of Trustees of the Michigan Asylums, the State Board of Charities, and other organizations interested in the care of the insane. During his administration of Kalamazoo Asylum the antiquated buildings were practically reconstructed, the colony system developed and extended, detached hospitals and infirmaries for patients of both sexes erected. He organized a highly effective training school. Dr. Edwards was about six feet in height, well proportioned, very dark hair and complexion, gentle of speech, with winning expression and considerate manner; he was able to attract all to his plans and interest them in his purposes, blending the most inharmonious elements into an efficient working force.

On August 10, 1897, he married Emma Adèle Merritt, of Union City, Michigan, who survived him. He died on April 26, 1905, in the hospital at Ann Arbor, from chronic heart disease.

Two of his papers were: "The Public Care of Epileptics by Colonization." (Transactions Michigan State Medical society, 1884.) "The Early Recognition and Treatment of Insanity at Home." (Transactions Michigan State Medical Society, 1899.)

LEARTUS CONNOR.

EIGHTS, James (1798-1882), naturalist, was the son of Dr. Jonathan Eights, in his day a well-known physician of Albany, New York, and was born in that city in 1798. In those days the home of the Eights, which stood on the corner of what is now North Pearl and Columbia Streets, was in the center of the fashionable residential district of the old Dutch citizens, and nearby dwelt the Douws, the Terwilligers, the Huns, the Van Schaicks, the Ten Broecks, the Ten Eycks, the Zerbrugges, the widow Visscher and many others whose names still persist among the families of Albany, or are recalled by the names of streets or localities. In this atmosphere of picturesque high-peaked houses, young Eights, who was an artist of ability, must have received strong impressions. It is this same Eights who drew a series of sketches of the streets of old Albany in 1815; pictures that have been so often copied that some of them are apt to be found almost anywhere, and their authorship forgotten.

Of his early education we know little. One may easily surmise that he was licensed to practice medicine by the state or county medical society, according to the custom of the time, because throughout life he was known as "Doctor Eights." He seems to have developed in early years an unusual keenness of observation and deep interest in natural sciences, and in 1829 accompanied the Capt. Fanning Voyage of Discovery to the South Sea Islands. He brought back with him considerable material of a scientific interest, and some of the interesting forms of animal and vegetable life which he discovered are described in the Transactions of the Albany Institute in 1833 ("Remarks on the New South Shetland Islands"). Fragments of this material are still in existence. The plants which he collected, in an excellent condition of preservation, found their way into the herbarium of his friend and colleague, Dr. Lewis Caleb Beck (q. v.), who sent a duplicate set to Hooker for determination. The original set is now in the State Herbarium at Albany. Dr. John M. Clarke, Director of the New York State Museum, says of Eights: "It is worth while taking note of Eights's geological observations . . . they were the first ever made in the Antarctic and were put down by a man who was in his time reckoned a geologist." According to the same authority, "Eights was among the first observers to make record of the active volcanoes in the vicinity of these islands and what was then called Palmer's Land."

In 1837 Eights published a paper in the first volume of the "Journal of the Boston Society of Natural History" and gave an account of "Decolopoda australis" an unbelieveable ten-legged pycnogonid; Dr. Leon J. Cole says of this: "A ten-legged pycnogonid such as 'Decolopoda' was an unheard of thing until Eights described this one."

On the Fanning Expedition was one John N. Reynolds, not a man of science, but a man who had much to do in initiating the sentiment and leading the campaign which resulted in the Wilkes Exploring Expedition. Eights wanted to go on the new expedition, and was appointed as its geologist, but when the final arrangements were completed we find that he had been skilfully eliminated from the corps of scientists on the expedition. This proved to be a bitter disappointment for

him and was doubtless the deathblow to his ambitions and to what might have been a notable scientific career.

The rest of the story is short. Between 1835 and 1853 he resided in Albany and wrote anonymously for the "Zodiac," an Albany magazine, articles on flowers, clouds, weather, insects, birds, mollusca, geology, the lowering of the Hudson river, elevated beaches, turtles, sun-spots, fossils, minerals, constellations and other subjects, the observations of a well-stocked mind of a gifted naturalist.

At one time during this period he appears to have been an assistant in the preparation of a report on the geology of the western part of the state. In 1852 he published a paper in the "Transactions of the Albany Institute" on the superficial geology of Albany. This was his last appearance.

Of the remainder of his life, we know only that he was living alone, and was unmarried, and that he was very, very poor, so poor that he received assistance from his friends. He apparently found most congenial company among the interesting scientific men, who were active at that period in the affairs of the Albany Institute, but with increasing age he was obliged to take up his residence with a sister in Ballston, New York, where he died in 1882, at the age of eighty-four.

H. D. House.

ELIOT, Jared (1685-1763), was eminent as a Congregational minister and famous as a physician, unquestionably the first physician of his day in Connecticut, frequently visiting every county in the state, and often making professional visits to Newport and Boston.

Born in Guilford, Connecticut, November 7, 1685, his father was the Rev. Joseph Eliot, whose great abilities as a divine, a politician and a physician were justly admired, not only among his own people, but throughout the colony. His grandfather was John Eliot, "Apostle to the Indians," an Englishman who landed at Boston, Massachusetts, in 1631. The wife of the "Apostle" had great skill in physic and surgery. The grandson, Jared, married Hannah, daughter of Samuel and Elizabeth Smithson, who was a famous midwife in Guilford. From his father, Joseph, his grandmother, Ann, wife of the "Apostle," and from association with his wife, Hannah, and her mother, the midwife, Jared Eliot must have been in the way of acquiring many useful hints in the healing art. He was graduated from Yale College in 1706. Harvard College gave him the honorary A. M. in 1709. About 1756-7 he was unanimously elected a member of the Royal Society of London. He was trustee of his alma mater from 1730 till his death.

Seven of his printed sermons reveal unusual excellence in his chosen profession, and a number of his printed essays upon agriculture show that he was a scientific agriculturist. So valuable were they that they were printed in a volume in 1760. In 1762 his "Essay on the Invention, or Art of Making Very Good, if not the Best Iron from Black Sea Sand," appeared. For this the Royal Society of London granted him a valuable gold medal inscribed for "Producing Malleable Iron from the American Black Land," which then, and now, abounds on the shore of Long Island Sound at Clinton. The medal is in the possession of a descendant at Goshen, New York.

Eleven children, nine sons and two daughters, were the result of his marriage. Three of the sons graduated at Yale College, two of them becoming physicians, who died young. The portraits of Eliot and his wife, by an unknown artist, are preserved by a descendant at Clinton.

Much more might be said in regard to this very distinguished man of colonial Connecticut. "Dexter's Yale Biographies and Annals," "The Geneaology of the Eliot Family," "The Descendants of John Eliot," a new edition, and Dr. Gurdon W. Russell's "Early Medicine and Early Medical Men in Connecticut," and numerous other books and pamphlets contain lengthy articles in regard to him, but one of his communications in print shows in his own words the scientific spirit of the man more than any relation of what he did.

"The last week, in this place, a man at his work was troubled with a fly that attempted, and, notwithstanding all his endeavors to avoid it, entered his ear and went so deep that he could not reach it. It continued for some time, and then came out of itself. He quickly found inconvenience of the spawn grew great and almost intolerable, but was there lodged; the pain and tumult in his head soon eased by thrusting into his ear a feather dipped in war oil. There came out forty maggots. This was in May, 1729."

Elsworth Eliot.

ELIOT, Johnson (1815-1888), surgeon of Washington, D. C., was born in that city August 24, 1815, a son of Samuel and Mary Johnson Eliot, Jr., of Boston, Massachusetts. Upon his father's side he traced his ancestry back to Sir John Eliot, of Devonshire, Eng-

land, in 1373. When only thirteen, after a common school education, he apprenticed himself, very much against the wishes of his widowed mother, to Charles McCormick, a druggist of Washington, and continued in the drug business for about fifteen years, when he disposed of his store and in 1839 was appointed hospital steward at the Naval Hospital, Washington, serving under Surgeons Foltz and Jackson. During the same year he began to study medicine under Dr. Thomas Sewall (q. v.) matriculating in the medical department of Columbia College, District of Columbia (now George Washington University), and graduating in 1842 with a thesis entitled "Humoral Pathology." Immediately upon graduation he was appointed demonstrator of anatomy. This position he resigned in 1849 to become one of the founders of the Medical Department of Georgetown University and the same year professor of anatomy and physiology, three years later resigning the physiology chair but continuing to fill that of anatomy. When the chair of surgery in Georgetown Medical Department became vacant in 1861, he accepted the position and very soon forged his way to the front rank of the surgeons in this section of the country.

At the call of President Lincoln, he was among the first local surgeons who volunteered their services, starting for the battlefield of Bull Run with a pass to the front signed by Secretary of War Stanton, not waiting for a commission.

A thorough anatomist, a bold and deliberate operator, he was one of the pioneers in ovariotomy. Among some of his brilliant operations may be mentioned three cases of removal of the superior maxilla, two cases of amputation at the hip-joint, a case of removal of seven and a half inches of the humerus, and also one of the early successful excisions of the head of the humerus, simultaneous ligation of the carotid and subclavian arteries for eneurysm of the arteria innominata, two cases of removal of palatopharyngeal sarcoma, ligation of the subclavian artery, simultaneous amputation of both legs.

Among his appointments Dr. Eliot was physician-in-charge of the Washington Smallpox Hospital, 1862 to 1864; consulting surgeon and one of the directors of St. John's Hospital, Columbia Hospital for Women, Children's Hospital, Central Dispensary and Emergency Hospital; surgeon-in-charge of Providence Hospital; dean of the medical faculty of Georgetown University from 1856, to the re-organization of that body in 1876, and professor of surgery from 1861 to 1876, when he was elected emeritus professor of surgery, but continued his clinical teachings until his death. In 1869 the honorary A. M. and in 1872 that of doctor of pharmacy were conferred on Dr. Eliot by Georgetown University. He was a member of the Pathological Society, Medical Association of the District of Columbia, Medical Society of the District of Columbia, and president of the last in 1874.

His publications were few; he delivered a number of introductory and valedictory addresses to students and presented the following before the Medical Society of the District of Columbia: "Bright's Disease," "Knotted Funis," "Stimulants Hypodermically," "Report of a Large Calculus from a Horse," "Cystic Degeneration of the Thyroid Gland," "Hepatic Abscess," "Amputation of the Finger for Neuralgia Following Whitlow," "Excision of the Elbow," "Strangulated Hernia," "Excision of the Inferior Maxilla," "Ovariotomy," "Palatopharyngeal Sarcoma." The following paper was published in the "American Journal of the Medical Sciences," 1877, vol. lxxiii, p, 374: "Simultaneous Ligation of the Carotid and Subclavian Arteries for Aneurysm of the Innominate Artery."

He married, November 30, 1850, Mary John, daughter of John Llewellin, Esq., of St. Mary's County, Maryland, who with six children survived him. While reputed to be wealthy he died a comparatively poor man, as he lacked business tact and his charitable work knew no bounds. His death was caused by pneumonia after a short illness of eight days, in 1888.

GEORGE M. KOBER.

Ellegood, Robert Griffith (1829-1902), president of the Delaware State Medical Society. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 358.

ELLINGWOOD, Finley (1852-1920), editor and author of Illinois, was born September 12, 1850, in Manchester, Indiana, the son of Elijah and Mary Abigail Rice Ellingwood. He was a graduate of the Bennett College of Eclectic Medicine and Surgery of Chicago in 1878, and practiced in Kankakee County, Illinois, until 1884 when he was appointed professor of chemistry in his alma mater. He held this chair until he assumed the profes-

sorship of materia medica and therapeutics in 1900, resigning in 1907.

Dr. Ellingwood was the editor of "The Chicago Medical Times" from 1884 until 1906, 'The Eclectic Medical Annual" from 1889 until 1891, and "Ellingwood's Therapist" from 1906, and was the author of "Eclectic Medical Annual," 1888, "Synopsis of Medical Chemistry," 1889, "Manual of Urinalysis," 1891, "Ellingwood's Materia Medica" (8 eds.), 1899, "Ellingwood's Pregnancy and Labor," 1912, and "Ellingwood's New American Materia Medica," 1915. He was president of the National Eclectic Medical Association in 1919 and first vice-president of the World's Eclectic Medical Association in 1919 and first vice-president of the World's Eclectic Medical Congress in 1903.

On September 1, 1880, he married Jennie S. Elliott of Chicago. He died June 29, 1920, at Pasadena, California.

ELLIOT, George Thompson (1827-1871) of New York, scholar, clinical teacher, and writer, was born in that city May 11, 1827, the son of George T. and R. G. Elliot. At an early age he attended Mr. Peugnet's school, then entered St. Paul's College and at the expiration of the sophomore year joined the junior class at Columbia College where he took his A. B. in 1845. Subsequently receiving an A. M. from Columbia, he began the study of medicine under Valentine Mott (q. v.) and received his degree of M. D. from the University of the City of New York, in 1849, writing a graduating thesis on "Fracture of the Thigh," into which he incorporated notes from his personal experience from a sad accident a few years before. For three years Dr. Elliot studied medicine abroad, passing six months in the Dublin Lying-in Hospital and seven on the Dreadnaught Hospital Ship, in London. Thirteen months were spent in Paris and four in Edinburgh.

On returning to New York he became resident physician to the New York Lying-in Asylum and subsequently attending physician; after 1854 he was attending physician to Bellevue Hospital and for six years visiting physician to the Nursery and Child's Hospital. For the last ten years of his life he was professor of obstetrics and diseases of women and children at the Bellevue Hospital Medical College in conjunction with professors Taylor and Barker and consulting surgeon to the Woman's Hospital in the State of New York.

As a didactic lecturer Dr. Elliot took high rank, using the choicest language and having a persuasive eloquence that held his hearers. He contributed many articles to medical literature and toward the close of his life published (1868) his "Obstetric Clinic," a volume of 458 pages, an epitome of his teaching and practice.

Though only forty-four years old at his death he had a large consulting practice. While attending a consultation on a case of thrombosis, June 9, 1870, he had an apoplectic seizure, at that time being president of the New York County Medical Society. He recovered but died suddenly from an immense cerebral hemorrhage, January 28, 1871.

ELLIOT, John Wheelock, (1852-1925), pioneer aseptic surgeon of Boston. Dr. Elliot's ancestors settled in New England in 1750. His great grandfather was a soldier at Bunker Hill. His grandfather's name was spelt with one L but the spelling was later changed to accord with that of the Scottish clan from which the family came. He was born in Keene, N. H., on Oct. 10, 1852, son of John Henry Eliot, a lawyer and distinguished man in his state, and Mary Ann Wheelock. He entered Harvard from Phillips Exeter Academy graduating in 1874, and from Harvard Medical School in 1878, having in the mean time served as interne for a year at the Massachusetts General Hospital. He studied for 18 months in Europe at Weimar, Dresden, Berlin, Vienna, Paris and London, then returned to Boston and began practice in 1880. He married in 1883 Mary Lee Morse a most attractive member of a distinguished Boston family. Much of his success was due to her helpfulness and high ideals. In his first years of practice he tended toward specializing in gynecology, was assistant surgeon to the Free Hospital for Women from 1883 to 1887, at the same time conducting a large clinic for women at the Boston Dispensary where he taught gynecology to the Harvard medical students. From 1886 to 1894 he was surgeon to out-patients at the Massachusetts General Hospital, and on the staff from 1894 to 1907 when he resigned on account of his health. He retired from practice in 1913. During the World War Elliot was chairman of the New England Surgical Dressings Committee. During his active career he was in touch with teaching at the Harvard Medical School, holding the titles of "Clinical Instructor in Gynecology" (1888-1889) and "Lecturer on Surgery" (1900-1905). He coop-

erated in this teaching rather than took a very active part. He died at Needham, Mass., Sept. 17, 1925, of valvular heart disease. His wife survived him about a year. They had but one child, John Morse Elliot, who served as a lieutenant in the Aviation Corps during the World War and then engaged in business in Boston.

When at the age of 28 Elliot returned from Europe, where he had visited the surgeons best known as exponents of antisepsis he evidently had realized the importance of the new ideas, for we find an article by him in "The Boston Medical & Surgical Journal", Oct. 7, 1880, which shows that he knew all there was to be known about the germ theory of disease at that time. By comparing this article with the hospital records at that date and with the aid of the recollections of surgeons who were then internes, I think it can be conclusively shown that Elliot was among the first or the very first surgeon in his community to forsee that a complete change was coming. Certainly he was the outstanding exponent of asepsis rather than antisepsis at the Free Hospital for Women and at the Massachusetts General Hospital. Again, reading the writing on the wall as to the part laparotomy was to play in gynecology, he began doing laparotomies at the Free Hospital for Women and in private practice although ovariotomy was still taboo at the Massachusetts General Hospital. By the time he received his appointment as surgeon to out-patients at 34, he was recognized by several prominent doctors as the safest ovariotomist and pelvic surgeon in Boston. Even his senior colleagues, M. H. Richardson (q. v.) and Arthur T. Cabot, (q. v.) had not done so many successful laparotomies. These surgeons, his immediate senior colleagues, were his close friends throughout his career. All three had been assistants to John Homans (q. v.) and it is hard to say which of the four was the real leader in the new surgery. I am satisfied Elliot was the first to really understand the fundamental point of excluding germs rather than killing them in the wound. He was among the first to appreciate R. H. Fitz's work (q. v.) on appendicitis and was the first surgeon in his community to deliberately open the peritoneal cavity to search for an inflamed appendix, almost against the advice of Fitz, who was present. His courage in following his convictions in doing this is emphasized by the fact that the patient was his own friend Dr. Alfred Worcester, of Waltham, who fortunately survived to become the ardent apostle of appendectomy. On encountering a deep seated abscess, Elliot searched no further but drained transperitoneally as we do now. The surgeon of today cannot realize that this direct simple procedure was an important innovation. Elliot's defence of this operation at a local medical meeting soon after is most forceful and of classic interest. His greatest contribution was his introduction of gauze sponges as a substitute for the old sea sponges which were difficult if not impossible to sterilize thoroughly. This seems a simple step but it was a most important one. So was his introduction of the ideal position in gall bladder surgery which is today universally used. He was not an experimentor who tried everything, and in consequence made many mistakes, but a man of foresight who did not dread change on account of its mere novelty and was always alert to replace poor methods by better ones. His short pithy papers before the surgical societies stand today as evidence that he followed no false prophets and yet was among the pioneers in nearly every field of modern surgery. The principles enunciated and the technique described in these papers are still the important ones today, although in most instances the number of similar operations then recorded could have been counted on the fingers. Personally Elliot was a very attractive and agreeable man with frank gracious friendly manners. His success came early and it was inevitable that well-to-do patients fully occupied his time. He would not do a large practice for he was punctilious in attending to preoperative and postoperative care. With little ambition for professional recognition or fame as a teacher he wrote more as a duty than with any pleasure. His brief papers nearly all represent accounts of his early cases the success of which he attributed to some principle of pathology or technique which might be of use to others. His writing, teaching, studying and attendance at medical meetings were all secondary to his real enjoyment of giving his friends and their friends the best surgical care. His remarkable surgical judgment in not undertaking what he could not do, made him very successful; at the same time he was daring in operating upon difficult cases. He seemed to discern with nicety what would be possible. Although he had a high degree of manual dexterity he did not rely on it un-

duly, with the result that he did easily and quickly what he had made up his mind to do.

The writer has filed with the Boston Medical Library and with the Massachusetts General Hospital copies of a biographic sketch of Dr. Elliot (50 typewritten pages), which takes up in some detail his contributions to practical surgery.

ERNEST AMORY CODMAN.

ELLIOTT, Stephen (1771-1830), incorporator of The Medical College of South Carolina, botanist, son of William and Mary Barnwell Elliott, was born at Beaufort, South Carolina, November 11, 1771. After graduating from Yale in 1791, he entered upon a public career: several times a member of the South Carolina Legislature and as State Senator responsible for the passage of two bills, one establishing free schools, the other a state bank. In 1812 he left the Senate to be president of the Bank of the State of South Carolina at Charleston; here he organized the Literary and Philosophical Society of South Carolina. Elliott devoted most of his leisure to zoology, botany, and other sciences. During 1816-1824, he published in parts, "A Sketch of the Botany of South Carolina and Georgia," which in spite of its modest title constitutes two thick volumes and is one of the classics of American botany. He was also the founder of the "Southern Review" and contributed anonymously to its pages. The LL. D. was conferred upon him by Yale in 1819, by Harvard in 1822, and by Columbia in 1825.

In 1823, he secured from the State Legislature an act incorporating the Medical College of South Carolina which opened in 1824 and graduated its first class in 1825, Elliott in the chair of natural history and botany. One of its first acts was to grant him the honorary M. D.; although he never practiced his name holds a high place in the history of medical education in his native state.

He married Esther Habersham of Georgia in 1796; their son, Stephen Elliott (1806-1866) became the first Protestant Episcopal Bishop of the Diocese of Georgia. Stephen, senior, died March 28, 1830.

Elliott is commemorated by the beautiful flowering shrub "Elliottia," and various species, such as "Carex Elliottii," "Juncus Elliottii," "Solidago Elliottii," "Aster Elliottii". The Elliott Society of Natural History, of Charleston, established in 1853, was named for him.

JOHN H. BARNHART.

ELLIS, Benjamin (1798-1831), author of "The Medical Formulary," was born in Muncy, Pennsylvania, May 7, 1798. His father was William Ellis, teacher and pioneer settler in Tioga and Lycoming Counties, Pennsylvania; his mother was Mercy Cox, highly thought of as a preacher in the Society of Friends. He entered the Medical School of the University of Pennsylvania in 1820 and was graduated M. D. April 14, 1822, with the thesis "Marsh Effluvia." He was elected one of the physicians of the Philadelphia Dispensary. He practiced in Philadelphia, but his claim in medicine lies in the authorship of "The Medical Formulary," which passed through eleven or more editions; later editions were revised and extended by Dr. Samuel George Morton (q. v.), and by Dr. Robert Pennell Thomas (q. v.). In 1827 Ellis became professor of materia medica in the Philadelphia College of Pharmacy, succeeding Dr. Samuel Jackson (q. v.), and held that chair until his death. He was co-editor of the "Journal of the Philadelphia College of Pharmacy," of which he was a founder, from 1829-1831.

On June 2, 1824, he married Amy H., daughter of Ellis Yarnall, a merchant of Philadelphia; there were no children.

Benjamin Ellis was one of eleven children; a brother was Charles (1800-1874), fourth president of the Philadelphia College of Pharmacy, 1854-1869, and president of the American Pharmaceutical Association, 1857-1858. After an illness of about a week from scarlet fever Benjamin Ellis died in Philadelphia April 26, 1831.

EWING JORDAN.

ELLIS, Calvin (1826-1883), dean of Harvard Medical School during a period of reorganization, professor of clinical medicine in that school, was born in Boston, August 15, 1826, being a descendant of the Ellises who founded Dedham, Mass., in 1634. After an education in the schools of his native city Ellis entered Harvard College, where he was graduated in the class of 1846. He used to say that during his college life he "played," and that he first awoke to the full meaning of life when he studied medicine. He took his M. D. from the Harvard Medical School in 1849, and the same year was appointed house-pupil at the Massachusetts General Hospital.

When he had spent two years in the hospitals of France and Germany, where he devoted the greater part of his time to clinical

medicine, morbid anatomy and pathology, he returned to his native city and became assistant to J. B. S. Jackson (q. v.), professor of pathological anatomy at the Harvard School. He was also made admitting physician and pathologist to the Massachusetts General Hospital. On April 25, 1863, the corporation appointed Ellis adjunct professor of the theory and practice of physic. He was associated with George C. Shattuck (q. v.) for two years and was transferred to the department of clinical medicine. On October 20, 1865, he was made adjunct professor to Henry I. Bowditch (q. v.), whom he succeeded on September 28, 1867, as professor of clinical medicine. He was now a visiting physician to the Massachusetts General Hospital. Two years later he was chosen dean of the medical school and held this office till June 25, 1883, when the school moved into its new building. Ellis was unquestionably one of the most valuable teachers the Harvard Medical School had. He showed that we must place the diagnosis of disease upon a scientific basis; he scouted mere authority. Nothing was to be regarded settled until proven. "Snap" diagnoses were beneath his notice, and so-called intuition in diagnosis was to him little less than charlatanism.

He was dean of the medical school in the reorganization period, and the newly elected president of the university, Charles W. Eliot, found in him a leader ready and able to carry out reforms in that department of the university where custom, tradition, and personal interests seemed strong enough to defeat any new move. He lived to see success assured. Not so with his life work on "Symptomatology." It must be one of our keenest regrets, as it is a loss to medicine that this last work was not left in form for publication. But many of his writings survive. A full list includes some forty-two articles published, mostly in the "Boston Medical and Surgical Journal" and the "American Journal of the Medical Sciences," between 1855 and the year of his death. His Boylston prize essay in 1860 on "Tubercle" was considered perhaps the best paper on that subject prior to Koch's discovery of the bacillus. Ellis became a fellow of the American Academy of Arts and Sciences on November 9, 1859, and was a distinguished member of that learned body at the time of his death. During the Civil War he went twice to the front upon errands of mercy, and twice returned a victim to the infection from which he tried to rescue others. His generous bequests to the school so faithfully executed by his sister were as helpful in a material manner as his teaching to the intellectual side of student life. The trustees of the Massachusetts General Hospital wanted him for visiting physician and were glad to get him. So too felt the corporation of the university when they elected him professor of clinical medicine. Finally, when his failing health made these duties impossible, the corporation waited three years in the hope that his strength might return and his labor be renewed. He died on December 14, 1883.

He gave freely of his time and money, and helped many educational undertakings also. When the new Boston Medical Library Association needed funds for a card catalogue, Ellis gave one thousand dollars, and at his death he left one hundred and fifty thousand dollars to the Harvard Medical School. His daily example as a wise and high minded practitioner, and a kindly, honorable, unselfish man, was of great worth to the students, for they saw that these qualities were the foundation of his success as a physician, and of his wholesome influence in the hospital, the school and the medical profession.

WALTER L. BURRAGE.

ELMER, Jonathan (1745-1817), of New Jersey. The family of Elmer in New Jersey was descended from Edward Elmer, who came to America with the company of forty-seven that comprised the church of the Rev. Thomas Hooker in Cambridge, Mass., in 1632. He was killed by the Indians in King Philip's War in 1676. Edward is believed to have been a grandson of John Aylmer, educated at Oxford, a Protestant, and a tutor of the unfortunate Lady Jane Grey. He was made Bishop of London by the name of John Elmer.

Jonathan, great-grandson of Edward, grandson of the Rev. Daniel Elmer, who came from Connecticut to Fairfield in 1727, and son of Daniel 2d, was born at Cedarville, Cumberland County, New Jersey, November 29, 1745, and died at Bridgeton, September 3, 1817. He was one of the ten who first in this country received the degree of bachelor of medicine, from the University of Pennsylvania, June 1, 1768. They began their study in Philadelphia in 1765 in the institution called the "College and Academy of Philadelphia," later the University of Pennsylvania. John Morgan (q. v.) was Jonathan's preceptor. After receiving the bachelor's degree in 1768, Jonathan and three of his

friends continued their studies and were granted the degree of doctor of medicine in 1771. Jonathan Elmer's doctorate diploma, signed by Benjamin Rush, William Shippen, John Morgan, and others, hung over the mantle in the office of Walter Gray Elmer, of Philadelphia, in 1919, himself a graduate of the medical department of the University of Pennsylvania in 1897, and a great-grandson of Jonathan. It is an interesting fact that all five of these Elmers were graduates of the medical department of the University of Pennsylvania, and the first four were presidents of the state medical society.

Being from youth of feeble health, Jonathan was disabled early in life for active exertion and therefore confined himself very much to study, being "a laborious and diligent student." Besides his knowledge of medicine, he was well read in law and theology. In personal appearance he was of short stature, slender and erect; neat in his dress and stately in his address. He possessed a firm and unbending self-will, which was perhaps intensified by his secluded habits. At the time of his decease, L. H. Stockton, Esq., in a short notice of him in the "Trenton Federalist," said that "in medical erudition the writer remembers his illustrious contemporary, the late Dr. Rush, frequently say that Dr. Elmer was exceeded by no physician in the United States." He was elected a member of the New Jersey Medical Society, only recently founded, in 1772. This society held no meetings during the war, from 1775 to 1781. Dr. Elmer was elected president of the rehabilitated society in 1787, the year prior to his election to the United States Senate, and delivered two "Dissertations" before the meeting of that body. These dissertations entitled "On the Chemical Principles of Bodies" and "On the Different Properties of the Air Contained in the Atmosphere," were published in the Transactions.

Prior to the breaking out of the war, Dr. Elmer laid aside the duties of his chosen calling and became an ardent friend of regulated liberty. He was Whig sheriff when, in November, 1774, a company of disguised men burned the tea stored at Greenwich, N. J. Although he was supposed to know who were the culprits he did not apprehend them. He was appointed delegate to the Provincial Congress in 1776, was a member of the committee that formed the first constitution of the state, and served with Richard Stockton and Dr. Witherspoon in 1780 and again in 1784 in the legislature of the state. He was in the National Senate from 1789 to 1791. The following extract from the journal of William Maclay, a fellow Senator in 1789, throws light on his character: "I know not, in the Senate, a man if I were to choose a friend, on whom I would cast the eye of confidence as soon as on this little Doctor. He does not always vote right—and so I think of every man who differs from me, but I never saw him give a vote, but I thought I could observe his disinterestedness in his countenance. If such an one errs, it is the sin of ignorance and I think Heaven has pardons ready sealed for every one of them."

While in Congress Dr. Elmer was placed on the Medical Committee, visiting in this relation the various hospitals within reach by long journeys on horseback, and it was on one of these journeys that he met his brother, Surgeon Ebenezer Elmer (1752-1843), at the military hospital at headquarters, Morristown, when the brother was on his return from his northern campaign.

A very neatly written and legible letter from Dr. Elmer as president of the New Jersey Medical Society, dated Trenton, 22nd January, 1788, to the president of the Massachusetts Medical Society, is preserved in the archives of the latter society. According to the records it was one of two letters submitted to the council, establishing friendly relations between the two societies. The New Jersey society had been unfortunate in being unable to obtain a charter from its state legislature. It is possible that the first charter for a term of twenty-five years, granted them in 1790, may have been helped along by the correspondence between Dr. John Warren, (q. v.), corresponding secretary of the Massachusetts society, and Dr. Elmer.

Dr. Elmer held the office of presiding judge in the Court of Common Pleas in Cumberland County, which he resigned in 1814, on account of increasing age and infirmity, remarking to his associates, as he took his final leave of them, that it was forty-two years since he became an officer of the court, and he had lived to see every person who had been a member of it, both on the bench and at the bar, consigned to the house appointed for all the living.

He died at the age of seventy-one and was buried in the Bridgeton cemetery.

WALTER L. BURRAGE.

ELSBERG, Louis (1836-1885) was the first in this country to demonstrate in public the use of the laryngoscope in diagnosis and

treatment. He was born April 2, 1836, at Iserlohn, Prussia, son of Nathan and Adelaide Elsberg. His people came to America and settled in Philadelphia when he was thirteen, and the boy went to a public school, and took his M. D. at Jefferson Medical College in 1857. After six months as resident at Mt. Sinai Hospital he went abroad and studied under Czermak, and the year after, on returning, established the first public clinic for throat diseases. He also, with some few others, founded the American Laryngological Association and was its first president.

The records of his contributions given at the end of this sketch show the work he did despite a very large operative practice. In a paper on "Laryngoscopic Medication," 1864, he gave descriptions of many new instruments he had invented. His intense application to work after a second journey to Europe, this time to recuperate, led to an aggravation of the kidney disease from which he suffered. Ten days before his death he contracted a severe cold, pneumonia set in and his friends hardly knew he was ill before news came of his death on February 19, 1885.

He married, in 1876, Mary Van Hagen, daughter of Joseph Scoville, of New York.

His most important writings include:

"Laryngoscopical Surgery," 1864, which won the gold medal of the American Medical Association; "On the Structure and Other Characteristics of Colored Blood"; "Changes in Biological Doctrines During the Past Twenty-five Years"; "Neuroses of Sensation of the Pharynx and Larynx"; "A Complete Manual of Throat Diseases"; "The Normal and Pathological Histology of the Cartilages of the Larynx"; "The Discovery of a New Kind of Resultant Tones"; "The Explanation of Musical Harmony." In 1880 he began the quarterly publication of "The Archives of Laryngology". Among his appointments he was professor of laryngology at the University Medical College, New York, for seventeen years.

ELSNER, Henry Leopold (1857-1916), was for a long time a teacher in the Medical Department of Syracuse University, a clinical investigator of merit, and a prolific writer dealing for the most part with advanced medical topics; he also for a generation stood before the entire central New York State as an ideal general practitioner, and its cherished consultant.

Born in Onondaga County, New York, August 15, 1857, of Dr. Leopold and Hanchen Sulsbacher Elsner, he was prepared in the Syracuse grammar and high schools, and began to study medicine under his father and an older brother. He was graduated in medicine from the College of Physicians and Surgeons of New York City in 1877, and continued his studies in Berlin and Vienna, beginning an active general practice in Syracuse in 1878, and attaining great eminence as the leading consultant in New York State west of the City, while serving as attending physician at St. Joseph's Hospital and as professor in the University. He was appointed lecturer on internal medicine in the Medical School of Syracuse, becoming full professor of the science and art of medicine on the resignation of Dr. Didama (q. v.) in 1893, and it is to his credit as well as to the credit of Didama and Jacobson (q. v) that so many well-trained men have been sent out into practice from the Syracuse University. He was remarkable for an unusual sweetness of disposition and approachableness. Syracuse University conferred on him the degree of LL. D. June 9, 1915.

He married Pauline Rosenburg of Rochester, N. Y., in 1881, beginning a most happy domestic life which was blessed by one son.

Among the subjects of his writings are: "Conditions Lessening Cell Resistance and Favoring Infection, Especially Consumption"; "Tubercular Meningitis in Children"; "Newer Methods of Examining the Stomach"; "Erythromelalgia with Raynaud's Disease"; "Expert Testimony"; "Cardiac Asthenia"; "Spleno-myelogenous Leukemia"; "Cardiac Toxemia in Pneumonia"; "Vascular Crisis"; "Hypertension"; "Uterine Growths"; and "Goitre."

His health began to break down under the incessant stress of work several years before death, when he began to seek recuperation in change of scene, but not by seeking the needed rest. He worked up to the end, and during the last two years was writing his "opus magnum," "Prognosis of Internal Diseases" for "Monographic Medicine," D. Appleton & Co., a volume of twelve hundred pages, a complete treatise on internal medicine with special reference to prognosis.

Dr. Elsner died of cardio-vascular disease, at Syracuse, February 17, 1916.

FREDERICK W. SEARS.

ELWELL, John J. (1820-1900), medico-legal expert and lawyer of Ohio, one of the ripest scholars and most courtly gentleman who ever graced the medical profession, was born

near Warren, Ohio, June 22, 1820. His youth was spent on a farm, his early education acquired at the public schools of Warren and at the Western Reserve University, his medical degree from the Cleveland Medical College. For some years he practiced medicine, then turned his attention to law, being admitted to the bar in 1854, and entering at once into legal practice. He soon became professor of medical jurisprudence in the Ohio State and Union Law College and in the medical department of Western Reserve University. In 1853 and 1854 he was a member of the Ohio Legislature from Ashtabula County. In 1857 he established the "Western Law Monthly," and was for years both editor and publisher. In August, 1861, he entered the Union Army in the capacity of quartermaster and rose to the rank of brigadier general. At Port Royal he was stricken with yellow fever, and for a time recovery seemed doubtful. Owing largely to the careful nursing of Clara Barton, he at last got well, but with health so impaired that he was placed in command of the prison for Confederates at Elmira, New York. At the close of the War Dr. Elwell settled as a lawyer at Cleveland, Ohio, where he practiced until his death.

Dr. Elwell was a polished and copious writer. In addition to editorial work he wrote voluminously for other journals, both legal and medical. He was one of the contributors to and an editor of Bouvier's "Law Dictionary," and some of his articles in the "North American Review" attracted widespread attention. His "magnum opus," however, and the work on which his fame as a writer rests, was his "Malpractice, Medical Evidence, and Insanity." This not very large work (only 594 pages, even in the last edition) contained in compact form the law so clearly and thoroughly stated that the volume at once became a leading authority not only in America but also in Canada and Great Britain, going through four editions. It did not profess to cover the whole of the field, but the portion with which it did concern itself had not at that time been cultivated by any other writer with equal assiduity and success.

Gen. Elwell was six feet tall and in middle life of substantial build. His complexion was light, his cheeks ruddy till sickness made them sallow. His hair in early life was abundant and of a rich brown, worn rather long; his eyes gray, very gentle and kindly; his manner quick, earnest and impulsive. He was found of children.

He married Nancy Chittenden, by whom he had one son and three daughters, but neither the wife nor any child survived him. On the death of his wife he brought the three children of his younger brother (who had also lost his wife) to his house and adopted them. To these he later left his entire fortune.

The general, though he lived to be almost eighty, never wholly recovered from the effects of the yellow fever. The day before his death he wrote to his life-long friend, Capt. Levi T. Scofield, of Cleveland, this very simple message: "Captain, come and see me." The friend complied at once. The general, though sick, rose as his old friend entered and placed before the fireplace a rocker. Then he said, "Captain, I am going to die to-night, but please do not tell General Barnett or Major Kendall of my condition. It would pain them greatly to see me suffering so." That night he rose again to do some simple favor for two young men, strangers, who had not known of his condition. Three hours later (March 13, 1909) he was dead.

THOMAS HALL SHASTID.

EMERSON, Gouverneur (1795-1874), traveller, agriculturist and doctor, eldest of the seven children of Jonathan and Ann Beel Emerson, was born August 4, 1795, near Dover, Kent County, Delaware. His grandparents having been received into the membership of the Duck Creek Meeting of the Society of Friends, Gouverneur was brought up in their simple faith. Through his mother's ambition he began to study medicine when he was sixteen, under one of her cousins, Dr. James Sykes, a surgeon of some note in Dover and one time governor of the state of Delaware. Afterwards he attended medical lectures in Philadelphia. The University of Pennsylvania granted him his M. D. in March, 1816. In that year, owing to poor health, he moved to and practiced near Montrose, Pennsylvania, but after two years accepted an appointment as surgeon on a merchant ship bound for China. His journal gives detailed account of the voyage and a dramatic account of being held up and robbed by Spanish pirates on the return voyage. When Dr. Emerson returned to America he settled in Philadelphia where a yellow fever epidemic gave him an opportunity for usefulness which he used so well that he was appointed attending physician to the City Dis-

pensary. The Board of Health being without authority to deal with smallpox as it did with other contagious diseases, Dr. Emerson turned his attention, when on the Board of Health, to necessary legislation concerning checking the disease. Statistics relative to smallpox are to be found in his article, "Medical and Vital Statistics," published in "The American Journal of the Medical Sciences" for November, 1827, 1831, and July, 1848.

Dr. Emerson made some contributions to the improvement of the agriculture of his native place, editing for the United States, Cuthbert W. Johnson's "Farmers' and Planters' Encyclopaedia of Rural Life." His interest in agriculture increased until he was entirely occupied with its demands to the exclusion of medicine. He definitely gave up his large practice in 1857 and occupied himself with questions of political economy and social science for the remaining years of his life. He published a translation of Le Play's treatise on the Organization of Labor.

He died suddenly July 2, 1874.

MARGARET K. KELLY.

EMLEN, Samuel (1789-1828), of Philadelphia, was born in Chester County, Pa., March 6, 1789, and belonged to one of the oldest families of Friends. His early education was solid, and in 1808 he began the study of medicine in Philadelphia as a house-pupil of Dr. Parrish (q. v.) remaining with him for four years, during which time he attended lectures by Rush, Wistar, Barton, Physick, James and Coxe at the University of Pennsylvania, receiving his medical degree in 1812; the subject of his thesis being "Mania à Potu."

In June, 1812, he sailed from New York for England, reaching London in July, where he heard lectures and attended hospital practice. The declaration of war by the United States against Great Britain did not interfere with his studies, and he took advantage of the detention to travel through England, Ireland, and Scotland; fourteen months later he went to Paris, reaching that city about the time of Napoleon's return from Leipzig. From Paris he went to Holland and after being abroad two and a half years, came home in the corvette "John Adams," as the bearer of despatches for the Government. Association with eminent physicians and others had given him a wider knowledge, and moving in the elegant society to which he had access, gave to his manners an "urbane cast which is far more estimable and trustworthy than the false and heartless elegance of more fashionable intercourse. They were marked by the gentleness, self-possession, and confidence which belong to the gentleman." However, he retained the gravity of his bearing and the "serious and sententious style of his conversation." Soon after his arrival he began to practice medicine and was elected a physician of the Philadelphia Dispensary. His increasing occupations made him resign in 1819, and soon after he was elected one of the managers; at the death of Dr. Griffitts (q. v.) Emlen became secretary to the Dispensary. In 1820 Emlen was secretary to the Board of Health and when yellow fever prevailed along the water front of Philadelphia he made observations preserved in his valuable paper on yellow fever. From 1821 to 1823 he was co-editor of the "Journal of Foreign Medical Science and Literature;" was a member of the board of the Guardians of the Poor, and physician to the Magdalen Asylum, the Orphan Asylum and the Friends' Asylum for the Insane. In 1825, he was elected one of the physicians to the Pennsylvania Hospital, to which office he was annually reelected; also he succeeded Dr. Griffitts as secretary to the College of Physicians.

Emlen acquired large statistical knowledge on the vice of drunkenness, and was active in the organization of the Pennsylvania Society for Discouraging the use of Ardent Spirits.

In 1819 he married Beulah Valentine, who, also, was a Friend.

He died of remittent fever, April 17, 1828.

HOWARD A. KELLY.

EMMET, John Patten (1797-1842). This scientist was born in Dublin, Ireland, April 8, 1797, the second son of Thomas Addis Emmet, one of the leaders of the United Irishmen, and Jane, daughter of the Rev. John Patten, a Presbyterian clergyman of Clonmel. He was also nephew of the great Irish orator Robert Emmet. His parents emigrated to New York when he was a child, and he was educated in Newburg, New York, and later entered the Military Academy at West Point. He was prevented from graduating by his delicate health and spent a year abroad, chiefly in Italy, devoting himself to the study of languages and art. On his return to New York, he began to study medicine in the College of Physicians and Surgeons, paying special attention to chemistry, and, despite ill health, graduated in 1822, defending an inaugural thesis on "The Chem-

istry of Animated Matter," a treatise of one hundred and twenty-five octavo pages. Immediately after this he settled in Charleston, South Carolina.

While a cadet at West Point he was appointed, on account of his great proficiency, acting assistant professor of mathematics, also while studying medicine, assistant to the professor of chemistry, Dr. William J. McNeven, (q. v.). In 1825 he was offered the Chair of natural history, as it was then termed, comprehending zoology, botany, mineralogy, chemistry and geology, in the University of Virginia, which he accepted. In 1827 his chair was changed to that of chemistry and materia medica, and this he filled until his health gave way in 1842. Before his marriage he filled his residence with pets, accumulating in one room a number of live snakes and other reptiles, and a large white owl and a brown bear had the liberty of the house and grounds. These were banished in the house-cleaning made by his mother, preparatory to his marriage. In 1834 he purchased a tract of land adjoining the University grounds, built a house, calling the place Morea, and here passed his time in the fullest enjoyment of giving play to the exercise of his ingenuity, chiefly in the line of horticulture. He planted and experimented with flowers and fruits in great variety; gave the neighborhood its noted stock of apples and peaches; established the cultivation of the grape and the making of wine and brandy. He grew hedges of the "morus multicaulis" and raised silk-worms, and after several years succeeded in making sewing silk of the best quality. Discovering on his place a vein of fine kaolin, he used this earth in making pottery and porcelain vessels, devising the necessary methods for doing so, and also made from it a fine hone and a variety of water-proof cements.

He married, in 1827, Mary B. F. Tucker, of Bermuda, who was then on a visit to her uncle, Mr. George Tucker, a colleague in the faculty. Thomas Addis (q. v.) one of Emmet's sons, became the noted gynecologist of New York, who died March 1, 1919, at the age of ninety.

For ten years after 1830 he was a frequent contributor on various scientific subjects to "Silliman's Journal." He also wrote often for the different literary publications, including the "Virginia Literary Museum," then edited and published at the University of Virginia. Emmet was something of a sculptor and executed an excellent bust of his father.

In January, 1842, the condition of Dr. Emmet's health necessitated a trip to Florida, where in the milder climate he so improved that in May he with his wife were able to take passage on a vessel sailing for New York. This vessel was dismasted in a storm off Cape Hatteras and drifted for thirty-eight days before she was picked up and taken into New York. The privation and exposure of the voyage so greatly reduced his strength that he died in New York, August 15, 1842.

A portrait done in July, 1842, just before his death, was in the possession of his son, Dr. T. A. Emmet, of New York.

ROBERT M. SLAUGHTER.

EMMET, Thomas Addis, (1828-1919), of New York, one of the great founders of modern gynecology, historian and Irish patriot, was born at the University of Virginia at Charlottesville, May 29, 1828, the son of John Patten Emmet, (q. v.) who filled the chair of natural history, and later that of chemistry, and materia medica. His grandfather was Thomas Addis Emmet, the Irish patriot (b. Ireland 1764, d. New York 1827), who studied medicine in Edinburgh, and later law in London, and attained distinction at the bar in New York City. For his activity as president, in the interests of the United Irishmen, he was put in jail in 1798 for two years and a half. In New York he was attorney general of the State in 1812. Thomas Addis, was the fourth of that name in the family; his mother was Mary Boyd Tucker from Bermuda, originally from Kent, England. He had an inquisitive mind but rebelled against discipline and often played truant to roam the fields with his gun. Visits to an uncle in New York led to attendance at a private school at Flushing, Long Island. After his father's early death he entered his uncle's counting house in New York, but soon left and went to the University of Virginia, which also proved uncongenial to the undisciplined boy. A sudden impulse took him to Robley Dunglison, (q. v.) a friend of his father at the Jefferson Medical College in Philadelphia, where the very first lecture by J. K. Mitchell, (q. v.) another paternal friend, settled all doubts; "From that hour I felt my life's work laid out for me". S. Weir Mitchell (q. v.) was a fellow student. Emmet received his diploma from Jefferson in 1850 and returned to New

York to be a resident physician at the Emigrant Refuge Hospital on Ward's Island, just completed, where he stayed three years, and enjoyed an enormous general practice, thus rounding out the rudimentary medical education of the day. He had typhus twice, and made fully 1000 post mortem examinations. He also learned to compound prescriptions. He was an expert mechanic and built a 19 foot sail boat. On the expiration of his term he was made visiting physician to the hospital, and secretary to the Board, at a salary of four dollars a day, on which, with some returns in the way of private practice, (25 cents a visit cash) he married (1854) Catherine Rebecca Duncan of Montgomery, Alabama, by whom he had six children, one of whom, John Duncan, studied medicine at the College of Physicians and Surgeons, New York, graduated in 1882, and was the editor of the "American Gynecological and Obstetrical Journal" during its brief career.

In 1855, on losing his position through politics, Emmet at the same time (in May) met J. Marion Sims (q. v.). This was the great turning point in his career. Thus Emmet again found himself, and surely, on the other hand, never was man more fortunate than Sims, whose restless genius brooked no restraints of routine or custom, being temperamentally unfitted for the daily duties of a large hospital service. Emmet, like Sims, had genius, but it was the genius of the patient persistence of the student with an analytical mind,—the tortoise and the hare were thus mated to good purpose, the Emigrant Hospital having supplied the basic training in breadth of experience, calm judgment and painstaking details which the quondam, restless boy so urgently needed; "During our joint service at the Woman's Hospital my relation with Dr. Sims was as close as that of a son." He was assistant surgeon to Sims from 1855 to 1861, when Sims resigned, and then for ten years he carried alone the responsibility of the work and secured funds for the institution, until 1872. He remained as visiting surgeon until 1902, a continuous service of nearly forty-seven years. It must be remembered that the Woman's Hospital, opened primarily for vesico-vaginal fistulas alone, was the first institution of its kind in the world. Sims, an errant genius, came and went, and was in Europe much of the time, but Emmet was always there operating, recording, analyzing and demonstrating to crowds of postgraduates. Burning questions of that preantiseptic era were dilatation of the cervix, lacerations of the cervix ("Lacerations of the cervix a frequent and unrecognized cause of disease," 1874) and the repair of the ruptured perineum, and, above all, vesico-vaginal fistulas. These knotty problems Sims and Emmet settled in a manner almost final. Abdominal conditions clamored for attention, but the territory was still too dangerous for free invasion, and so clinical experiences were not available, and the errors of predecessors were perpetuated and "cellulitis" ruled the pathology. Whatever Emmet accomplished in life was the outcome of his wonderful Woman's Hospital work, and Emmet in a measure grew out of Sims as we have grown out of Emmet. His greatest achievements also lay in the field of vesico-vaginal fistula, and consisted in the painstaking preparation of those cases in which the edges of the fistules could not be drawn together—a class hitherto inoperable. By topical applications, use of his "water medicine", hot douches and assiduous attention, he was able to bring almost all of this large group into the operable class, and thus brought back to the Hospital many who had gone home hopeless. On some patients he operated many times before success was attained. The annals of surgical literature present no more inspiring record than this achievement. The greatest work on fistules which had as yet appeared was his "Vesico-vaginal Fistula" (1868), summarizing an experience of 600 cases of which but three (!) were discharged as incurable. Like Sims, he devised numerous instruments (especially his curved scissors) to overcome the difficulties of his novel undertakings.

In his fistula operations at the Woman's Hospital he sat by a simple table in a small room with the patient in the semi-prone posture, with nurse Margaret Brennan, a nation-wide celebrity, holding the Sims' speculum, sometimes for several hours, with visitors crowded about him and trying now and then to catch a glimpse of what was going on. The early operations were without an anesthetic. While operating, he was testy and complained much of his awkward assistants, as he advanced slowly but with deliberation and painstaking accuracy towards the goal—the closure of a large rent in the vesical septum, first denuding the edges with scissors, his own innovation, and continually sponging away the blood, and then leading the silver wire sutures through with a needle and silk thread carrier, shouldering and adjusting the wires

with wonderful skill. No more cosmopolitan crowds have ever gathered in a surgical amphitheatre than those who secured the honor of an admission among the number, limited either by the space, or by the orders of the Board of Directors (a sore point with the staff). He drew on the blackboard with great skill, talked as he proceeded, and occasionally a peep over his shoulder revealed his strategy as the operation advanced to its completion. In the consciousness of the visitors there was the sense of the dawn of a new era in surgery and the anticipation of the relief coming to an army of sufferers, and his criticisms of the instruments and querulousness made no bad impression, for all felt that they were in the presence of a great leader.

While wrestling with fistula problems he learned to treat infected and infiltrated cervices, to reduce by treatments and douching and then to suture them (trachelorraphy). Thus was clarified the discreditable gynecological maze of ulcerations and erosions of the cervix. In the course of all this work, the prolonged, repeated hot water douches became a potent factor in giving relief and in promoting the absorption of exudates, an adjunct of great value. Emmet's perineal operation included the lower vagina and was a great advance, the best and the most rational procedure as yet devised, showing how to pull into place by proper suturing the sundered structures of the pelvic floor. A contribution was his buttonhole operation for intractable cystitis, which was an offcast of general medicine and a stepchild of gynecology.

Emmet's first article in the "American Journal of The Medical Sciences" for 1856 on "Oedema of the Glottis from Typhus Fever" is a remarkable piece of fine scientific work, with a report of successful tracheotomies. The "Principles and Practice of Gynecology" (1879) was the first thoroughly scientific, comprehensive book on this subject in English, being the condensed record of his large personal experiences. In speaking of its statistical tables, he rightly claims that "their parallel is not to be found in the whole range of gynecological literature . . . . for two continuous years they kept me occupied in hours not required for professional work, and to the minutest detail they have been prepared by myself, for I felt their value rested on their accuracy"; in this limited field he was a great statistician, comparable to his cotemporary Robert P. Harris (q. v.). His papers have been computed to number about seventy.

Emmet found recreation in the study of early American history and in constructing a unique set of large folios illustrating the period of the Declaration of Independence; he secured many rare documents, and was able to collect, with the keen scent of a born hunter, duplicates of the signatures of the signers. This collection, priceless in value, and his manuscripts, prints and books, was secured by the New York Public Library for the sum of $150,000 by Mr. J. S. Kennedy, June 26, 1896. His zest for historical material and his collector's zeal, during the Civil War, nearly got him into trouble, as he told the writer. Realizing that the manifestoes and posters and dodgers were vivid valuable records, which rarely survived, he was in the habit of going out at night with water and sponge to wet the coveted paper on the board, or to tread on the heels of the bill-poster to abstract them. The risk lay in the fact that he was known as an active Southern sympathizer, and his motives might be hard to explain.

The blood of the Irish Emmets coursed hot in his veins, he was president of the Irish National Federation for gaining home rule by constitutional means for eight years, and wrote and made addresses. He was an authority on Irish history, writing "Irish Emigration During the 17th and 18th Centuries," Trans. Am.-Irish Hist. Soc. (1899); he wrote "The Emmet Family, with some Incidents relating to Irish History etc." pp. 411, with over 100 portraits, and "Ireland under English Rule, a Plea for the Plaintiff", N. Y. 1903, 2 vols.; and in his 87th year published the "Memoirs of Thomas Addis Emmet and Robert Emmet" in two volumes. "Incidents of my Life" (1911) is a charming volume of reminiscences, replete with valuable historical data, and with much about Ireland. When the trustees of the Woman's Hospital would check Emmet's activities, in limiting the beds devoted to cancer cases or otherwise, Emmet went about with his resignation in his pocket for long periods of time.

His son, John Duncan, tried to follow in his footsteps, but the strain was evidently too great. It was a bitter disappointment to his father when the trustees wisely refused to install him to perpetuate paternal practices, Emmet not realizing with all his experience and knowledge of man not his own flesh and blood that each generation has its own fresh problems to solve.

Though a later day has changed about all

that Sims and Emmet held sacred in surgery, and has silenced their shibboleths, yet in the history of gynecology, they abide serene like Castor and Pollux in the starry firmament of the midnight sky, well-known and welcome beacon lights destined to shine long after thousands of later lesser luminaries have paled into oblivion. Emmet was a member of many scientific societies at home and abroad and was a founder of the American Gynecological Society, and its President in 1882.

Once, in a talk with the writer, about his faith, he declared that it was the dogmatic consistency of the Roman Catholic faith that appealed to him, and that he had joined that communion after careful investigation and there had found all he craved; this united him wholly with his beloved wife. He was made Knight Commander of the Order of St. Gregory by Pope Pius ix, and was a recipient of the Laetare Medal from the University of Notre Dame. He received the degree of LL. D. from the Jefferson Medical College.

Late in life Emmet turned over his valuable Madison Avenue properties (at number 93) to erect a skyscraper, stipulating that he have a suite for life in the top story, and in that lofty perch he lived, separated but not completely from the city life and once more in sight of the North and East rivers which he had looked upon with unobstructed vision in 1853 when calling upon Sims, who lived in the same neighborhood, at that time well out in the country. In his apartment he was a recluse in the midst of millions, cut off from visitors by deafness, bowed with age, and spending his time in constructive literary work as he approached his end. He died March 1, 1919, when nearing his ninety-first birthday.

Emmet was a man of medium height with a slight stoop which increased with age; he was of rather slight build with a round head and a keen grey eye. His voice was pleasant but a bit rasping when annoyed.

An "In Memoriam," written by J. Riddle Goffe, M. D., was published in the "American Journal of Obstetrics" for April 1919, with a portrait. Dr. Emmet during the course of his life had many representations of himself made. Every house officer at the Woman's was presented on graduation with a good sized steel engraving of Emmet in his prime. There is a portrait in George M. Gould's History of Jefferson Medical College (1904), as a frontispiece in "Incidents of My Life", (1911), one in the Album of Fellows of the American Gynecological Society (1917) and several pictures in the brochure which appeared following the dinner given him on his ninetieth birthday.

HOWARD A. KELLY.

ENGELMANN, George (1809-1884), of St. Louis, best known as a botanist, was born in Germany February 2, 1809, in the old and wealthy city of Frankfort-on-the-Main, and died of Bright's disease in St. Louis on February 11, 1884. His father was a burgomaster in Frankfort, and was able to give his son a university education. He was the eldest of thirteen children, and left only one son, George J. (q. v.), a gynecologist of St. Louis. He entered as a pupil at the University of Heidelberg, where he met and formed an intimate association with Louis Agassiz (q. v.) and Alexander Braun and graduated as doctor of medicine at Würzburg, after attending in Berlin the lectures of the genial Prof. Schönlein and others. His inaugural dissertation created quite a sensation among the acquaintances of the young scientist. It was called "De Antholysi Prodromus" and treated of morphological monstrosities of plants and their metamorphoses. It was written in elegant Latin, and showed evidence of deep insight into the nature and cause of the deviations from the ordinary conformation of plants. Englemann, however, did not deduct from his researches the shallow hypothese attempted since by Darwin. His work was purely scientific, differing in this from Darwin's conceptions, which, as Virchow proved, are not founded upon a scientific basis. This essay was soon followed by a monograph, also in Latin, on the habits of a little creeper he found on a hazel bush. It was printed in Germany, and delighted scientists on account of the minuteness and perfections of the observations.

Before coming to America he spent a year in Paris to enlarge his knowledge of surgery, medicine and obstetrics. He remained there in 1832, although cholera was raging. Dissatisfied with the political situation of Germany, and attracted by the glowing descriptions which Dresden had published of Western America, at the end of 1832 he embarked at Bremen for Baltimore, and after a long and tedious journey arrived near Belleville, Illinois, at the home of his uncle, who had preceded him. He soon began his explorations of the country, visiting Southern Illinois, Missouri, Arkansas and Louisiana, paying particular attention to his favorite studies and discovering many plants which he after-

wards described. In one of his excursions through the wilds of Arkansas he stayed one night at a farmer's rude cabin, and while cleaning the large knife which he used to dig out plants and roots, the farmer watched him closely, and thinking that Englemann had some murderous design, stepped forward and said, "Look ye here, stranger, let us swap knives," and at the same time brandishing a vicious looking "Arkansas toothpick." Englemann was at some trouble to convince this backwoodsman that he used his knife only to dig out roots. After making several excursions in the above states, he concluded in 1835 to settle down and begin practice at St. Louis, then only a small frontier town of ten thousand inhabitants. In order to defray the expenses of furnishing his modest office, then on Chestnut and Second Streets, he was compelled to dispose of his guns and pistols, but did not sell his favorite horse, so necessary in those primitive times.

Practice from the first was very successful, especially among the numerous French families, who became his warmest friends. Even during the last years of his life, and with failing health, he would not refuse his professional service to any one, even at night. Owing to his obstetric skill he became the most popular accoucheur of those days, and was the first man who successfully used the forceps, in spite of the opposition of the members of the profession. In about four years he had accumulated sufficient funds to enable him to leave his patients in the care of his trusted friend, Dr. F. A. Wislizenus (q. v.), and to return to Germany for the purpose of marrying Dorothea Horstmann, of Kreuznach, to whom he had been engaged ten years. In June, 1840, he brought his young wife to his new home in St. Louis.

After thorough observations he published in America his masterpiece, "The Monography of North American Cuscutinæ," this production being republished by botanical periodicals in England and Germany, also in America in 1842 by the "American Journal of Science." In 1856 he took another trip to Europe where he remained two years to superintend the engraving of the plates for his great work on the "Cactaceæ of the Boundary."

In 1868 he repeated his European tour, accompanied by his wife and his only son, George, whom they left abroad to complete his studies. In 1879 his wife, the constant companion of his journeyings, died of nervous exhaustion. Englemann was inconsolable, and in spite of attempted consolations by his friends, of whom I had the honor to be one, and occasional visits to the Rocky Mountains and Colorado, he gradually succumbed to the intensity of his sorrow.

A list of Englemann's botanical papers has been published by Prof. C. S. Sargent in Coulter's "Botanical Gazette" for May, 1884, which enumerated one hundred and twelve entries, and also counts thirty-eight scientific societies of which Dr. Engelmann was duly elected a member.

His publications on the North American vines should be particularly mentioned, for they have become very important to the grape-growers of this country as well as of Europe.

In 1856 he organized the St. Louis Academy of Science, of which he was the first president. The Shaw Botanical Garden owes much of its beauties to his original ideas and plans.

He was a man of medium stature, well-proportioned, with a square German head and a countenance beaming with intelligence and kindness.

LOUIS C. BOISLINIÈRE.

ENGELMANN, George Julius (1847-1903), A. M., M. D., master in obstetrics, Vienna, St. Louis gynecologist, was born in St. Louis, Missouri, July 2, 1847; only son of George Engelmann (q. v.), who was born in Frankfor-on-Main, in 1809, and died in St. Louis in 1884. His mother was Dorothea Horstmann, who was born at Bacharach-on-the-Rhine in 1804, and died in St. Louis in 1879. His early education was guided by his mother until 1856, when he was taken by his parents to Europe to study in the great centers, which his father sought in the interest of botanic research. He returned to St. Louis in 1858, and entered Washington University, where he graduated with the valedictory in 1867, then he went for medical training to the University of Berlin, 1867-69, and to Tübingen under von Niemeyer and von Bruns, 1869-70. A brief interval as volunteer surgeon under the Red Cross, in the Franco-Prussian War, followed; then further studies in Berlin, under von Langenbeck, Virchow, Traube, Frerichs, and Martin. He was graduated in the spring of 1871, receiving the first medical diploma under the new German Empire. The years 1871-72 were spent in Vienna, mainly in the gynecologic wards of Spaeth and Braun, and in the pathologic laboratory of Rokitanski. He there received the degree of master in obstetrics, and engaged in his first important investigation on the "Mucous Membrane of the Uterus"

with Dr. Kundrat, later professor of pathologic anatomy. After a winter in the hospitals of Paris and London, Dr. Engelmann returned to St. Louis in the spring of 1873 to practice in his native city, taking the position of lecturer on pathologic anatomy in the St. Louis Medical College. He entered with zest upon his work, took an active part in the medical life of the city, and organized the St. Louis School for Midwives and the Maternity Hospital in 1874. After recovery from a nearly fatal sepsis acquired in December, 1878, he gave up a laborious general practice and devoted himself entirely to diseases of women, in which he had been always most interested.

Among many of his papers may be mentioned: "The Health of the American Girl" Presidential Address (Southern Surgical and Gynecological Society, 1890); "The Menstrual Function as Influenced by Modern Methods of Training, Mental and Physical," Presidental Address, American Gynecological Society, 1900; "The Age of First Menstruation on the North American Continent" (Transactions of the American Gynecological Society, 1901; "The Age of First Menstruation at Pole and Equator" ("American Gynecology," March, 1903); "The Cause of Race Decline is not Education" ("Popular Science Monthly," June, 1903).

Archeologic research in the interest of the St. Louis Academy of Science, in the swamplands of southeast Missouri, added much of interest to the society's museum, and formed the basis for his own private collection, one of the most important in the West, to which exchanges with the museums of Washington, Berlin, and Vienna added greatly. On removing to Boston in 1895, the larger part of his collection of Missouri flints and pottery from the mounds, was given to the Peabody Museum of Archeology in Cambridge, Mass.

Dr. Englemann was professor of diseases of women and operative midwifery, Missouri Medical College and St. Louis Post-graduate School of Medicine; president St. Louis Obstetrical and Gynecological Society, 1887-89; president Southern Surgical and Gynecological Society, 1890, president American Gynecological Society, 1900; Fellow, London Obstetrical Society, British Gynecological Society, Obstetrical Society of Boston; member of the Massachusetts Medical Society and Medical Society of the State of New York.

He married, in 1879, Emily Engelmann, who died after a long illness in 1890, and in 1893 he married Mrs. Loula Clark, removing to Boston, Massachusetts, in 1895, where he died November 16, 1903.

JOSEPH TABOR JOHNSON.

ENGLISH, Thomas Dunn (1819-1902), remembered abroad as well as in America as the author of "Ben Bolt," was a physician and graduate of the University of Pennsylvania. He wrote the "M. D." on his title-page, and practiced medicine, although literature claimed most of his time. He was born in Philadelphia, Pennsylvania, June 29, 1819, son of Robert English; his mother, before her marriage, was Miss Kempstone. He was descended from Joseph English, who became a Quaker through William Penn, and with his brother, Henry, left Ireland for Gloucestershire, England, was admitted to the Society of Friends, and in 1682 came to America. He had grants of land in New Jersey and in Pennsylvania, and his descendants became identified with this country.

Thomas was educated at Wilson's Academy, Philadelphia, and the Friend's Academy, Burlington, New Jersey, and with private tutors; in 1836 he entered the University of Pennsylvania to study medicine, and was graduated in 1839 with a thesis on "Phrenology." He was attracted to journalism, and at the age of sixteen had written for Philadelphia journals, and continued to write fluently and voluminously, and one day found himself famous because of his touching lines, "Ben Bolt." N. P. Willis had asked him to write a sea song to be published in Willis's "New York Mirror"; but English, instead, sent him the poem, beginning:

'Don't you remember sweet Alice, Ben Bolt,
Sweet Alice, whose hair was so brown,
Who wept with delight when you gave her
a smile,
And trembled with fear at your frown?"

He wrote to Willis, "If you don't like this stuff, burn it, and I shall send you something when I am more in the vein," but Willis saw the appeal in the words, and the poem was printed, only the word "blushed" in the third line got printed as "wept." English sprang into fame wherever the language was spoken, the song was set to music, and was first sung in a Pittsburgh theatre to a German melody, when the audience went wild. It was dedicated to Charles Benjamin Bolt, a friend of English's, and the name "Ben Bolt" became known everywhere; it was given to a ship, to a steamboat, and to a racehorse. English

said: "The ship was wrecked, the steamboat blown up, and the horse turned out to be a 'plater,' and never won anything." The song met a second popularity when given prominence in Du Maurier's novel, "Trilby" (1894), when, again it was revived as the song of the hour. When Edgar Allan Poe wrote his article on the "literati" of New York, in "Godeys' Lady's Book" (1846), there was a "passage at arms" between Poe and English, said to be "the most exciting which had been witnessed since Cobbett's famous assault on Dr. Rush. (Oberlitzer.) Poe was severe, said English's grammar was bad, that he wrote "lay" for "lie" and needed "private instruction"; English attacked the character of his critic. Poe in a rejoinder called English "Thomas Dunn Brown"; Oberlitzer says that "English was indeed 'done' so 'brown' that he must have regretted ever having offered himself for a baking at the hands of such an artist in cookery."

English wrote plays, poems, and novels, always with a great rapidity; his play "The Mormons" is said to have been written in three days and nights, and he would dash off several poems at a time. Although so prolific a writer, literature was not his only profession. He added law to medicine, and was admitted to the bar in Philadelphia, in 1842; the same year he took a lively interest in politics, and advocated the annexation of Texas; in the presidential contest of 1844 he was sent on a confidential mission to secure Polk's election; in 1855 he opposed the Know-Nothing party; he served in the New Jersey Legislature in 1864-1865; and was elected representative to the United States Congress from New Jersey in 1890 and in 1892. He was one of the founders of the American Archeological and Numismatic Society, was vice-president of the Society of American Authors, and a member of the American-Irish Historical Society. At the sixteenth anniversary of his graduation from the University of Pennsylvania he addressed three alumni societies of the University, receiving a hearty welcome from each. William and Mary College gave him an LL. D. on July 4, 1876.

He wrote: "Walter Woolfe" (1842); "1844, or The Power of the S. F." (1847); "Poems" (1855); "Ambrose Fecit" (1869); "American Ballads" (1879); "The Boy's Book of Battle Lyrics" (1885); "Jacob Schuyler's Millions" (1886), besides many other works.

Dr. English married Annie Maxwell Meade, daughter of John Maxwell and widow of the Rev. S. R. Meade of Philadelphia. They had four children, Edgar, Arthur, Florence, and Alice. His wife died in 1899. He survived her three years, dying in Newark, N. J. April 1, 1902.

HOWARD A. KELLY.

ENTRIKIN, Franklin Wayne (1830-1897), Ohio surgeon, the son of Emmor and Susanna Bennett Entrikin, Quakers, was born at West Chester, Pennsylvania, July 27, 1830. His parents removed with him to New Lisbon, Ohio, in the fall of 1831, and settled on a farm in Hanover township and here he attended the country schools. They removed to a farm, two miles south of Salem, Ohio, in 1840, where he attended the Salem Quaker Academy, working on the farm during vacations. He studied anatomy, physiology, chemistry, and materia medica under Dr. John Harris, of Salem, and also learned practical dentistry. In the summer of 1848 he worked under Drs. Robertson and Kuhn, at Hanover, Ohio. In July, 1855, he removed to Findlay, attended lectures at the Medical College of Ohio and graduated in the spring of 1873.

During the first twenty years of his professional career, Dr. Entrikin accumulated an anatomical cabinet, the work of his own hands, to which was added by purchase, many of Azieus' best models in paper maché, and a large number of pathological specimens obtained in operations and postmortems. Dr. Entrikin had charge of the Green Springs Medical and Surgical Sanatorium, 1881-82. He returned to Findlay in 1883; was elected professor of diseases of women, Fort Wayne Medical College in 1882, and delivered lectures on gynecology there, during the winters of 1882, '83 and '84. In the summer of 1885 he was elected to the chair of gynecology, Toledo Medical College, and lectured there in 1885-86. Dr. Entrikin was a member of the Ohio State Medical Society and the Mississippi Valley Medical Association. He wrote the "Woman's Monitor," and contributed many articles on medical subjects, to be found in the "Lancet and Observer," "Toledo Medical Journal," and the "St. Louis Medical and Surgical Journal," also an article on "Tuberculosis" in the "St. Louis Medical and Surgical Journal," February, 1885, which attracted considerable attention.

The first tracheotomy in Hancock County, Ohio, was performed by Dr. Entrikin, in 1862, for the removal of a bean from the trachea of a little girl. On July 1, 1862, he united the severed tendo Achillis by means of a silver wire suture, performing the operation upon

George Franks, of Cass Township, Ohio, a perfect cure resulting. In November, 1875, he operated for ankylosis, correcting a bad deformity of the knee in a boy of fourteen, and exhibited the case before the Northwestern Ohio Medical Society, in May, 1876. He also was early to propose overextension of oblique fractures of long bones, to allow for the creeping incidental to use and muscular action, calling attention to it in an article read before the Northwestern Ohio Medical Society in May, 1876, and published in the "Cincinnati Lancet and Observer," in May of the same year.

Dr. Entrikin married, in October, 1852, Sarah Ann, daughter of Thomas and Sarah Leslie Lyon, of Deerfield, Ohio, and had three children: Leonidas, Emmor L, and Franklin B., who graduated at the Medical College of Ohio, and practiced with his father, who died at Findlay, May 13, 1897.

ERNST, Harold Clarence (1855-1922), Boston bacteriologist, was born at Cincinnati, Ohio, July 31, 1855, the son of Andrew Henry and Sarah Otis Ernst, and brother of Major General Oswald H. Ernst, U. S. A., retired, of Washington, D. C. and the late George A. O. Ernst, a prominent Boston Lawyer. His paternal grandfather came to this country from Germany during the wars with Napoleon. As the chief man of a small German village he had been ordered to levy a tax, or tribute, on the inhabitants, which he considered so unjust that he refused to obey and escaped with his family during the night to a seaport, whence he sailed for America. He regarded the Germans as cravens in their attitude to Napoleon and never allowed German to be spoken in his family, except to his wife, who had a very slight knowledge of English. This active, independent opposition to injustice seems to have been inherited by his grandson, Dr. Ernst, whose courage in facing obstacles and devotion to high principles were striking characteristics of his career.

Dr. Ernst was graduated from Harvard College in 1876 with the degree of A. B. and from Harvard Medical School in 1880 with his M. D. While in college he gained notoriety as pitcher on the base ball nine which made itself famous by being the first to use the curved pitched ball, the solving of this hitherto mystery being the outcome of a series of experiments made by him.

After receiving his medical degree and a year spent as house officer in the Rhode Island Hospital, he settled in Jamaica Plain, a part of Boston, his home until his death. While engaged in private practice and in the Out Patient Department of the Massachusetts General Hospital he became so impressed with the importance of the developments of bacteriology under the leadership of Pasteur, Lister and Koch that he entered the laboratory of Harvard Medical School in 1885 and from being an assistant, cooped-up in primitive and inadequate quarters, in ten years he had advanced through the various grades, becoming in 1895 full professor, with entire charge of the laboratory and the instruction of the classes in bacteriology. The six lectures that he gave in 1885 were the first lectures on bacteriology given in this country by a special teacher as a part of a medical course.

He was one of the early investigators of tuberculosis in cows and the contagiousness of their milk; all the tuberculin used by the city of Boston was made by him until the work was taken over by the State; the diphtheria antitoxin available in Boston came from his laboratory for a long time, the tests for strength and purity being worked out by him, in the face of much opposition. Another important service was his successful study of ultra-violet photo-micrography in the rapid diagnosis of rabies. In 1896 he wrote "Infectiousness of Milk" and two years later "Infection and Immunity," while "Animal Experimentation" appeared in 1902 and also "Modern Methods of Bacterial Immunity." He was sole editor of the "Journal of Medical Research" from 1896 until his death, and a founder of the Association of American Pathologists and Bacteriologists, of which he was secretary from 1902 to 1917, with the exception of the year of his presidency. These important services with close relations to the medical welfare of the State led to his being selected as the most fitting advocate to appear before committees of the legislature in behalf of high standards of medical education, better registration laws, the value of animal experimentation and vaccination, in which capacity he had to contend against great ignorance and prejudice. In connection with these public duties, in 1906 he was appointed a member of the new standing committee on medical education of the Massachusetts Medical Society, an important committee organized at the instance of the American Medical Association. Until 1919 he remained its efficient chairman, devoting much time to the duties of his office and always an undaunted champion of the highest standards.

At the dedication of the new buildings of the Harvard Medical School in 1906 he was a valued helper of Dr. H. P. Bowditch (q. v.) and Dr. J. C. Warren, the committee in charge, who considered themselves fortunate in having at their disposal the unusual executive ability of Dr. Ernst. For the occasion he edited a most admirable history of the school and an account of the dedication exercises. In the recent war he was placed at the head of the Northeastern Division in Laboratory Work, with the rank of major, in charge of all the contagious diseases. His strong, erect, commanding figure, together with his thick, grey moustache gave him a military look well in harmony with his major's uniform. He kept himself in good physical condition by taking as much out-of-door exercise as his laboratory work permitted; in fact, he was an expert golfer, a member of the match team of the Brookline Country Club. During his travels he procured a notable collection of sun dials from all parts of the world. This was shown at an exhibition in the rooms of the Massachusetts Historical Society, of which he was a member.

Dr. Ernst's summer home was at Manomet, near Plymouth, Mass. On his way thither he was taken suddenly ill on the steamer and carried to the Jordan Hospital in Plymouth, where a serious abdominal operation was found necessary; from this he was apparently convalescing, when a few days later, on September 7, 1922, he passed away, leaving a place hard to fill. He was survived by his wife, who was Ellen Lunt Frothingham of Boston; they had no children. His wife was a sister of Rev. Paul Revere Frothingham, Congressman L. A. Frothingham and Dr. Langdon Frothingham.

JOHN W. FARLOW.

ESKRIDGE, Jeremiah Thomas (1848-1902), neurologist and alienist of Philadelphia and Denver, the son of Jeremiah and Mary Marvel Eskridge, was born June 1, 1848, in Sussex County, Delaware. His family was founded in America by Judge George Eskridge, a native of Scotland, who came to America in 1660 as judge of the King's Bench in Virginia. Dr. Eskridge, when a boy, worked on a farm, attending school until fifteen, when he began teaching in the schools of his native county. With the money gained he entered at eighteen the Classical Institute at Laurel, Delaware. He entered the Jefferson Medical College, at Philadelphia, in 1872, and took his M. D. there in 1875.

Immediately after graduation, he practiced in Philadelphia, for a time acting as assistant demonstrator of anatomy in Jefferson Medical College, and physician to the Philadelphia Dispensary. In 1879 he was appointed lecturer on physical diagnosis at the Philadelphia School of Anatomy, and attending physician to St. Mary's Hospital. He was elected in 1880 attending physician to Jefferson Medical College Hospital; in 1882 neurologist to the Howard Hospital, and in 1883 post-graduate instructor in mental and nervous diseases in Jefferson Medical College.

Dr. Eskridge was president of the Philadelphia Northern Medical Society; a director of the Philadelphia County Medical Society; a member of the College of Physicians of Philadelphia; the American Neurological Association, and the New York Medico-Legal Society.

Dr. Eskridge's health broke down in 1883, and in 1884 he went west on account of tuberculosis of the lungs, and settled in Colorado Springs, where he spent four years; in 1888 he removed to Denver, where he again practiced. In 1889 he was appointed neurologist and alienist to the Arapahœ County and St. Luke's Hospitals, and the next year began giving a course of lectures on the diseases of the nervous system, in the University of Colorado. In 1892 he was appointed dean of the medical faculty of the same institution, and professor of nervous diseases and medical jurisprudence, but in 1897 he resigned, severing all connections with the college. In 1895 he was appointed commissioner of the State Insane Asylum, and from 1895 to 1898 was president of the board. His master mind was housed in a body all too frail to endure the work he had mapped out for himself. The systematic manner in which he studied cases, or applied his reasoning powers to abstruse problems of diagnosis, illustrated the whole life manner and method. The courts often desired his opinion, and sought it privately in many cases when attorneys had failed to put him on the witness stand. A close student of medical literature, and a prolific contributor to its most difficult branch, he yet found time, in spite of a busy life, to range the broader fields of general literature.

In 1876 Eskridge married Jane Grey, who was born in Ireland, but came to this country in childhood. They had no children.

Eskridge died in Denver, Colorado, January 15, 1902, his death being due to cerebral thrombosis. His writings numbered over sixty papers. A tolerably full list is in the Catalogue of the Surgeon-general's Library, Washington, D. C.

SAMUEL D. HOPKINS.

ETHERIDGE, James Henry (1844-1899), Chicago gynecologist, was born at St. Johnsville, New York, March 20, 1844, the son of Dr. Francis B. Etheridge, a Civil War surgeon of New England stock. James studied for one year at the medical department of the University of Michigan; two years at Rush, graduating in 1869. He practiced a year at Evanston, and then spent a year abroad, studying in the hospitals; on his return settling in Chicago in 1871.

He was on the staff of several Chicago hospitals for many years, for a long time holding the chair of therapeutics, materia medica, and medical jurisprudence in Rush Medical College. This chair he vacated in 1889 to take that of gynecology, succeeding Dr. William H. Byford (q. v.). In 1892 he was elected to the chair of obstetrics also, and was for some time professor of gynecology in the Chicago Polyclinic, practicing gynecology exclusively, after 1891. He was well known as a brillant operator. Though a constant contributor to medical journals, he never wrote a book. He was a prominent member of the American Gynecological Society.

He married, June 20, 1870, Harriet Elizabeth Powers, of Evanston, and had two daughters.

He died in Chicago, February 9, 1899, of fibrous myocarditis.

EUSTIS, William (1753-1825), army surgeon, of Massachusetts, was born in Cambridge, June 10, 1753, and took his bachelor of arts degree at Harvard, in 1772, with highest honors. He was a pupil in medicine, and favorite of Dr. Joseph Warren (q. v.) who thought highly of his ability, and had him appointed surgeon in the Massachusetts artillery. In the Battle of Bunker Hill he was near his heroic friend and teacher when the latter was struck down by a fatal bullet. Eustis was soon made a hospital surgeon, and went with Washington's army, to New York. He had the reputation of being a "humane, faithful and indefatigable officer." In 1786 he served in the campaign against the Indians, and later in Shay's rebellion. He then withdrew from the army. Subsequently he was successively a member of Congress, secretary of war, minister to Holland, and governor of Massachusetts, and died, while holding the last office, in 1825 in the fine old mansion in Roxbury, called Shirley Place. Harvard conferred on him the degree of A. M. in 1784, and LL. D. in 1823. While traveling about the country inspecting the fortifications, as secretary of war, Dr. Eustis was often called in consultation in difficult medical cases, as instanced in the life of Dr. Lyman Spalding, by his grandson, Dr. J. A. Spalding (1916), page 152, where a consultation over a case of floating cartilages in the knee joint, is mentioned.

EVANS, John (1814-1897), founder of Northwestern University, Chicago, and pioneer organizer of Colorado, was born of Quaker parents, near Waynesville, Ohio, March 9, 1814, a son of David and Rachael Evans, the oldest of thirteen children. David had a farm of 640 acres and a general store, which he planned John should carry on; but John wanted to become a doctor, so with a cousin, and probably with his mother's secret approval, he went to Philadelphia, to Clermont Academy, and began to study medicine there, but graduated at the medical department of Cincinnati College, March 3, 1838. He received his diploma from his college, and from his father, a pony, with saddle and bridle, and ten dollars; thus equipped he rode off to Indiana, and into Illinois to hunt a practice. After a year he settled at Attica, Indiana, where he became interested in the insane, and for nearly ten years he labored to secure Indiana's first insane hospital. In 1844 he was made superintendent, and designed and directed the erection of the buildings. In 1845 he became professor of obstetrics in Rush Medical College, and from 1845 to 1847 lectured while still maintaining his oversight of the unfinished hospital at Indianapolis. In 1848 he settled in Chicago, where he was editor of the "Illinois and Indiana Medical Journal," the first in Chicago (1846-1852). He wrote many editorials, covering a wide range, including papers on obstetrics. He invented an obstetrical extractor, which he considered superior to forceps. He was an active coadjutor in the early days of the American Medical Association; was one of the organizers of the Chicago Medical Society (1850), and of the Illinois State Medical Society (1850). He was a progressive citizen, and as a member of the city council, prepared an

ordinance, providing for a superintendent of schools; he also inaugurated the first city high school, and the present educational system.

From 1853 to 1855 he led the way in founding the Northwestern University, and was the first president of the trustees, a position held until death. He induced the legislature to pass the bill, relieving the university from taxation, and granting valuable lands. He, himself, gave it as much as $100,000, and his name was attached to the site called Evanston. He was an organizer of the Hospital of the Lakes, later named Mercy Hospital. When he was well established, his father relented and advanced him money for investments in Chicago real estate, which were judiciously made, laying the foundation of a fortune. Through Bishop Simpson, he became an ardent Methodist, and was one of the projectors of the Methodist Book Concern, and of the "Northwestern Christian Advocate," and a builder of the Methodist Church Block, one of Chicago's first office buildings. His greatest financial effort was the raising of the funds to build the Chicago and Fort Wayne Railroad, now a part of the Pennsylvania system, and to Dr. Evans this system owes its terminal in the heart of the city. His activities overflowed in so many other directions that after eleven years in the Rush Medical College, and in practice, he resigned both. In the early sixties he was active in national politics, and was a member of the convention which nominated Lincoln. Lincoln made Evans Territorial Governor of Colorado (1862). He took an active part in attempting to have Colorado admitted to the Union (1864-5), and when Andrew Johnson vetoed the "Colorado Bill" he went out of politics.

A record of his thirty-five years in Colorado would fill a volume. Colorado was then a wilderness, but he lived to see it the leading state of the Rocky Mountain country. He built the railroad from Cheyenne to Denver. In his time new mines were opened, colonies founded, and towns started. He was interested in installing cable cars in Denver, later supplanted by electricity. A business block in Denver, and the Evans School perpetuate his memory. A station on the Denver Pacific also has his name. A massive peak of the Rockies, the tallest in the state, was named for him, by act of the Colorado Legislature. He had a large part in creating Colorado Seminary, the pioneer school of higher learning in the territory, which became the University of Denver. His gifts in cash exceeded $150,000, besides donations of lands. He continued to be president of the board of trustees up to his death. He also did much for the Colorado Women's College.

On December 11, 1838, Dr. Evans was married to Hannah, daughter of Joseph and Lydia Canby of Ohio, who died in Chicago, October 9, 1850. All of their four children died in childhood, except Josephine, who became the wife of Hon. Samuel T. Elbert, Governor of Colorado (1873-74). She died in Denver, and as a loving tribute, Dr. Evans built the Lawrence Street Methodist Church of Denver, as a memorial. On August 18, 1853, Dr. Evans married Margaret, daughter of Samuel and Susan F. Gray, of Bowdoinham, Maine. Mrs. Evans died in Denver, leaving four children, William Gray, Margaret G., Evan Elbert, and Anna.

Full of years and honors, Dr. Evans quietly passed away, July 3, 1897.

F. D. Du Souchet.

Evans, John M. (1820-1903), of Evansville, Vermont. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. i. p. 292.

EVE, Joseph Adams (1805-1886), obstetrician and gynecologist of Georgia, son of Dr. Joseph Eve by his second wife, Hannah Singleterry, was born near Charleston, South Carolina, August 1, 1805. He came of an old loyalist family of Philadelphia, who, because of political opinions, sacrificed their property and left the country at the beginning of the Revolution and settled in Jamaica, West Indies. His father, Dr. Joseph Eve, was a highly cultivated man of decided inventive and poetic genius. He invented the brush and roller cotton gin, and was the author of many poems. Joseph Eve, Sr., returned to the United States about the year 1800, and engaged in planting, first near Charleston, South Carolina, and afterwards near Augusta, Georgia. Dr. Eve received his education in the country schools of his day, but acquired a knowledge of Greek and Latin and several of the modern languages, unassisted by teachers. He studied medicine under Dr. Milton Antony (q. v.), and attended his first course of lectures in Liverpool, 1827, graduating M. D. from the Medical College of South Carolina in 1828, and after this was associated with Dr. Antony in establishing at Augusta the Georgia Academy of Medicine. This institution was a hospital for patients, as well as a school for the instruction of students. In 1833 it became

the Medical College of Georgia, and in 1873 was made the medical department of the University of Georgia. In the first faculty of the Medical College of Georgia, Eve held the chair of materia medica and therapeutics, but on the death of Dr. Antony (1839) was transferred to, and held for fifty-three years, that of obstetrics and diseases of women and children.

As a teacher he was clear, exact, and eminently practical; his lectures were always carefully prepared and first written out, and he was ever untiring in the interest of his students. Throughout his long and useful career as a teacher he boldly and persistently advocated adoption of every reform for higher medical education, and was one of the committee, appointed by the faculty of the Medical College of Georgia, in 1848, to call a convention of the medical colleges of the country to raise the standard of requirements. This was the first movement toward advanced medical education ever inaugurated in the United States, and was not received with favor. At the first meeting of the American Gynecological Society, Dr. Eve was highly honored. He was invited to a seat on the right of the president, and presented to the society as the oldest active teacher of obstetrics in the world, and at this meeting he was made one of the first honorary Fellows.

Dr. Eve was never a voluminous contributor to medical literature; but the few papers on scientific subjects which he published are characterized by deep study and research, and are to be found in the "Transactions of the American Gynecological Society," the "American Journal of Obstetrics," the "Transactions of the Medical Association of Georgia," and the "Southern Medical and Surgical Journal," of which publication he was the editor for a number of years. Dr. Eve was one of the founders of the Georgia Medical Association, and its president in 1879. In 1882 Emory College of Georgia conferred on him the degree of LL. D. in recognition of his distinguished services to science and humanity.

JOSEPH EVE ALLEN.

EVE, Paul Fitzsimmons (1806-1877), Tennessee surgeon, son of Captain Oswell and Aphra Ann Pritchard Eve, was born near Augusta, Georgia, on the Savannah River, June 27, 1806. First taking his A. B. from Franklin College, Athens, Georgia, he studied medicine under Charles D. Meigs (q. v.); then took his M. D. from the University of Pennsylvania in 1828. A year of practice taught him his needs, and to supply them he worked hard during 1831 in the clinics of the most famous European surgeons. The year 1831 was a time of political turmoil and excitement in Europe, and when the Russian advance was made on Poland Eve helped as army surgeon in Warsaw and received the golden cross of honor. In November he returned to America, and in 1832 became professor of surgery in the Medical College of Georgia. He married Sarah Louisa Twiggs, granddaughter of General Twiggs of the American Revolution. In 1850 he succeeded Gross in the University of Louisville, but resigned on the death of his wife in 1851. He was afterwards successively, professor of surgery in the University of Nashville, in 1868, and in Missouri Medical College, St. Louis, yet had to resign as the climate did not suit him or his family, and returning to Nashville, accepted the chair of operative and clinical surgery in the University of Nashville in 1870.

During his well-filled forty-five years of surgery he became a skilled lithotomist, using largely the lateral perineal operation, and Meigs gives him the credit of being the first American to exsect the uterus "in situ." He did also fine operations in trephining and tracheotomy, the details of which can be seen in his largest work, "Remarkable Cases in Surgery" (1857). In this year he was president of the American Medical Association. There was an article on "One Hundred Cases of Lithotomy" (Transactions American Medical Association, 1870), and "A Report on Hip-joint Operations performed by Confederate Surgeons" was contributed to "The Medical History of the War." He also edited the "Southern Medical and Surgical Journal," and was assistant editor of the "Nashville Medical and Surgical Journal." He wrote biographical sketches of more than two hundred physicians of the Southwest, for Johnson's Encyclopedia. Dr. Eve served as volunteer surgeon in the Mexican War, and in 1859, being in Europe, was present at the battles of Magenta and Solferino, contributing notes he made on them to the "Nashville Medical and Surgical Journal." When the Civil War broke out, he became surgeon-general of Tennessee, and on the fall of Nashville was surgeon to the Gate City Hospital, Atlanta.

After the death of his first wife, he married in 1852, Sarah Ann, daughter of the Rev. H. D. Duncan, of South Carolina. They had two sons and a daughter, both of the sons becoming physicians.

Dr. Eve had a successful career in spite of defects of sight and hearing, for he was,

from youth, myopic, was color-blind and could not distinguish one note of music from another. He was a teetotaler, using neither alcohol nor tobacco, and he was most regular and methodical in his habits. He died suddenly, while visiting a patient, November 3, 1877.

A tolerably full list of his writings, which numbered some six hundred, may be found in the Surgeon-general's Catalogue, Washington.

EVERTS, Orpheus (1826-1903), pioneer alienist of Indiana. The ancestors of Orpheus Everts came from Vermont and settled in Ohio in 1795. They included Mercy, daughter of Josiah Standish, son of Miles Standish. Orpheus, son of Dr. Sylvanus and Elizabeth Heywood Everts, was born in Salem Settlement, Indiana, on December 18, 1826, and after early education at local schools, studied medicine under his father and Dr. Daniel Meeker. Graduating from the Medical College of Indiana in 1846, he later received honorary degrees from the University of Michigan and Rush Medical College. He began to practice in 1846 at St. Charles, Illinois, but after ten years (1846-1856) retired to take up the editorship of a newspaper in La Porte, Indiana. When he had served in this capacity for three years he studied law, and was admitted to the bar in 1860. The beginning of the Civil War found him at the front, as surgeon and major of the twentieth regiment Indiana Volunteers. After the war he devoted his attention to psychiatry and diseases of the nervous system, and in 1868 was appointed superintendent of the Indiana Hospital for the Insane, a position held for eleven years; and for thirteen years he was professor of nervous and mental diseases in the medical College of Indiana, then, until his death, medical superintendent of the Cincinnati Sanatorium. For thirty-four years he was an active and honored member of the American Medico-psychological Association and its predecessor, the American Association of Superintendents of Hospitals for the Insane.

He married, March 14, 1847, Mary Richards, daughter of Dr. George W. Richards (q. v.) of St. Charles, Illinois, and had five children: Charles Carroll, Juliet, Orpheus, William Porter, and Carolyn. Charles Carroll and William Porter graduated in medicine, but the latter died soon after finishing his course.

Dr. Everts was a frequent contributor to the press. Among his more important contributions to non-medical literature, were: "Giles and Company, or Views and Interviews concerning Civilization," a novel illustrating some phases of heredity; "The Cliffords," a philosophical allegory introducing impersonations of religion and science; "Facts and Fancies," in blank verse (a modern American epic). He was the author of numerous medical papers published in the "American Journal of Insanity," the "Cincinnati Lancet-Clinic," and "Journal of the American Medical Association." One of the last acts of his professional life was to prepare a paper for the section on "Nervous and Mental Diseases" for the American Medical Association at its meeting in New Orleans, in May, 1903, which appeared in the "Journal of the American Medical Association," April 16, 1904. A tolerably full list is in the Surgeon-general's Catalogue, Washington, District of Columbia.

He died at his home in College Hill, Cincinnati, June 19, 1903. The cause of death being advancing years, and the failure of the digestive functions.

A. G. DRURY.

EWELL, Thomas (1785-1826), investigator, Navy surgeon, was born May 22, 1785, at Blairs, Prince George County, Virginia. He was the son of Col. Jesse Ewell and a brother of Dr. James Ewell. He began the study of medicine with Dr. Weems of Georgetown, D. C., and was graduated with the degree of M. D. in 1805 from the University of Pennsylvania. His inaugural essay, published in May, 1805, was entitled "Notes on the Stomach and Secretion." This is divided into two parts; the first of which bears the caption "Relative to the Stomach," the second, "Relative to Secretion." Accepting the observation made by Spallanzani that the gastric juice of herbivorous animals would not dissolve muscular tissue, and that the gastric juice of carnivorous animals had no effect on vegetable substances, he proved by experiment that in two weeks a horse would "eat eighteen ounces of meat mixed with meal, at once, without hesitation." He also relates a case in which a lamb was raised on animal food and became "possessed of such unusual courage that it attacked a bull of the farm, and was killed in the conflict." He ascribes to the gastric juice an antiseptic power, and states that it will not only prevent putrefaction, but that it will also arrest putrefaction when it has once begun. He isolated, by ligation, two feet of the jejunum of a dog which had fasted for two days, and placed within it one ounce of gastric juice, obtained from the

pig, saturated with "well boiled meat in a temperature of 110°"; the intestine was then returned into the abdomen. At the end of three hours the dog was killed and he found "one-third of the mixture was absorbed and the mesenteric glands associated with the isolated portion of the intestine contained chyle; there was also a small quantity in the thoracic duct." He suggests the administration of gastric juice where digestion is impaired, and in case the patient refuses to swallow it, to use injections "per anum" of nutritious substances mixed with the gastric juice of healthy animals. In the second part of his essay he deals with the secretions in general. Much that he has to say is tinged with the physiology of his day. He says: "We are led to look upon the body as a laboratory in which the most important operations are performed." After discussing the artificial production of bile, he continues, "this leads us to expect, that from the progress of knowledge, all the secretions will, at some future day, be formed by art." In 1819 Dr. Ewell collected all of his papers into a single volume of 168 pages and published it at Philadelphia. Although he was a graduate of the University of Pennsylvania, he did not hesitate to criticise the professional conduct of some of its professors in receiving fees from private pupils, and in the production of text-books "to be sold at rates greatly exceeding the fair value." He seems to have had a special animosity towards Dr. Chapman (q. v.), whom he accuses of double dealing. Dr. Ewell apparently entered the service of the United States Navy immediately after graduation, for the above mentioned compilation contains a letter addressed to Dr. Rush, of Philadelphia, dated from the United States Navy Yard, New York, June 15, 1806, in which he supports the miasmatic origin of yellow fever advocated by Rush. In 1808 he was stationed at the navy yard, Washington, where he remained until he resigned, May 5, 1813, to practice at Capitol Hill, later at Georgetown.

In 1820 Dr. Ewell tried to interest the Corporations of Washington and Georgetown in uniting to establish a general hospital; but "beyond securing the hearty approval of the "National Intelligencer," and the promise of one thousand dollars by a benevolent citizen," nothing came of the attempt. Busey gives the outlines of the hospital proposed by Dr. Ewell, and it is evident that he held views far in advance of his contemporaries.

Dr. Ewell married Elizabeth, daughter of the Hon. Benjamin Stoddert, of Maryland, secretary of the navy. He died on his farm, in Blairs, Virginia, May, 1826.

WILLIAM SNOW MILLER.

FAGET, Jean Charles (1818-1884). The discovery of a definite, practicable pathognomonic sign of yellow fever by Dr. Faget in 1858 was as invaluable to the seacoast of North America and South America between north latitude 38½ degrees to south latitude 36 degrees as that of Jenner on cow vaccine, or of Pasteur on serum therapy. It allowed an earlier diagnosis and stopped at once the long disputes regarding the confusion with malaria and the pernicious horror of many types of that disease.

Jean Charles Faget was born in New Orleans, June 26, 1818, of French parentage. After a most solid and careful education under the Jesuit Fathers he went to Paris. There he was a student in the College Rolin from 1830 to 1837. After undergoing a rigid examination he became an interne in the hospitals of Paris, and on finishing his studies graduated M. D. in 1844. His thesis, which received "magna cum laude," was on "Quelques faits anatomiques en faveur de la cystotomie sus-pubienne chez les très jeunes enfants."

On his arrival in New Orleans, where he settled in 1854 after graduation, he quickly entered into active practice. He did not find the field of the profession barren of men with ability. There was then in the city a galaxy of distinguished men, most of them graduates of "La Faculté de Paris"; men who after their splendid preparation in the hospitals and laboratories of Paris soon became brilliant practitioners in America, among them Drs. Charles Delery, Lambert, Labatut, Henri Rancé, Beaugnot and many others. Dr. Faget, though modest and retiring, was soon at the fore. Of course it was impossible for men of such ability and forcefulness to get along in perfect harmony and peace.

When Dr. Faget joined La Société Médicale de la Nouvelle-Orléans, he soon became a propagandist of the infectious school of the spread of disease, while his distinguished confrères, Charles Delery, Beaugnot and Rancé, were of the contagionist school. It was during the interminable polémiques between these scientists that most of the work and labor of these gentlemen was told, couched in language most polite, but with sarcasm most biting, while they broke their lances against one another, and enunciated their theories and related the facts they had as proofs.

Dr. Faget read many letters before the

society, which were published in "La Gazette Médicale," all to prove that the old school which believed that the natives never had yellow fever were wrong; that the yellow fever, which was diagnosed by them with the then specific symptoms of black vomit, was not yellow fever, but most often a pernicious malarial fever, which, properly treated, answered to massive doses of quinine. Finally, on July 15, 1859, Faget proved the difference between these cases and real yellow fever, a fever of one paroxysm with sometimes a remission, a flushed face, red gums, frequently hemorrhagic gums, pointed coated tongue, red and thin at the edges. First day, high fever, pulse in proportion; second day, high fever and falling pulse, some albumin in urine; third, fourth and fifth day, still these symptoms, more pronounced, the pulse falling, often to sixty, even fifty, while the temperature is maintained. This important observation, made and given out by Dr. Faget in 1859, was bitterly assailed at the time, but its truth was quickly recognized by Dr. Thomas Layton and later by Dr. Just Touatre. In 1870 the latter, who had used for years in his service as a French marine surgeon a large rectal centigrade thermometer, was able to confirm absolutely the observation of Dr. Faget, that often in the first twenty-four or thirty-six hours, with a rising temperature, as shown by the thermometer, the pulse instead of becoming more rapid is proven by the watch to be gradually falling, losing entirely its usual correlation. This is undoubtedly due to some intense toxin absorption affecting the sympathetic nervous system. Often a rising temperature of 105° or 104° Fahrenheit shows a pulse of sixty, or as low as fifty per minute. For this most important clinical observation and also his "Different Symptomatic Signs in Hematemesic Paludal Fever," after the epidemic of yellow fever of 1858, he was decorated by the French government as a Chevalier de la Légion D'Honneur. And for his "Type and Specific of Malaria with Watch and Thermometer" he received twenty-four votes out of fifty-three for his candidature as a member of the Académie Médicale de Paris. Dr. Faget was made a member of the Louisiana State Board of Health, and in 1864 he was a member of a sanitary commission named by Gen. Banks, drawing up the report that was sent to Washington.

His personality was an ideal one, for besides his great medical ability he had splendid qualities of heart and mind, modest and pure; he was a consistent Christian and always a thorough and honorable gentleman. This well spent life, when it ended, September 4, 1884, had certainly been a most useful one and the Faget law of pulse and temperature is as well known in the entire yellow-fever zone as the mosquito dogma is to-day.

He was married in 1844 to a daughter of Dr. Ligeret de Chazey, of the faculty of Paris. One of the sons, Charles Faget, Jr., was demonstrator of anatomy in the University of New Orleans.

Louis G. Le Boeuf.

FARISH, Henry Greggs (1770?-1856), pioneer obstetrician of Nova Scotia, son of a Commissary in the British Army, was born in Brooklyn, New York, about 1770, and was engaged first as assistant surgeon and later as surgeon in the British Navy and after practicing for a time in England, came to Nova Scotia and settled in Yarmouth in 1803, where he remained in active practice till his death fifty-three years later. In addition to his duties as medical practitioner he filled for many years, with singular ability and integrity, many important public offices. He was naval officer, collector of excise, registrar of deeds, and an able magistrate.

Dr. Farish must have been extremely methodical in all his ways, otherwise he could not have successfully carried on a large practice in conjunction with his many public duties. As a proof of the careful and conscientious manner in which he cared for his patients, there is no better evidence than the record of 2,148 cases of labor attended by him.

The Farish obstetrical record was published in volume 4, page 177 of the "Maritime Medical News," Halifax, and is a very interesting document. It includes over 10,000 cases of confinement attended by the father and his three sons who adopted medicine as a profession. They were: Joseph and James C. who settled in Yarmouth, and Henry G. in Liverpool, England.

Dr. Farish died in Yarmouth, Nova Scotia, in 1856.

Donald A. Campbell.

FARLOW, William Gilson (1844-1919), of Cambridge, Mass., pioneer cryptogamist, distinguished botanist, writer and teacher, was born in Boston, December 17, 1844, the son of John Smith and Nancy Wight Blanchard Farlow. His father was an East India merchant and later a railroad president, much interested in horticulture and fond of music. The son was graduated at Harvard in 1866,

having taken courses in botany under Professor Asa Gray (q. v.) while a student. After graduation, the question of what he should do in the future was discussed with Prof. Gray, who advised him to study medicine because, as he said, the possibility of gaining a living from botany was so small that one should always have a regular profession to fall back upon, and medicine was a good preparation for a future study of science. Farlow early showed unusual musical ability as a pianist, and he was even urged by Prof. J. K. Paine, then fresh from his musical studies in Germany, to take up music as a profession. The advice of Prof. Gray prevailed and Farlow entered the Harvard Medical School in 1866, following this by a year as surgical house officer in the Massachusetts General Hospital, at the end of which he received the degree of M. D. But botany could not be denied, and soon after leaving the hospital he became assistant to Prof. Gray at Harvard, a position which he held for two years. Although he had received a certain amount of instruction in cryptogamic botany and had even taken a small part in its teaching, he determined to acquire a more extended knowledge of the subject and decided to go to Europe, there being no opportunities in the United States for such special work.

In 1872 he entered the laboratory in Strassburg of Prof. Anton De Bary, the great authority on algae and fungi. Here he came in close contact with a group of young men who later became famous as teachers of cryptogamic botany. For the study of lichens he went to the laboratory of Prof. Mueller of Geneva, and in Antibes, on the Mediterranean, he greatly enjoyed, and profited by, his work on marine algae with professors Thuret and Bornet. He also visited most of the principal cryptogamists in Europe and laid the foundation for a life-long correspondence and exchange of specimens for his future collection. On his return to Boston in 1874, after an absence of two years, he was recognized as the best equipped cryptogamist in this country and the only person competent to teach something beyond the rudiments of his subject and initiate others into the doing of original work. He immediately received an appointment as assistant professor of botany at Harvard, the first special provision made in this country for instruction in cryptogamic botany. Most of his work was done in his laboratory at the Bussey Institution, a department of the University about five miles from Cambridge, where his investigations and publications on fungous diseases of plants laid the foundation for American phytopathology. In 1879 he was transferred to Cambridge and made professor of cryptogamic botany; there he had charge of instructing the students in his laboratory and lecture room, a work to which he gave his personal attention without leaving it to his assistants. A part of his time was given to the formation of his herbarium and his special library, a task to which he devoted his best efforts until his death. He withdrew from his active class teaching in 1896, but continued to supervise the advanced students in their research work.

His early publications had to do with the then little-understood diseases of plants and the fungous contaminations of water supplies. Among these were the potato rot, the black knot, gymnosporangia or cedar apples, diseases of orange and olive trees; for the Massachusetts State Board of Health (1879) he contributed a long paper on algae found in water, called by Prof. G. C. Whipple one of the classics of state sanitation. His medical studies had probably given him an added interest in causes of disease, whether in plants or in man.

An important writing of his at about this time is: "List of the Marine Algae of the New England and Adjacent Coasts," which is still the only scientific manual of seaweeds in this region. He spent a number of summers at the Marine Biological Laboratory at Woods Hole examining the algae brought up by the dredges on their expeditions, working in connection with Prof. S. F. Baird.

During the last twenty three years of his life he was fully occupied with three large undertakings: 1) a "Bibliographical Index of North American Fungi"; 2) the making of large colored illustrations of fungi; and 3) the development of his already great herbarium. A part of the Index was published by the Carnegie Institution in 1905; the whole work up to the time of his death included 350,000 references. The colored illustrations of mushrooms, consisting of more than 100 large plates, made by skilful botanical artists under his immediate supervision, still await publication, but are expected to appear in the not distant future.

In recognition of his distinguished work, Prof. Farlow was elected to membership in the most important scientific societies in this country and in Europe. From Harvard he received the honorary degree of LL. D. in 1896, from the University of Glasgow in 1901, from

the University of Wisconsin in 1904, and a Ph. D. from Upsala in 1907 at the great Linnaean celebration. In 1917 he received word that he had been elected a corresponding member of the Paris Academy of Sciences.

As a teacher, Prof. Farlow was held in the highest esteem by his students, who, under his enthusiastic instruction, were inspired to do their best work, and from their number have come many who are now leaders in cryptogmac botany, not only in the United States, but also in foreign countries. He maintained friendly, and often intimate, relations with many of the most distinguished botanists throughout the world, and in his library can be found a large number of bound volumes of the letters received from his warm friends.

In 1900 he married Lillian Horsford, daughter of Prof. Eben M. Horsford. She was a most congenial and sympathetic helper in his work. Dr. Farlow died in Cambridge, June 3, 1919, of myocarditis, after a few weeks illness. By his will he left to Harvard University his unrivalled cryptogamic library and herbarium together with a sum of money as endowment. The cryptogamic department of the University is now housed in the same fireproof building in which are his library and the herbarium, and there all the work of the department is done.

Prof. Farlow was short in stature, but little over five feet, and was rather slight in build; his eyes keen and his general bearing alert. He was very witty and was the best of company. His music was ever a source of pleasure to a large circle of friends.

At the meeting of the Faculty of Arts and Sciences of Harvard University on December 2, 1919, a committee consisting of Prof. Roland Thaxter, Prof. W. J. V. Osterhout and Prof. Theodore W. Richards closed their report on Prof. Farlow's death as follows: "His first hand knowledge of cryptogams was greater than that of any other botanist and he was probably the most learned man in his profession." JOHN W. FARLOW.

FARNSWORTH, Philo Judson (1832-1909), professor of materia medica and diseases of children in the University of Iowa, was born in Westford, Vermont, January 9, 1832, the son of Levi and Lucy Curtis Farnsworth. He was graduated at the University of Vermont in 1854 and at its medical department in 1858, receiving an M. D. from the College of Physicians and Surgeons, New York, in 1860.

After living in Lyons, Iowa, from 1862-66, he moved to Clinton, Iowa, and in 1870 was elected to the chair of materia medica and diseases of children in the University of the State of Iowa, a position he held until 1895. Later he was made emeritus professor in the Iowa State University, of which he was one of the founders. For many years he was local surgeon at Clinton, Iowa, for the Chicago and Northwestern Railroad. He was founder of the first public library in that city.

He was a member of several medical societies and contributed to professional journals, chiefly to the "Medical and Surgical Reporter" of Philadelphia. He also paid some attention to local geology and archaeology. He read a paper on the "Therapeutics of Ammonia" before the American Medical Association in 1873 and one on "Indian Mounds" before the Iowa National History Society in 1876. He was the author of "A Snyopsis of a Course of Lectures on Materia Medica," Chicago, 1884.

He married Mrs. Elizabeth Dean Eaton of Clinton, Iowa, in 1872.

Dr. Farnsworth died February 14, 1909, of injuries received by a fall down the stairs of his house three days before.

FARRAND, David Osborn (1837-1883), surgeon to the Harper Hospital, Detroit, was born in Ann Arbor, Michigan, April 23, 1837, the son of Judge Bethuel Farrand, prominent in the early history of Michigan, and Deborah Osborn Farrand, whose culture and tactful manners made a home full of benediction to all who were its guests. David had his general education in the Ann Arbor schools and the literary department of the university, his medical studies in the medical department of the university and afterwards in Germany. He completed them at the College of Physicians and Surgeons of New York City, whence he received his diploma in 1862. On graduating he entered the United States Army as a volunteer and was stationed at the Lawson General Hospital in St. Louis, Missouri, later being detailed to the barracks at the east end of Clinton Street, Detroit, and St. Mary's Hospital, places for transfer of soldiers on their way to the front. In 1864 a commission as assistant surgeon in the regular army was given and he was transferred to Harper Hospital, Detroit. In 1866 he formed a partnership with Dr. Zina Pitcher (q. v.). Until 1871 by special permit he was contract surgeon of the Detroit troops. From its origin till his death in 1883 he was surgeon to Harper Hospital, Detroit, and a member of the Michigan

State Medical Society; in 1866 a leading spirit in the erection of Harper Hospital building; its training school for nurses was named after him, also one of the Detroit public schools. As he was quick of perception, of thought and execution, he accomplished a vast amount of work.

In September, 1866, Dr. Farrand married Elizabeth Trombly, who with two daughters and a son survived him. The son became a physician. The father died in Detroit, Michigan, March 18, 1883, with cerebral infection from a chronic suppurating ear.

LEARTUS CONNOR.

Farrand, Elizabeth M. (1852-1900), of Ann Arbor, Michigan. See Cyclopedia Amer. Med. Biog. H. A. Kelly, Phila. 1912, i. 298.

FARRAR, Bernard G. (1785-1849), "The father of the Medical Profession in St. Louis," was born in Goochland County, Virginia, July 4, 1785, the son of Joseph Royal Farrar. His life has been entertainingly set forth by Dr. Charles A. Pope, (q.v.) who knew him personally, in the "St. Louis Medical and Surgical Journal" of 1850. Both Farrar's father and mother had been married four times and all of the unions had been fruitful. There were seven different sets of children united in one family and, of a consequence, each child had very little patrimony. When Bernard, who was known as "Barny", was very young the family moved to Kentucky, near Lexington. Barny was educated under Parson Stubbs, a pious man, who put up with his pupil's laughable tricks as best he could; then the boy attended the literary department of Transylvania University for three years. In the Spring of 1800 he began the study of medicine with Dr. Selmon of Cincinnati, Ohio and a year later became a pupil of Dr. Samuel Brown, (q. v.) of Lexington, Kentucky. In 1804 he attended lectures in the medical department of the University of Pennsylvania, at Philadelphia, returning at the close of the session to Lexington and receiving an M. D. from Transylvania in the same year. Dr. Farrar began practice in Frankfort, near Lexington, but being conscious of his new dignity, he refused to be called "Barny" any longer. He was "Doctor Farrar" and feeling that a prophet is not without honor save in his own country, determined to try his fortune in St. Louis. Accordingly, in the fall of 1806 he embarked at Louisville in a keel boat, the only mode of water conveyance of the period, and travelled by the slow process of "cordelling," from the French word meaning twisting with a rope, a species of towing, down the Ohio and Mississippi rivers, a tedious voyage of several weeks, until St. Louis was reached. There he found the only physician to be a Dr. Antoine Saugrain, a Frenchman who had come from Europe. Farrar soon was actively engaged in practice and was often sent for from miles around. As the first American physician to establish himself permanently on the west bank of the Mississippi, he was often called the father of the profession in St. Louis.

Of great tact and kindness of heart yet he was resourceful in an emergency and prompt to act. It is related that once he was summoned to a woman who had been ill of a fever and was regarded as already dead, indeed a shroud was being made. The usual tests for vitality, such as the mirror and a pan of water on the chest, having proved negative, Dr. Farrar had the idea of applying a hot smoothing iron to the soles of the patient's feet, with the result that she jumped up and protested loudly. A gentleman who had seen her laid out for burial, had left town before Dr. Farrar's effective test had been carried out. Upon his return he was amazed to meet her on the street, in perfect health.

Dr. Farrar, a success in general practice, was preeminent in obstetrics and distinguished as a surgeon. Among his first major operations was the amputation of the thigh on a man named Shannon, who had been wounded by a ball in the knee, by the Black Feet Indians, while on a government expedition to ascertain the sources of the Missouri river, over a thousand miles from its mouth. Dr. Farrar, operating in St. Louis, took many chances of failure, on account of the distance the patient had been brought in order to come under his care with a consequent lowered resistance. The patient's recovery was considered an evidence of unusual skill. In the case of an Indian boy, who was suffering from a stone in the bladder that could be felt projecting into the rectum, Farrar originated and executed an operation seldom used today, namely recto-vesical section.

Dr. Farrar is represented as usually tolerant and long-suffering, though on one occasion he did fight a duel, later being called on to dress the wound he had inflicted on his opponent and ending by becoming a fast friend. On another occasion he gave a traducer who misjudged his courage, a good clubbing for slander, the slanderer being a brother practitioner. In the war of 1812, he

served both as surgeon and soldier in the defence of Missouri from Indian depredations.

He preferred a successful though laborious practice, to the uncertain renown of a professorship in the medical department of Transylvania, that had been offered to him. He was the first president of the St. Louis Medical Society. For one year he served in the legislature, the first assembled under the territorial form of government. He was fond of St. Louis and loved to expatiate upon its growth and prosperity. He was twice married. In the summer of 1849, he fell a victim to the epidemic of cholera then raging and died July 1, at the age of sixty-three.

WALTER L. BURRAGE.

FARRELL, Edward (1843-1901), the son of Dominick Farrell of Dartmouth, Nova Scotia, was born in Halifax, Nova Scotia, September 23, 1843, and after practicing in that city for about thirty-five years, died there January 1, 1901.

His literary education was obtained at St. Mary's College in his native city, his professional training with Dr. W. J. Almon, Halifax, and at the College of Physicians and Surgeons, New York, from which he received his M. D. in 1864. For the next two years he was one of the house surgeons at Bellevue Hospital, New York.

He began practice in Halifax, in 1866, and quickly established a reputation for more than ordinary ability, associating himself actively with everything pertaining to the medical life of the city, and being one of the most earnest and devoted of those who fathered and fostered the Halifax Medical College. It was chiefly by his efforts also that the Halifax Infirmary was founded and developed.

From 1874 to 1878 Dr. Farrell was a member of the House of Assembly, and a member, without portfolio, of the Provincial Government. At the time of his death, and for years previously, he was president and professor of surgery in the Halifax Medical College, dean of the faculty of medicine in Dalhousie University, and surgeon at the Victoria General Hospital. He was elected president of the Medical Society of Nova Scotia in 1880, president of the Maritime Medical Association in 1894, and vice-president (surgery section) of the British Medical Association in 1897. He was also a member of the Canadian Medical Association, before which he delivered a notable address on surgery.

Dr. Farrell was survived by a widow (née-Walsh) and eight children, four sons and four daughters. His eldest son, Dr. Edward D. Farrell, engaged in the practice of medicine in Halifax. His second son, also a physician, joined the Royal Army Medical Corps, but lost his life through disease induced by hardship and exposure during the Somaliland expedition in 1906.

DONALD A. CAMPBELL.

FAUNTLEROY, Archibald Magill (1837-1886), surgeon and alienist, the son of Gen. Thomas T. Fauntleroy, of the United States Army, was born at Warrenton, Virginia, on July 8, 1837. His early youth was passed at military posts on the western frontier commanded by his father. He entered the Virginia Military Institute in August, 1853, and was graduated with distinction in 1857. Then, taking up the study of medicine, he spent one session at the University of Virginia, and another at the University of Pennsylvania, from which he was graduated in 1860. Passing the examination for the army, he was commissioned an assistant surgeon.

He was one of the founders of the Medical Society of Virginia, and was elected president in 1871, at the beginning of the second year of its existence, and the following year he was made an honorary member. In the society he was very active and influential, and probably did more than any other member in getting an act passed by the Legislature creating a Medical Examining Board.

In April, 1861, he resigned his commission in the army and entered the medical corps of the Confederate Army as assistant surgeon, and was promoted to surgeon June 27, 1861. He did duty in hospitals in various places in Virginia, and later as medical director at Wilmington, North Carolina. From July, 1861, to June, 1862, he served as chief of staff to Gen. Joseph E. Johnson, and carried his wounded commander from the field of Seven Pines. At the end of the war he settled in Staunton, Virginia, and at once became prominent as a physician and surgeon. Upon the death of Dr. Robert F. Baldwin, the superintendent of the Western Lunatic Asylum at Staunton, he was elected his successor, in 1880.

He married Sallie Conrad, of Virginia, and several children were born. Three of his sons became physicians, one a dentist. Of the former, all three entered the service of the United States, one being in the army, another in the navy, and the third in the marine hospital service.

He died in his fiftieth year, in Staunton, June 19, 1886. ROBERT M. SLAUGHTER.

FAVILL, Henry Baird (1860-1916), Chicago physician, was born at Madison, Wisconsin, August 14, 1860, son of John and Louise Sophia Baird Favill. His first paternal American ancestor was John Favill, who came over from England before the Revolution, fought in the Continental Army, and settled in Manheim, Herkimer County, N. Y. From him and his wife, Nancy Lewis, the line of descent is traced through their son, John Favill, and his wife, Elizabeth Guile. Their son, John Favill, and his wife, Louise Sophia Baird, were the parents of Henry Baird Favill. His father was a leading physician in Wisconsin, a member of the first state board of health, and president of the Wisconsin State Medical Society in 1872. Favill was a descendant through the maternal line from the Ottawa chief, Kewinoquot (Returning Cloud), and was especially proud of his Indian ancestry. Favill was graduated at the University of Wisconsin in 1880, and at Rush Medical College in 1883, was an interne at Cook County Hospital, Chicago, and practiced in Madison with his father, who died in a few months.

In 1894 he left a large practice and went to Chicago, accepting simultaneous calls to the chair of medicine in the Polyclinic and to an adjunct chair of medicine in Rush Medical College; from this latter post he was promoted in 1898 to the Ingalls professorship of preventive medicine and therapeutics, and in 1906 to the chair of clinical medicine. His practice, confined to internal medicine, became large, select and influential, and his reputation rapidly assumed a national character. At different times he was officially connected with numerous hospitals, among them the Augustana Hospital, the Passavant Memorial Hospital and St. Luke's Hospital. He took great interest in the Chicago Tuberculosis Institute, and was for many years its president. He was a member of: The Chicago Society of Internal Medicine, Chicago Institute of Medicine, Physicians Club of Chicago, and was president of the Chicago Medical Society in 1907-8. He was an influential member of The National Association for the Study and Prevention of Tuberculosis, National Society of Mental Hygiene, and the American Medical Association, in which he was chairman of the Council on Health and Public Instruction. He received the degree of LL. D. from the University of Wisconsin.

He was original as a lecturer and writer. A noteworthy address entitled "The Public and the Medical Profession, A Square Deal" was delivered before the Pennsylvania State Medical Society in 1915. In 1907-10 he was president of the Municipal Voters' League, during which period he exhibited sound judgment, fearlessly opposing corrupt politics. He was president of the City Club, 1910-12, having served as one of its directors from 1905, and was at one time chairman of the Committee on Public Affairs. He was ever a leader in good government, municipal improvement and sanitary progress, and acted for many years as a trustee of the Chicago Bureau of Public Efficiency, and a director of the United Charities.

During the last eight years of his life he became intensely interested in cattle breeding and the dairy industry, and gave most of his spare time during these years to the building up of a model dairy farm, "Milford Meadows" at Lake Mills, Wisconsin. His study of agriculture and breeding problems led to the writing of many articles and lectures, and to his election as president of the National Dairy Council. It was during a visit to Springfield, Massachusetts, in connection with this organization that he succumbed to a virulent attack of pneumonia, February 20, 1916, leaving his widow and one son, Dr. John Favill.

In 1885 he married Susan Cleveland Pratt of Brooklyn, New York.

No other physician in America had more widely and sympathetically related himself to the public welfare. He possessed that rare gift in a medical man, the ability to preside over a deliberative assembly, setting a higher standard as he restrained the discursive and, at the end, summarized the subject under discussion with remarkable clarity. By introducing his methods into medical gatherings he rendered a signal service to the profession. A fine figure of a man, tall, standing straight as an arrow, his ready intellect grasped every point and his well-modulated voice reaching to the farthest corner of the room held the sustained attention of his auditors. He had a ready wit of which the following is a sample. When Mrs. Favill was elected a Colonial Dame, some reporters facetiously inquired whether he could not qualify for the Society of the Mayflower. "No," was the quick retort, "My people were on the reception committee."

E. C. Dudley.

FAY, Jonas (1737-1818), pioneer physician and patriot of Bennington, Vt., the second of Stephen Fay's ten children, was born in Hardwick, Massachusetts, on January 17,

1737. Of his youth and training, we know only that Dr. Fay had a good general education for those days, a "pen and ink training." Of his professional education there is apparently nothing known. At the age of eighteen he was in the French War at Fort Edward and Lake George in a company of Massachusetts troops, then surgeon to Ethan Allen's expedition against Ticonderoga, and later surgeon to Warner's Regiment for the invasion of Canada. In his professional life in Bennington and elsewhere, he followed the routine of the average country doctor of those times.

His public services, however give him a high place in Vermont history. He was one of the founders of the state. A man of good native endowments, of wide information, of courage and determination as well as of likeable disposition and, above all, a patriot. Stephen Fay, his father, had come to Bennington in 1766, and kept the famous Catamount Tavern. "Landlord Fay's" was the rendezvous for the Green Mountain Boys in the stirring times, when the "New Hampshire grants" were the bone of contention between New Hampshire on one side and New York on the other. At the old hostelry, Dr. Jonas Fay was brought into frequent and intimate association with the leaders among the early settlers, chief of whom was the redoubtable Ethan Allen. Being a skilful draughtsman he early became the clerk of the Committee of Safety and of the various conventions of the settlers, which resulted in the establishment of the new state. He drew up important public papers, and was the author of its Declaration of Independence. These documents, still preserved in Dr. Fay's handwriting, attest the confidence in which the author was held by the inhabitants.

He was clerk of the Dorset Convention, which petitioned Congress to serve in the common cause of the country. He was again at the Westminster Convention, which declared Vermont to be an independent state, and he was secretary of the Convention that formed the constitution of the state in 1777. Dr. Fay continued to practice all this time and until 1800 in Bennington, when he removed to Charlotte, and later to Pawlet, but returned to Bennington late in life and died there March 6, 1818.

Senator Proctor discovered in 1904, in the Library of Congress, certain manuscripts relating to the early Vermont Conventions, and these manuscripts, all in Dr. Fay's handwriting, he reproduced in facsimile and distributed in a bound volume. This volume contains Dr. Fay's family record, and shows him to have been twice married. By his first wife, Sarah, he had seven children. His second wife was Lydia, widow of Challis Safford. They had three children.

CHARLES S. CAVERLY.

FAYSSOUX, Peter Dott (1745-1795), of South Carolina. No record of the ancestry of this army surgeon is extant, but it is known that he was born in southern France in 1745. His mother emigrated to Charleston, South Carolina, in 1746 or 1747, where the boy grew up and was educated under the care of his stepfather, James Hunter. He was graduated in medicine at Edinburgh in 1774 or 1775.

Of Dr. Fayssoux's life only a few fragments have been preserved, but these indicate a man of strong character, actively devoted to the cause of his adopted country, learned and skilful in medicine with high ideals for the betterment of his profession. He took an active part in the stirring events of the Revolution, and on July 13, 1778, was appointed first lieutenant, South Carolina Regiment. He was taken prisoner at Charleston on May 12, 1780, and was sent to St. Augustine, Florida, where he endured his "captivity with patience and exile with resignation." In the following year, on May 15, he received the appointment of chief physician and surgeon of hospital, southern department, a position he held until the close of the war. His public service, however, did not end with the advent of peace, for in 1786 we find him a member of the Legislature, acting "with independence and firmness of character." He was also a member of the Privy Council.

Dr. Fayssoux seems to have been the initiator of the movement to organize the Medical Society of South Carolina, for it was at his house in December, 1789, that Dr. David Ramsay (q. v.) and Dr. Alexander Barron met with him to carry out this project. He was elected the first president.

He married Mrs. Ann Johnson (née Smith) on March 29, 1777, and had six children, none of whom studied medicine.

He died suddenly of apoplexy, February 2, 1795.

ROBERT WILSON, JR.

FELL, Edward George (1850-1918), surgeon and inventor, of Buffalo, was born in Chippewa, Ontario, July 10, 1850, son of James Wilkins Fell and Ann Elizabeth Hoffman. He received a high school education, then studied

medicine at the University of Buffalo, graduating in 1882; an "ad eundem" degree was conferred by Niagara University in 1886. From 1885 to 1895 he was professor of physiology and microscopy in the Medical Department of Niagara University, and was physician to the Buffalo Hospital of the Sisters of Charity; from 1910 to 1916 he was surgeon to the Charity Eye, Ear, Nose and Throat Hospital, Buffalo. He was president of the Cuban American Junta (1897-1898); president of the American Microscopical Society, of which he was a founder (1890). He was a member of the Royal Microscopical Society (London).

Dr. Fell was the first inventor of a successful apparatus to produce artificial respiration in case of drowning, and asphyxiation (1887) through which thousands of lives have been saved and thoracic surgery made possible. In 1890 he invented the first chair used in electrical executions; his latest invention was an apparatus to enable one to remain under water a long time without danger.

Dr. Fell was married in 1872 to Annie Argo Duthie, of Buffalo; in 1912 he married Gertrude Luella Axtell of Spokane, Washington. He died at his home in Chicago, Illinois, of dilatation of the heart, July 29, 1918.

FENGER, Christian (1840-1902), Chicago's successful surgeon and first teacher of modern pathology, was the son of Kammerraad Fritz and Matilda Fjelstrup Fenger. From his birth, November 3, 1840, in Copenhagen, until his graduation from the medical department of the University of Copenhagen in 1876, little is known of him. After graduation he served Prof. Meyer as assistant for two years, and then gave another two years as interne of the Royal Frederick Hospital. His service in the City Hospital from 1871 to 1874 was first as prosector, then as privatdocent. From the beginning of his career Dr. Fenger wished to be a teacher, but failed in being appointed to the chair of pathology for which he had passed the required examination. Perhaps it was owing to this failure that he went to Egypt where he became a member of the Sanitary Council and surgeon to the Khalifa in the District of Cairo. Here he made the most of his opportunities in studying tropical disease and mastering the Arabic language. The Danish-Schleswig-Holstein and Franco-Prussian wars further added to his knowledge by giving him training in military surgery. With all this experience he quickly made his reputation as a teacher and surgeon when he came to the United States in 1877 and settled in Chicago. His medical confrères first recognized his worth by the work he did in the morgue of the Cook County Hospital. His profound knowledge of pathology was appreciated by all who attended his autopsies. Dr. Fenger was also well versed in bacteriology, keeping pace with all its new develbpments. The School of Modern Pathology of Chicago counts him as one of its founders. The County Hospital gave him the position of attending and consulting surgeon, a post he held for twenty years; and the internes profited by his ability as a teacher and his kindness as a host, for he cordially welcomed them at his house every week, the evening being spent in discussion and study.

Dr. Fenger taught surgery for eighteen years in the College of Physicians and Surgeons, Northwestern University Medical School, and Rush Medical College. An acknowledgment of his work as a teacher came to him in the appointment of professor of clinical surgery in the Rush Medical College. His teaching was enhanced by his skill in illustrating by colored drawings on the blackboard. He always adopted this way when he undertook an important operation, to show the pathologic condition, surgical anatomy, and technic of the operation about to be performed. Every operation was with him a dissection. He would stand with his knife in the air, talking and demonstrating, forgetting the patient was under anesthesia or take out a specimen and talk about it, forgetting the wound was waiting to be sewed up. His endurance was unusual, as he was able to conduct clinics from two o'clock in the afternoon until nine in the evening. He made no display of his vast clinical material and had the honesty to report unfavorable cases. He was the first in Chicago to perform vaginal hysterectomy and one of the first there to explore the brain with an aspirating needle.

During his thirty years of work he contributed more than eighty articles to surgical literature, a full list of which is given in Sperry's "Group of Distinguished Physicians and Surgeons of Chicago," 1904. The place he made for himself in the new world as scientist, surgeon, author and humanitarian did not allow him to be forgotten in the old. King Christian of Denmark conferred on him the Order of Ridder of Danneberg; America honored him in her own democratic way by a large gathering of physicians representing one hundred and thirty-nine medical societies

from every part of the continent; all coming together to express admiration for the pioneer work in science done by Dr. Fenger in the country of his adoption.

During the last summer of his life his working power was taxed to its utmost, but a good holiday set him up again. On the second of March, 1902, however, he was attacked by a most virulent type of pneumonia and died five days later. During his illness the three who had been his pupils, Billings (q. v.), Favill (q. v.) and Herrick, gave devotion and care to their beloved professor. He was survived by his wife, Caroline Abildgaard, and two children, Frederick and Augusta.

FENWICK, George Edgeworth (1825-1894), bold, original, pioneer surgeon in Canada, whose name is especially associated with the operation for excision of the knee-joint, was born in Quebec, October 8, 1825. He had an experience probably unequaled in thyroidectomy, lithotomy, and excisions of joints; he early took up and ardently practiced the Listerian antiseptic principles; his operation for excision of the knee-joint, devised before the days of antiseptic surgery, is an excellent conservative procedure widely used. Also he had large experience in excision of the rectum for malignancy.

His father, Joseph Fenwick, was from Morpeth, England, and his mother, Margaret Elizabeth Greig of Quebec. His medical studies were begun in the Marine Hospital; in 1846 he passed examinations in McGill University, but not being of age for passing, the conferring of the degree was deferred until 1847.

He was a founder and a large contributor to the "Canada Medical Journal," of which, also, he was editor (1864-1872), being associated with F. W. Campbell; he was editor of the "Canada Medical and Surgical Journal," 1872-1879. For two years he was demonstrator of anatomy, for eight years professor of clinical surgery, and for fifteen professor of surgery at McGill University, where he laid great stress on bedside instruction. The Museum of the Medical Faculty of McGill is a large debtor to Fenwick, particularly in the "bone room." He was full surgeon to the Montreal General Hospital for twenty-five years, and much of the reputation of the hospital at home and abroad is due to his efficient work. During the Fenian raids in 1866 and 1870, Fenwick was in the Montreal Field Battery. He was president of the Medico-Chirurgical Society of Montreal and in 1882 vice-president of the Canada Medical Association.

In 1852 he married Miss Eliza Charlotte De Hertel, who with a daughter, Mrs. George Massey, survived him.

He suffered from arterial sclerosis for some years and a cerebral hemorrhage was the cause of death, at his home in Montreal, June 26, 1894.

Fenwick's brother, A. G. Fenwick, of London, Canada, who died a short time before him at the age of seventy-six, took his M. D. from McGill in 1840 and was dean of the faculty and held the chair of medical jurisprudence and toxicology in Western University and for several years was on the Medical Council at Toronto.

HOWARD A. KELLY.

FERGUSON, Alexander Hugh (1853-1911), Chicago surgeon, of sturdy parentage, was born in Ontario, Canada, on February 27, 1853, and received his preliminary education at Rockwood Academy and at the Manitoba College. He was graduated with honors from the Medical School of Trinity University, Toronto, in 1881, and after studying in London, Edinburgh, and Berlin, settled in Winnipeg in 1882. He was one of the founders of the Manitoba Medical College of Winnipeg. For three years he was professor of physiology and histology in this institution, and for the succeeding eight years professor of surgery. During this period he was a member of the staff of the Winnipeg General Hospital, was surgeon-in-chief at St. Boniface Hospital, and chief surgeon to the Brandon and Mordon Hospitals. In 1894 he went to Chicago as professor of surgery at the Chicago Post-Graduate Medical School and Hospital. In 1900 he became professor of clinical surgery at the College of Physicians and Surgeons, Chicago. He was surgeon to the Post-Graduate Hospital, surgeon-in-chief to the Chicago Hospital, and surgeon to the Cook County Hospital for the Insane.

Dr. Ferguson possessed a charming, though somewhat pugnacious personality, and was a doughty advocate of the truth, as he saw it. He stepped almost at once into the front rank of Chicago surgeons and soon gained national prominence. As a worker he was indefatigable; within five years of graduation articles from his pen began to appear in the medical journals. Even a casual acquaintance was impressed by his mental alertness, energy and indomitable will. No other man in America

had such a large experience with hydatid cysts; many Icelanders went to Winnipeg for operation. An interesting paper on hydatids of the liver appeared in the "Northwest Lancet," St. Paul, in 1893. He wrote over one hundred articles covering a wide range of surgical topics. He did many goitre operations, wrote on vesicovaginal fistula, devised the cuff operation, and was much interested in cleft palate. He also wrote a large work entitled "The Modern Operation for Hernia," and at the time of his death he was engaged in writing a text-book on surgery.

He was the first president of the Manitoba branch of the British Medical Association; a fellow of the American Surgical Association; of the American Association of Obstetricians and Gynecologists; and of the Southern Surgical and Gynecological Association. He was also a president of the Chicago Medical Society, and of the Western Surgical and Gynecological Society. In 1906 he was honored by the King of Portugal with the decoration of Commander of the Order of Christ of Portugal for his skill in surgery.

In 1882 Dr. Ferguson married Sarah Jane Thomas of Nassagaweya, Ontario, with issue, two sons, Ivan and George Alexander. He suffered with diabetes and then a carbuncle on his neck from which he died. He did not seem to realize, in the midst of his work, that so serious a disease had any significance in his case. He died in Chicago, October 20, 1911.

THOMAS S. CULLEN.

FERGUSON, Everard D. (1843-1906), surgeon of Troy, New York, was born in Moscow, Livingstone County, New York, on May 9, 1843, and was educated academically at Genesee College, University of Michigan, graduating from Bellevue Hospital Medical College in 1868. After practicing in New York State in Essex and Dannemora, he settled in Troy and remained there until his death on September 8, 1906. He married, in 1864, Marion A. Farlay, and had a son and a daughter.

He was a master of quick, accurate clinical diagnosis and his insight into complicated conditions was astonishing. As an operator, too, he had consummate ability in overcoming any unforeseen emergency. For twenty-five years he was summoned hither and thither in New York State and his resources for keeping appointments were amusing. He would sometimes get a lift on a freight train or an engine, once doing what was an unparalleled thing in those days, having the New York Albany express stopped to take him up.

Keenly interested in medical literature and societies, he was a founder of the New York State Medical Association and its president in 1899, also originator and a founder of the Medical Association of Troy. His biggest work was founding the Samaritan Hospital in Troy, for which he raised about a quarter of a million dollars by private solicitation. He himself was chief of its medical and surgical staff, and at death had done some 2,153 operations, of which 907 were abdominal sections.

His chief contribution to medical literature was the editing of and writing original articles in the "Transactions of the New York State Medical Association," writing them in good virile English. His alert intelligence and gift of the spoken word made him also a welcome addition at medical meetings.

JAMES P. MARSH.

FERNALD, Reginald (1595-1656). The state of New Hampshire had its beginning at Strawberry Bank in 1623, and the little colony there had the severest hardships of life on the frontier. It was without a physician for eight years, then in 1631 there was an arrival in the colony of some fifty men and half as many women on the ship "Warwick," which dropped anchor in the harbor on July 4, 1631. Among these was Dr. Reginald Fernald, who was the first physician to settle in the province of New Hampshire, and the second in New England. He was born in Bristol, England, July 6, 1595. He is said to have resigned a position in the English Navy to come to America. From the few records of his career that have been left to us, it is known that he was a man of more than ordinary ability, and served the colony to which he had joined himself with honor and fidelity. Soon after his arrival he was elected captain of the military company in the little colony, was drawn as grand juror in 1643, elected town recorder in 1654-1655, was trial justice of the peace, recorder of deeds, surveyor and commissioner, and clerk of Portsmouth.

The name of Strawberry Bank was changed to Portsmouth through the efforts of Dr. Fernald in a petition which he and four others presented to the General Court in May, 1653. The first coroner's inquest held in New Hampshire was in January, 1655, by a jury of twelve men, under the direction of Dr. Fernald, who certified that the said jury returned the following verdict:

"Wee whose names are subscribed doe testifie how wee found Thomas Tuttell, the son of John Tuttell, by the stump of a tree which he had newly fallen upon another limb of the other tree, rebounding back and fell upon him, which was the cause of his death as wee consider. This was found the last day of the last March."

Dr. Fernald died at Portsmouth, October 6, 1656.

IRA JOSLIN PROUTY.

FERNALD, Walter Elmore (1859-1924), Massachusetts psychiatrist, teacher of the study and training of the feeble-minded, was born in Kittery, Maine, February 11, 1859, the son of William A. and Margery C. Fernald. Brought up on a farm he had his preliminary education in the schools of New Hampton, N. H. He taught a country school and was apprenticed to a Portland, Me. physician. Entering the Medical School of Maine (Bowdoin) he received his M. D. in 1881. Harvard conferred her honorary A. M. on him in 1913. For five years after graduation from Bowdoin Fernald was assistant physician in the state insane hospital at Mendota, Wisconsin and in 1887 he was appointed superintendent of the Massachusetts School for the Feeble-Minded, then in South Boston. Fernald supervised the construction of the new buildings at Waverley and by 1893 completed the transfer of his four hundred charges to their new school. Here he built up an organization for the training of the feeble-minded which became a model and attracted visitors from all over the world. He brought to bear on the problems of the feeble-minded profound sympathy, rare tact and untiring industry. He grouped around him able teachers and inspired them with his devotion. He instructed physicians, medical students, psychologists, social workers, nurses. He lectured at Tufts College Medical School, where he was associate professor of mental diseases, also at Harvard, holding there the positions of associate in psychiatry, in the Graduate School of Medicine, as well as lecturer on the mental diseases of children in the Harvard Graduate School of Education. Dr. Fernald travelled about Massachusetts lecturing to medical audiences whenever opportunity offered, carrying the story of the burden of the feebleminded and how best to care for them. Through his efforts the Legislature passed a law in 1919 for the state-wide examination of mentally retarded children, and he did all he could to further its successful application, giving courses of lectures to the physicians on whom the actual examinations of the children devolved and also inspiring confidence in the public in the wisdom of this measure. His chief interest in the advances in this particular field of psychiatry was in a broad clinical observation but he carried on researches in collaboration with other workers in the pathological aspect. The Waverley Researches on the Pathology of the Feeble-Minded, in three series, 1918-1924, represent the high-water mark of research on the pathological anatomy of feeble-mindedness in this country. He reviewed the development of thought in relation to the topic of feeble-mindedness in his presidential address to the American Association for the Study of the Feeble-Minded, in May 1924, looking back to the situation in June 1893, when he held the same office and delivered his first presidential address to that association.

Dr. Fernald attributed great importance to the education of the public in the problems of mental health in general. He was vice-president of the Massachusetts Society for Mental Hygiene, organized in 1912; director of the National Committee for Mental Hygiene and chairman of its committee on Mental Deficiency. Also he was president of the Boston School for Occupational Therapy in virtue of his constant advocacy of the gospel of work for the mentally handicapped, so well provided for in the school at Waverley at the time of his death an institution of 1600 beds, an out-patient department and a farm where the inmates grew all of the vegetables and supplied the milk. On the organization of the Massachusetts Psychiatric Association in 1924 Dr. Fernald naturally became its first president.

While at Mendota, Wisconsin, in 1887 he married Kate M. Nolan of Janesville, in that state.

Pneumonia seized him while in full activity and he passed away at his school after a brief illness, November 27, 1924. The Legislature, at its subsequent session, renamed the Massachusetts School for the Feeble-Minded the Walter E. Fernald School for the Feeble-Minded.

WALTER L. BURRAGE.

Ferrer, Henry (1850-1890), of California.

See Cyclopedia American Medical Biography, H. A. Kelly, Phila., 1912, vol. i. p. 303.

Field, Edward Mann (1823-1888), Early practitioner of Bangor, Me., See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 382-383.

FIELD, Nathaniel (1805-1888), of Jeffersonville, Indiana, was born in Jefferson County, Kentucky, November 7, 1805. His father, who was a native of Virginia and served in the Revolutionary war, emigrated to Kentucky in 1784. Nathaniel was educated in the best schools of the state and took his M. D. at Transylvania University, settling in Jeffersonville, Indiana, in 1829. In 1838-39 he was a member of the legislature; was one of the first antislavery men of the West and freed several valuable slaves he had inherited; he drafted a city charter for Jeffersonville and had it passed by the legislature; he established the first Christian (or Cambellite) church in 1830, and in 1847 the Second Advent Christian church, serving as pastor of the first for seventeen years and of the latter for forty years, without compensation.

Dr. Field held a debate, in 1852, with Elder Thomas P. Connelly on the "State of the Dead," and the arguments were published in book form. He published a humorous poem, entitled "Arts of Imposture and Deception Peculiar to American Society," 1858. Others of his writings are: a monograph on Asiatic cholera, articles contributed to the medical journals, and he left manuscript lectures on "Capital Punishment"; "The Mosaic Record of Creation"; "The Age of the Human Race"; and "The Chronology of Fossils."

During the civil war he was surgeon of the 66th regiment of Indiana volunteers; in 1869 he was president of the state medical society.

Dr. Field died at his home, August 18, 1888.

Finley, Clement Alexander (1797-1879), surgeon-general of the United States Army. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 383.

FIRESTONE, Leander (1819-1888), surgeon and gynecologist, of Cleveland, was born in Wayne County, Ohio, April 11, 1819. Cradled in poverty and brought up as an ordinary farmer's boy, the lad fought his way steadily forward, studying at night by the light of a burning brush pile until he was able to attend a few sessions of the district school, then securing the direction of such a school for himself, and finally saving sufficient money from his scanty earnings to attend medical lectures, first at the Jefferson Medical College, Philadelphia, and then in that of Cleveland. From the latter institution he was graduated in 1841 and settled immediately in Congress, Wayne County, near his place of birth. In 1847 he was called to the position of demonstrator of anatomy in the Cleveland Medical College and occupied this position for six years. In those early days the duties of the modern demonstrator were largely combined with the more exciting adventures of the not entirely historical "resurrectionist," and Dr. Firestone is reported to have been a model demonstrator. In Wooster he enjoyed a large practice and almost monopolized surgery in the counties of Wayne, Stark, Summit, Holmes and Ashland, acquiring rapidly an extensive reputation. In 1864 Dr. Firestone was called to the chair of obstetrics and the diseases of women and children in the newly organized Charity Hospital Medical College in Cleveland, a chair which he exchanged in 1866 for that of the principles of surgery in the same college. In 1879 he was once more transferred to the chair of gynecology, in which he continued active until a short time before his death. In 1878 he was appointed superintendent of the Central Ohio Insane Asylum at Columbus, and managed to combine the duties of this position with those of a professor in the Wooster Medical College without detriment to either. At the close of his connection with Wooster he was made professor emeritus, and in 1874 received the degree of LL. D. from the University of Ohio, situated at Athens. He died of apoplexy at Wooster, November 9, 1888, leaving a son, Dr. W. W. Firestone, who continued his practice in Wooster until he also died.

Dr. Leander Firestone was president of the state medical society in 1859-60, and a member of the Boston Gynecological Society. In addition to his valedictory address to the Ohio State Medical Society ("Transactions of the Ohio State Medical Society," 1860), numerous papers from his pen are to be found, in the pages of contemporary medical journals.

In 1839 he married Susannah Firestone and had two sons, William W. and M. O., who both became physicians.

HENRY E. HANDERSON.

FIRMIN, Giles (1615-1697), of Ipswich, Mass., practiced medicine all his life, although his chief reputation was gained as a

religious writer and dissenting divine in England, after he was thirty years old. During his early manhood he served the inhabitants of Ipswich, Massachusetts, as physician, for six years, and he may have practiced in Boston previously. He lectured on anatomy and his teaching stimulated the General Court to pass an act in 1647 reciting the necessity that "such as studies physick, or chirurgery may have liberty to read anatomy and to anatomize once in four years some malefactor in case there be such as the court shall allow of."

In a letter to Governor Winthrop dated at Ipswich, February 15, 1640, Firmin says: "only for matter of employment I have as much here as I desire and love my planting more than it, only the highest ambition of my thoughts and desires are to be useful and serviceable here in a common way. We have divers very ill; and fluxes and fevers, I observe, are very dangerous."

Firmin was born in the County of Suffolk, England, in 1615. His father, Giles Firmin, was an apothecary of Sudbury who came to New England in the fleet with Winthrop, was chosen deacon of the church at Boston, and died in that town previous to October 6, 1634, being selectman at the time of his decease. The son studied at Cambridge, England, under the tutorship of Thomas Hill, D. D., entered Emmanuel College in 1629, but did not graduate, accompanied his father to Boston and was admitted to the First Church before October 11, 1632, as established by the records of that church. Probably he returned to England before the fall of 1634 and was a student under Dr. John Clerk (written also Clarke) of London (1582-1653), president of the College of Physicians, 1645-1649, for in a letter written by a Mr. Robert Harmer concerning a religious controversy, about the year 1645 we find this: "Quaeries put to some independents of C. (Colchester) upon an occasion of a sermon preached by Mr. F. (Firmin), an independent apothecary physician, sometime servant to Dr. Cl. (Clerk) of London." In "The Real Christian," a popular book published by Firmin in England in 1670, and reprinted several times, he says that when his father died in the fall of 1634 he was "far distant," meaning probably that he was at his studies in England. It is likely that his father's death terminated those studies, for he says in his "A Serious Question Stated," a pamphlet: "Being broken from my study in the prime of my years, from eighteen years of age to twenty-eight, and what time I could get in them years I spent in the study and practice of physic in that wilderness till these times changed, and then I changed my studies to divinity."

Firmin was in Boston in March, 1637-8, as he mentions being present when Mrs. Hutchinson was excommunicated on the twenty-second of that month (Separation Examined, page 120). His name first appears in the records of the town of Ipswich, January 4, 1638-9, when he was granted by the freemen of that town, one hundred acres of land on condition that he would live there for three years. The town had been settled only five years and the number of inhabitants was small, for the town records tell us that in the first nineteen years, 1633 to 1652, the total number of male inhabitants over twenty years of age was 332. Therefore we are not surprised to learn by a letter to Governor Winthrop, under date of October 10, 1639, that Firmin asked permission to settle in another township and to sell his land. He says: "I am strongly sette upon to study divinitie, my studyes else must be lost; for physick is but a meene help." The apostle John Eliot says of him, writing September 24, 1647, to Mr. Shepard, the minister of Cambridge: "We never had but one anatomy (skeleton) in the country, which Mr. Giles Firmin, now in England, did make and read upon very well." As Dr. O. W. Holmes points out, Firmin may be regarded as the earliest lecturer on anatomy in the country.

Sometime before December 26, 1639, Dr. Firmin married Susan, daughter of the Rev. Nathaniel Ward, an English barrister and for three years minister of Ipswich, author of "The Body of Liberties," a codification of the laws of the Colony, and of a satirical tract called "The Simple Cobbler of Aggawam," an early name of Ipswich. Firmin speaks of having had three of his children baptized by ministers who never looked at him as a member of their church (Sober Reply to Mr. Cawdrey, page 20). The father-in-law was very poor, resigned his pastorate and was anxious to return to England, as is shown by his letters to Governor Winthrop. Dr. Firmin sailed in the fall of 1644, leaving his wife and children to follow with her father in 1646. He was shipwrecked off the coast of Spain but reached England in the following year, for he preached in Colchester July 30, 1645. There he was attacked for his independent views. He preached whenever the opportunity offered, engaged in theological

controversies and wrote many pamphlets. He moved to Shalford in 1646, was joined by his family and was ordained by the Presbyterians when thirty-six years old as minister of the church, only to be turned out with others of his brethren in 1662 when the Act of Uniformity went into operation, thereby losing his living and becoming a "Dissenter."

In 1672, on the Declaration of Indulgence, he set up a meeting at Ridgewell and there he continued until his death in April, 1697. During the ten years from 1662 to 1672 Dr. Firmin supported his family by the practice of medicine; apparently it was now more than a "meene help," for by the Five Mile Act of 1665 dissenters were prohibited from coming within five miles of any incorporated town, or of any place where they had been settled as ministers. Calamy (Calamy's Baxter, page 244) says of Firmin: "He practiced physic for many years, and yet was still a constant and laborious preacher, both on the Lord's days and week days too. * * * He had one considerable advantage above his brethren, which was the favour and respect which the neighboring gentry and the Justices of the Peace had for him, on account of their using him as a physician * * * The poor applying themselves to him, had often both advice and physic too for nothing; and of those who were more able, he took but very moderate fees; whereby he lost the opportunity of getting an estate, which had been a very easy thing."

WALTER L. BURRAGE.

FISCHEL, Washington Emil (1850-1914), an internist and medico-legal expert of St. Louis, Missouri, was born in that city, May 29, 1850, and was graduated from the St. Louis High School in 1868, and in 1871 from the St. Louis Medical College. The next few years he spent at the Universities of Prague, Vienna and Berlin. Returning to America in 1874, he settled in St. Louis, and soon had a very large practice. He held, from time to time, a number of important hospital appointments. He was also professor of hygiene and forensic medicine and professor of clinical medicine at the St. Louis Medical College from 1881 to 1889, and professor of clinical medicine at the medical department of Washington University, from 1911 until his death, September 15, 1914.

Dr. Fischel was a very kindly, courteous man, and always loyal to his friends. A man of broad interests there was hardly a department of science which did not greatly interest him.

T. H. SHASTID.

FISHER, George Jackson (1825-1893). It takes men of all kinds to make a complete medical portraiture of the country, and the bibliophile has his place in the collection. George Jackson Fisher, of North Castle, Westchester County, New York, where he was born, November 27, 1825, had a strong liking for natural history but was withal a decided booklover, a taste which his medical profession gave him ample excuse for indulging. He studied medicine first under Prof. Nelson Nivison in Mecklenberg and attended medical lectures afterwards at the University of the city of New York whence he was graduated in 1849 and began to practice with his former teacher. In 1851 he removed to Sing Sing and lived there until he died, successful as a surgeon in all the major operations, including Cesarean section, ligation of the carotid artery, etc., and writing a good deal on teratology. A paper on "Diploteratology" appeared in the "Transactions of the Medical Society of the State of New York," from 1863-8, and an article on "Teratology" in Johnson's "Universal Cyclopedia," vol. iv. Thoroughly imbued besides in medical history, he wrote "The Old Masters of Anatomy, Surgery and Medicine," "The Medical Men of Westchester County," and popularized S. D. Gross' "Autobiography" by adding over four hundred illustrations and forty autograph letters. He began to illustrate also "The Gold Headed Cane." His collection of some four thousand books, his fine engravings of old doctors, his cabinet of over four hundred medical medals made his library a delight to his confrères and his friends.

He came by his death as many another has done, by sepsis after an operation and a long-standing diabetes. He died February 3, 1893.

He had many honors, among them the A. M. of Madison University; president of the Medical Society of the State of New York; physician to the state prisons at Sing Sing, and twenty years brigade surgeon, New York National Guard. He was also editor of "The Physician and Pharmaceutist," 1868-9.

In "A Memorial Sketch of the Life and Character of the late John Foster Jenkins," (q. v.), (Trans. Med. Soc., State of New York, Syracuse, 1884, 369-387, G. J. Fisher), Fisher, in speaking of his friend's "bibliomania," reveals his own love of books. It was he says, "an innocent species of mania. It

brought an ample compensation in the way of pleasant diversion for spare hours, and an elegant culture otherwise unattainable. Though my books were burned as a funeral fire, they have served a purpose to me quite equal to their commercial value. By researches into the period and condition of the times of medical men; prevailing medical opinions of their era, their contributions to theory and fact; . . . . . the nature and extent of their labors and even the particulars relating to their personalities, ... we learned the story of our profession and traced the gradual evolution of the science and art of healing.

FISHER, James Cogswell (1808-1880), physician and educator, was born in Wilton, Connecticut, April 6, 1808, son of the Rev. Samuel Fisher and Alice Cogswell. He received his early education at Bloomfield Academy, New Jersey, and when fourteen entered Yale University, graduating in 1826. He received his M. D. at the College of Physicians and Surgeons, New York, in 1831. He went to live in St. Joseph County, Michigan, but the climate proving unsuitable, moved to Saddle River, New Jersey; in 1836 he went to New York and became professor of chemistry and mineralogy in the University of New York. Subsequently he took charge of a gold mine in Virginia and afterwards was associated with Rogers in surveying the James River Coal Basin. He returned to New York and worked with Morse on the electric telegraph at that time with Samuel Colt, experimenting in submarine batteries. In 1845 he was principal of a grammar school in Philadelphia; from 1855 to 1858 president of the Cooper Female Institute, Dayton, Ohio, and later was librarian of the Academy of Natural Sciences, Philadelphia.

At the beginning of the Civil War he was commissioned surgeon of the 5th New Jersey Volunteers, then of the 2nd New Jersey Brigade and later was medical director of Heintzelman's division and was on General Hooker's staff; he served in several places until honorably mustered out in 1865. In 1866 he retired to a farm in New Jersey, but ten years later settled in Washington where he died October 1, 1880. Fisher was author of a work on the Mosaic account of the creation, published in the Proceedings of the Academy of Natural Sciences, Philadelphia (1854).

In 1831 he married Eliza, daughter of Major Samuel Sparks, of Philadelphia, who had served in the war of 1812.

FISHER, John Dix (1797-1850), founder of the Perkins Institution for the Blind, at South Boston, and its physician, was the son of Aaron and Lucy Stedman Fisher. He was born in Needham, Massachusetts, March 27, 1797, was graduated from Brown University in 1820, then attended Harvard Medical School from which he received his degree in 1825. In the same year he went to Paris, where he spent two years in medical study under Laennec, Andral and Velpeau. In 1829 he published a book in Boston on "Confluent and Inoculated Small-pox, Varioloid Disease, Cow-pox, and Chicken-pox" from materials collected in Paris. It is dedicated to Dr. James Jackson (q. v.), from whom he conceived the idea of preparing the work, and is a quarto containing life-size plates made by a distinguished artist. It was a work of considerable importance. Later the plates and unsold copies were destroyed by fire.

Dr. Fisher was the first to introduce the education of the blind into this country. He conceived the plan of and was connected with the Perkins Institution for the Blind, at South Boston, founded with state aid, in 1829. He served both as visiting physician and vice-president from the beginning until his death, which occurred in Boston March 2, 1850.

Dr. Fisher had been elected an acting physician of the Massachusetts General Hospital shortly before his death. He was present at the early administrations of ether in surgery at the hospital and was one of the first to use ether in child-birth.

A committee composed of Hon. Charles Sumner, William H. Prescott, Thomas G. Cary, George N. Russell, D. Humphreys Storer (q. v.), S. G. Howe (q. v.), and Edward Brooks decided to erect a monument to Dr. Fisher's memory at Mount Auburn, which was duly executed in white marble. A portrait, painted by his brother, Alvan Fisher, is in the Boston Medical Library.

WALTER L. BURRAGE.

FISHER, Theodore Willis (1837-1914), Massachusetts alienist, was born in Westborough, Massachusetts, May 29, 1837, the son of Milton and Eleanor Metcalf Fisher, and died at his home in Belmont, in the same state after several years of invalidism, October 10, 1914. He was educated in the schools of Medway and Williston Seminary and Phillips Academy of Andover, and graduated at the Harvard Medical School in 1861. During the civil war he was a surgeon of the

44th Massachusetts Regiment. From 1884 to 1888 he was clinical instructor in mental diseases; from 1888 to 1898 he was lecturer on mental diseases in his alma mater. In 1881 he was appointed superintendent of the Boston Lunatic Hospital, a position he resigned in 1895. For several years he was examiner for the Public Institutions Registration Department of Boston and with a confrère committed most of the insane to the state insane hospitals from that city, also he saw many cases of mental disease in consultation. In the seventies he was the leading expert in his branch in Boston, and was frequently called on to testify as a witness in court. He was active in all matters concerning the welfare of the insane, and earnestly advocated a new hospital for the mentally afflicted in Boston. He, largely, planned the Danvers State Hospital and the buildings first erected by the Boston Lunatic Hospital at West Roxbury.

He belonged to many medical societies and had been a member of the American Medico-Psychological Association since 1881. He was the author of a number of papers. Among these were "Plain Talks about Insanity," and "Was Guiteau Sane and Responsible for the Murder of President Garfield?" ("Boston Medical and Surgical Journal," 1888). He could speak with some authority on this latter subject, since he was employed as an expert in the Guiteau trial. As showing his interest in medical progress, mention may be made of a paper he published in 1889 on "Cortical Localization and Brain Surgery," and also a paper on "The New Psychology," in 1893.

FISKE, Oliver (1762-1837), of Worcester Mass., was the son of the "well beloved" Nathan Fiske, a minister in Brookfield, where Oliver was born September 2, 1762. His prompt enlistment in the patriot army in 1780, at the age of eighteen, by stimulating others to follow his example prevented a draft from the Brookfield company of militia already paraded for that purpose. After the expiration of his term of service he returned to his home and continued preparation for Harvard College, which he entered in 1783. He taught school in Lincoln during the winter vacation of 1786-87, but procured a substitute and hastened to Worcester to take part in "Shay's Rebellion", arriving in time to make the march to Petersham with Gen. Lincoln. Returning to college he was graduated with his class (1787), and after studying medicine three years with Dr. I. Atherton, of Lancaster, began practice in Worcester in 1790. He at once took a leading position and was active in forming the County Medical Socity, of which he was secretary from 1794-1802. and librarian from 1799-1804. He was the first president of the district society, was a counsellor of the Massachusetts Medical Society, and in 1811 delivered the annual address before the society in Boston, his subject: "Certain Epidemics Which Have Prevailed in the County of Worcester," describing the smallpox of 1796 and "spotted fever" of 1810. In 1824 Harvard honored him with her honorary M. D.

Popular, and a scientific physician, well acquainted with natural philosophy, chemistry and physiology, Dr. Fiske, had he devoted himself to his profession would undoubtedly have made his mark both as practitioner and medical writer. But his profession soon became secondary to other objects. An ardent Federalist, he exerted no small influence in the party, and terse and epigrammatic articles from his pen on the questions of the day are scattered through the current literature of the time. An orator of no mean ability, he was often called on. Some of these orations and political articles have been printed; more remain in manuscript. In 1798 he was town treasurer, and in 1803 special justice of the Court of Common Pleas, also a member of the American Academy of Arts and Sciences and corresponding secretary of the Linnæan Society of New England. Increasing deafness caused him to retire from active life about 1822, and the next fifteen years were largely devoted to horticulture and agriculture.

He lived in the old Judge Jennison house on Court Hill, removed when State Street was opened, with an estate reaching from the Dr. Dix place to the Second Church, and extending up the hill as far as Harvard Street. He died in Boston, January 25, 1837, aged seventy-four. A son, R. Treat Paine Fiske, A. B. Harvard, 1818, and M. D. 1821 was a physician in Hingham, where he died in 1866.

LEMUEL F. WOODWARD.

FITCH, Simon (1820-1905), inventor of surgical instruments, gynecologist, came of a family named Ffytche of Widdington, Essex, England. He was born at Horton, Nova Scotia, January 2, 1820, and died at Halifax, Nova Scotia, September 13, 1905. His general education was received at the academy of his native town; his professional one in London, Paris and at Edinburgh University, graduating M. D. from the last university, August 2, 1841. Dr. Fitch was actively engaged in

professional practice for upwards of sixty years at various places, including St. John, New Brunswick; Portland, Maine; New York City; and finally at Halifax for a period of twenty-eight years.

He was a fellow of the Royal Obstetrical Society, London; a member of the British Medical Association; the Parisian Medical Society; the American Medical Association; the New York Medico-Legal Society, and the Maine Medical Association. For a time he was resident surgeon of the Edinburgh Maternity Hospital, surgeon to the St. John, New Brunswick, Hospital, consulting surgeon to the Victoria General Hospital, Halifax, and examiner in lunacy for the state of New York also holding for many years afterwards a surgeoncy in the United States War Department.

In 1871 Dr. Fitch introduced an improvement in the double tubular trocar, by removing the protecting cannula from the outside to the inside of the puncturing tube. In 1875 he invented the "dome trocar," with application to ovariotomy, aspiration and transfusion; and the same year a coupling for instantaneous attachment and detachment of the aspirator needle. He also invented the clamp forceps in 1876, the handy aspirator in 1877, the trocar catheter in 1882, and several other valuable surgical instruments. Although a general practitioner he gave special attention to gynecology, being a dextrous operator, and soon acquiring a large fortune.

He was a tall, handsome man, dignified, punctilious, exacting, and not easy of approach. He took practically no interest in public affairs, his leisure being devoted to travel and the study of English literature, especially the Bible and Shakespeare.

Among Dr. Fitch's writings are: "Lithotomy" ("Maine Medical and Surgical Reporter," August, 1858); "Excision of a Large Uterine Fibroid Tumor" ("Boston Medical and Surgical Journal," November 20, 1862); "Peculiarities of the Operations of Three Great Ovariotomists—Wells, Atlee, Keith" ("American Journal of Obstetrics," May, 1872); "Observations upon Medical and Surgical Practice in Great Britain" (Transactions of the Maine Medical Society, 1872); "Paracentesis, Aspiration and Transfusion" (Transactions of the International Medical Congress, Philadelphia, 1876); "The Dome Trocar and Associated Instruments" ("British Medical Journal," February 5, 1887); "Sanity, Insanity and Responsibility" ("Medico-Legal Journal," June, 1898).

He was twice married; his first wife was Miss Paddock of St. John, New Brunswick; his second, Miss Ackerman of Portland, Maine. He had two sons and six daughters, his eldest son, Dr. T. S. P. Fitch, becoming a medical practitioner in Orange, New Jersey.

DONALD A. CAMPBELL.

FITZ, Reginald Heber (1843-1913), Boston pathologist, teacher and the first to describe appendicitis and acute pancreatitis, was born at Chelsea, Massachusetts, May 5, 1843. His father, Albert Fitz, was a consul of the national government, his mother was Eliza R. Nye; both being of English stock.

He received his preliminary education in the Chauncy Hall School, Boston, was graduated A. B. at Harvard in 1864, and M. D. in 1868, and received an LL. D. in 1905. During his last year in medicine he was house surgeon in the Boston City Hospital. He then spent two years abroad with Rokitansky Oppolzer and Skoda in Vienna, and with Cornil in Paris; but the master spirit nearest akin to his own was Rudolph Virchow in Berlin, whose creation of a cellular pathology Fitz introduced to America, thus becoming our pioneer scientific pathologist. While in Berlin he wrote a paper on the changes in the cartilages of the bronchi in bronchiectasis in the fifty-first volume of "Virchow's Archives".

On his return home in 1870 he settled down to practice in Boston, and at once entered upon duties as a teacher which extended through his whole life, until his age retirement. From 1870 to 1873 he was instructor in pathological anatomy in the Harvard Medical School and from 1873 to 1878 he was assistant professor of pathology. In 1878 he was selected to succeed J. B. S. Jackson (q. v.) in the chair of pathological anatomy, the title being changed in 1879 to that of Shattuck Professor of Pathological Anatomy. He retained this position until 1892, when he was succeeded by W. T. Councilman, he himself then becoming Hersey Professor of the Theory and Practice of Physic in the Harvard Medical School. His pathological lectures, exponents of the new and quickening doctrine of the "cellular pathology," were thronged with interested students and were remarkable "in form and in substance, models of clear and precise exposition, admirably delivered in language, every facetted word of which seemed to have been chosen so that it and it alone could have filled the place." In 1887 he was made a visiting

physician to the Massachusetts General Hospital.

Fitz entered upon his career as a teacher at the critical time when the faculty had just adopted a progressive course of instruction to cover a term of three full years with examinations in writing, and with the resolution that no student should graduate without passing in every department. In the year in which he became an instructor, and before he became a member of the faculty, in 1871, the services of H. P. Bowditch (q. v.), were secured as assistant professor of physiology, and the faculty engaged to do its utmost to provide the latter with laboratory. The same plans were entered upon on chemistry, and thus two definite policies were adopted of far-reaching significance for the future of American scientific medicine—namely, the teaching of the sciences upon which medicine depends, by the laboratory method, and the employment as teachers of these sciences of men not harassed by the practice of medicine. For twenty-eight years Fitz was on the important committee of courses of medical studies and for seventeen years guided its deliberations. His influence upon the development of scientific medicine in America in this way was perhaps more important than his two brilliant medical discoveries. That the Harvard School did much to inspire and help mould the Johns Hopkins course, I well know.

In taking up his general medical and consulting practice Fitz had the rare advantage of a background of thorough training in pathology; in cultivating his diagnostic powers, he had a habit of examining carefully the cases in the surgical ward before operation. Also he required that a clinical diagnosis should be made known before an autopsy.

In 1897 and in 1903 he was president of the Congress of American Physicians and Surgeons. In 1908 as emeritus professor, he retired from his chair, gave up his hospital position at the age limit of sixty-five years, and devoted himself for the remaining five years to private practice. On his sixty-fifth birthday his former pupils and assistants issued a volume in his honor entitled, "Medical Papers Dedicated to Reginald Fitz." It was due to Fitz that Dr. Henry Francis Sears made his noble gift of the "Sears Pathological Laboratory" to the Harvard Medical School, the first laboratory in America used exclusively for the study and teaching of pathology.

Fitz's writings are sharp, critical and lucid. He was a thorough student of medical literature and was a scholar rather than a clinician. The titles of his papers number about thirty-eight. His best-known claims to fame are vested in two theses, "Appendicitis" and "Acute Pancreatitis." The classical article on appendicitis was presented at the Association of American Physicians in 1886, with the title, "Perforating Inflammation of the Vermiform Appendix," and he gave there, for the first time, a clear picture of the clinical course and diagnostic signs of the disease together with its pathologic changes, advocating a radical operation as the immediate objective and the only rational means of saving life, where there is not a prompt subsidence of threatening symptoms. His conclusions were firmly based upon some two hundred and fifty-seven cases of perforating ulcer, and two hundred and nine cases diagnosed as typhlitis and perityphlitis and perityphlitic abscess, in which the diagnosis was clinical only and not anatomical. The treatment recommended at the outset was opium, rest and liquid diet, and food in small quantities often repeated; but if general peritonitis seemed imminent at the end of twenty-four hours the abdomen should be opened and the appendix removed. In 1889 he analyzed a further series of seventy-two cases, occurring since 1886, and urged the interval operation. In this year he delivered another memorable address before the New York Pathological Society on "Acute Pancreatitis." He carefully distinguished the hemorrhagic, the suppurative and the gangrenous forms of acute pancreatitis. Since that time this disease, which was at first regarded as rare and curious, has come out into the light of day, and is now well known, and often diagnosed by all educated physicians and sometimes cured by operation. Here appears the earliest suggestion that fat necrosis is the result of a lesion of the pancreas, confirmed a year later by Langerhans.

In 1888 Fitz read a paper on "Intestinal Obstruction" before the first Congress of American Physicians and Surgeons, based on a critical study of two hundred and ninety-five selected cases; here again the conservative physician urges surgery. In 1903 he again addressed the sixth Congress of American Physicians and Surgeons on pancreatic disease, and was elected president. In 1875 he wrote on tubo-uterine or interstitial pregnancy (Am. Jour. Med. Sci. 1875). He wrote the article on diseases of the esophagus for the

"Twentieth Century Practice," New York, 1896. The following year, in collaboration with H. C. Wood (q.v.) of Philadelphia, he published "Practice of Medicine." He prepared a large number of anatomical specimens to illustrate his lectures; these are now in the Warren Museum, Harvard Medical School.

Dr. Fitz married Elizabeth Loring Clarke, daughter of Dr. Edward Hammond Clarke (q. v.), of Boston, and they had four children, a son Reginald, following his father in the practice of medicine.

It seemed to be Fitz's mission to explore obscure medical territories and thus to enlarge the domain of his aggressive surgical confrères. As a lecturer he was clear, comprehensive, logical and thorough. His diction was rapid and he always seemed to have more to say than could be crammed into an hour. The knife of logic in his hand, like that of steel in the hand of the surgeon, was guided solely by the intellect, as the unwary student often found. His critical faculty was highly developed and fairness of mind was instinctive.

He died September 30, 1913, at Brookline, Massachusetts, after an operation for chronic gastric ulcer.

HOWARD A. KELLY.

FLAGG, Josiah Foster (1789-1853), dentist, inventor and anatomical artist, was born in Boston, January 11, 1789. His father, Dr. Josiah Flagg, was long known as the "Boston Dentist," being almost the only person who confined his whole attention to dentistry. His mother was Eliza Brewster, a descendant of Elder William Brewster of the "Mayflower." Josiah F. Flagg received an indifferent early education, learned the trade of cabinet maker and attended an academy in Plainfield, Connecticut, finally, in 1811, becoming a student of medicine under Dr. J. C. Warren (q. v.). In 1813 he made some engravings of the large arteries for Dr. Warren's work on "The Arteries." A few years afterwards he made the drawings for "Comparative Views of the Nervous System" published by Dr. Warren. Dr. Warren stated that the representations of the anatomy were beautifully and accurately executed. Flagg invented a bone forceps which was extensively used by the medical profession, and in 1821 he published in the "New England Journal of Medicine and Surgery," vol. x, page 38, a description of his improvements on Desault's apparatus for treating fracture of the femur, an apparatus which was long used in the Massachusetts General Hospital.

Flagg was a graduate of Harvard Medical School in 1815 and practiced medicine for two years in Uxbridge, Massachusetts. Returning to Boston he married May Wait, a daughter of T. B. Wait, of the publishing firm of Wait and Lilley.

In 1833 and the succeeding years he allied himself with Dr. N. C. Keep in the manufacture of mineral teeth, inventing and perfecting the best made up to that time. In 1844-45 he conceived the idea of drilling into the nerve chamber, in order to prevent the ill consequences arising from a filling placed over the exposed or diseased nerve. His results were published in the "Boston Medical and Surgical Journal", January 27, 1847.

In 1846 he was involved in the famous ether controversy in which he opposed the patenting of the "Letheon" or ether as proposed by Morton and also was in his later years much interested in homeopathy. Dr. Flagg was founder of the Boston School of Design for Women, organized on a plan similar to that of the school in Philadelphia. He assisted in the management of the school and in its financing, and a scholarship was afterwards established in his honor. He died December 20, 1853.

WALTER L. BURRAGE.

FLEET, John (1766-1813), the first to receive a degree from Harvard Medical School, was born in Boston, Massachusetts, April 29, 1766, and died there unmarried, Jan. 4, 1813, in his 47th year. His grandfather, Thomas Fleet, who came from England and settled in Boston, was a book-seller, printer and newspaper publisher, his paper, the "Evening Post", being the best in New England and his "Fleet's Almanacks" a standard authority for many years. Another claim to notoriety was the fact that he was considered by many as the original compiler of the "Mother Goose Melodies," but this claim is disputed. He died in Boston in 1758, leaving as his successors in business his two sons, Thomas and John, the latter, who died in 1806, being the father of John Fleet, junior, the subject of this sketch, a graduate of Harvard College in 1785 at the age of 19. After graduation he studied medicine in the Medical Institution of Harvard College and dissected under the guidance of Dr. John Warren (q. v.). No medical degree had been granted by the College before 1788 owing to jealousies and friction between the medical professors and the Massachusetts Medical Society, but in that year John Fleet and George

Holmes Hall, students in Dr. Warren's Surgery, applied for degrees, which were granted on July 16 after considerable discussion on the part of the professors. The degree was M. B., called Bachelor in Medicine, and Fleet's name coming alphabetically before that of his classmate Hall, was thus the first to receive a medical degree from Harvard. The bestowal of this new degree was referred to by John Quincy Adams in his Diary thus: "There was a new ceremony of giving a Bachelor in Physic. Two young fellows by the names of Fleet and Hall received these diplomas, and even the President (Willard) in giving them seemed to have the awkwardness of novelty about him."

Seven years later, in 1795, John Fleet was the first to receive the degree of M. D. from the College, having passed an examination and been approved by the medical professors and also having presented a thesis in Latin, which was printed by his brother Thomas. The title of the thesis was: "Observationes ad Chirurgiae Operationes Pertinentes." A copy of this is in the Boston Medical Library. Another of his publications that has come down to us is a Discourse delivered before the Massachusetts Humane Society, of which he was a member, June 13, 1797, on "Animation," having reference to drowning. For this he received a vote of thanks of the Society and was asked for a copy for the press. Dr. Fleet was the first assistant appointed in the medical department of Harvard College, being made assistant to Dr. John Warren in 1793.

He was associated with the best medical men in Boston in his practice, and was one of the founders of the Medical Improvement Society in 1803. From this Society grew the first Boston Medical Library, instituted July 1, 1805, of which Dr. Fleet was the first librarian, the books being kept at his house in Milk Street until he was succeeded by Dr. Warren, in 1807. He was librarian of the Massachusetts Medical Society from 1800 to 1813, the year of his death, and secretary of the Society from 1798 to 1802, at a time when it was in a most decadent condition, as is evidenced by the scanty entries in his handwriting in the records of the Society.

JOHN W. FARLOW.

Fleming, Alexander (1841-1897), Canadian physician, see American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 391-392

FLETCHER, Robert (1823-1912), one of the most eminent medical scholars and bibliographers of recent times was born at Bristol, England, March 6, 1823, where his father was a local attorney and accountant. After completing his preliminary studies, he was bred to the law. When he had spent two years in his father's office, he decided to study medicine, entered the Bristol Medical School in 1839, and completed his course at the London Hospital, becoming a member of the Royal College of Surgeons and a licentiate of the Society of Apothecaries in 1844. In 1843 he married Miss Hannah Howe, of Bristol, and wishing to try his fortunes in the new world, crossed the ocean with his young wife, and settled in Cincinnati, Ohio, in 1847. When the Civil War broke out, he became surgeon of the first Regiment of Ohio Volunteers (1861), and, after three years' active service in the field, was commissioned surgeon, United States Volunteers, in charge of Hospital No. 7, at Nashville, Tennessee, and became subsequently medical purveyor of the army at the same post, receiving, at the end of the war, the brevets of lieutenant-colonel and colonel "for faithful and meritorious services." In 1871 he was transferred to the Provost Marshal's Bureau in the War Department at Washington, then in charge of Colonel Jedediah H. Baxter, United States Army, took an active part in the preparation of the two volumes of anthropometric statistics issued by that office (1875), and was the author of a treatise on anthropometry which prefaces this valuable work. In 1876 he became associatedwith Dr. John S. Billings (q. v.) in the Library of the Surgeon-General's Office, the nucleus of which, begun in Surgeon-General Lovell's (q. v.) time (prior to 1836), was a small collection of some three or four hundred books at the beginning of the Civil War, the library now containing upward to half a million volumes and pamphlets. In building up this great collection, Dr. Billings had early conceived the idea of printing a subject-index of the medical literature of the world, and, in 1876, he published a "Specimen Fasciculus of a Catalogue" of the Library, in effect a combined index of authors and subjects arranged in dictionary order in a single alphabet, which was submitted to the medical profession for criticism. A little later Dr. Fletcher was assigned to duty in the Library and became the principal assistant in the redaction of the Index Catalogue, the first volumes of which were printed in 1880. After the completion of the first

series in 1895, Dr. Billings was retired from the army at his own request, becoming professor of hygiene in the University of Pennsylvania and subsequently director of the New York Public Library, and the redaction of the second series remained in charge of Dr. Fletcher. To this work Dr. Fletcher gave his rare scholarship and his extraordinary capacity for close and intensive proof-reading, and his labors were often carried, as Dr. Billings has said, "far beyond mere routine or the limits of office hours"; indeed, he continued to read the proof down to the beginning of his last illness. The "Index Medicus", in which Dr. Billings and Dr. Fletcher were associated as editors, was begun as an extra-official publication in 1879, running through twenty-one volumes (1879-99). In 1903 it was revived, under generous patronage of the Carnegie Institution of Washington, with Dr. Fletcher as editor-in-chief (1903-11).

During the years 1884-88, Dr. Fletcher was lecturer on medical jurisprudence at the Columbian University, Washington, D. C., and at the Johns Hopkins University from 1897 till 1903. He is described as a clear and attractive lecturer, very popular with his classes. He was president of the anthropological, philosophical and literary societies of Washington, as also of the Cosmos Club. Many honors were paid him in his later years, in particular the banquet given to him by leading members of the profession on January 11, 1906, and the unique award of the gold medal of the Royal College of Surgeons (1910), a distinction which had been conferred upon only eleven physicians in ninety years, most prominent of whom were Parkinson (1822), Thomas Bevill Peacock (1876), Sir Richard Owen (1833), Sir W. J. Erasmus Wilson (1884), Sir James Paget (1897) and Lord Lister (1897). He also received honorary medical degrees from Columbian University (1884), and from his original alma mater at Bristol, which he was pleased to obtain only a few days before his death. During his later years he was the oldest living graduate of the London Hospital.

Dr. Fletcher was vigorous and active up to the last two years of his life. A severe attack of diphtheria in the spring of 1911 brought on a condition of enfeebled health, which he bravely weathered, but to which he gradually succumbed, dying on the morning of November 8, 1912. He was buried at Arlington with the honors commensurate with the military rank he had attained.

Dr. Fletcher was survived by a daughter, who was the wife of General Leon A. Matile, United States Army, and by his son, Captain Robert H. Fletcher, United States Army (retired), whose charming literary productions are well known. Another son, Lieutenant Arthur H. Fletcher, United States Navy (retired), died in 1911.

During his long life, Dr. Fletcher was the author of many interesting contributions to the literature of anthropology and the history of medicine, which may be listed in chronological order, as follows: "On Prehistoric Trephining and Cranial Amulets," 1882; "Paul Broca and the French School of Anthropology," 1882; "Human Proportion in Art and Anthropometry," 1883; "A Study of Some Recent Experiments in Serpent Venom," 1883; "Tatooing Among a Civilized People," 1883; "Myths of the Robin Redbreast in Early English Poetry," 1889; "The Vigor and Expressiveness of Olden English," 1890; "The New School of Criminal Anthropology," 1891; "The Poet—Is he Born, Not Made?" 1893; "Anatomy and Art," 1895; "Brief Memoirs of Colonel Gerrick Mallery, United States Army," 1895; "Medical Lore in the Olden English Dramatists and Poets," 1895; "The Witches' Pharmacopœia," 1896; "Scopelism," 1897; "A Tragedy of the Great Plague of Milan in 1630," 1898; "William Whitney Gooding," 1900; "A Rare Reprint of a Rare Work of Vesalius," 1909; "Columns of Infamy," 1912; "Diseases Bearing the Names of Saints," 1912.

Of these, the monograph on "Prehistoric Trephining," 1882, the first handling of the subject in English, is a good example of his capacity for exhaustive research and directness of statement, containing everything known on the subject up to the time of its publication. As an instance, we may say that the cranial mutilation which was observed in prehistoric skulls by Manouvier in 1895 and described by him as the "sincipital T" had been already noted by Dr. Fletcher, in 1882 (p. 28), as a common practice among the natives of the Loyalty Islands, as first described by the Rev. Samuel Ella, an English missionary in 1874. The "Tragedy of the Great Plague at Milan" (1898) is a remarkable piece of synthetic work, the story having been developed "ab initio" from a rare old Italian engraving. The paper on "Medical Lore in the Older English Dramatists and Poets" (1895) is the most scholarly and thoroughgoing treatment of the subject in English, forming, as it were, a medical pendant to Charles Lamb's immortal "Specimens" from

the Elizabethan poets. Dr. Fletcher had a wonderful retentive memory for poetic citations, often quoting the most recondite things offhand, and his papers on the poetry of his native land were perhaps those dearest to his heart. He was especially interested in bird lore, and he selected most of the poetic mottos descriptive of birds in the Smithsonian Institution. It had been his cherished intention to enlarge his essay on the Robin Redbreast with the valuable material which he had collected through many years, and it is hoped that this paper will some day appear in extended form.

Up to the time of his last illness, Dr. Fletcher maintained a most active interest in recent advances in medicine and in scientific and secular literature. He read most modern books that were worth reading, and commented freely upon them. As he had a definite contempt for weakness of character and mental ineptitude, he thought but little of the muddled logic, the sentimental glorification of crime, which disfigures the writings of Nietzsche and his school. On being shown a portrait of the unfortunate Nietzsche, with the Cro-Magnon jaw and "eyes of a trapped wolf," he handed back the picture with the brief humorous comment: "Hardly the sort of man one would care to meet in the traditional dark lane on a rainy night."

In person, Dr. Fletcher was the tall, dignified, stately and "distingué" gentleman of the old school, much respected by old and young alike for his cheerful stoicism and military promptitude, his ready wit and courtly ways. In the relations of private life, he was most kindly and generous, even with little children, who always liked him. An Englishman, "de race," he had the Saxon's strength of hand and the independence of the Western men, he did not need his war-time experience in the field to acquire a stoical disregard for pain and a fine sense of duty and loyalty. "He had," says Sir William Osler, "A rare gift for friendship; and all his colleagues at the Johns Hopkins Hospital were devoted to him. After his Jurisprudence lecture at the Johns Hopkins Hospital, at the hospitable board of the Director, Dr. Hurd, many of us would gather, delighted to hear Dr. Fletcher's reminiscences of the profession, which went back to the forties. He had met Sir Astley Cooper, and he knew well the famous old men of the Bristol School, and could tell tales of the Middle West in the palmy days of Drake and Dudley and Caldwell. It was a rare treat to dine with him quietly at his club in Washington. He knew his Brillat-Savarin well, and could order a dinner that would have made the mouth of Coelius Aspicius to water."

The profession lost in Dr. Fletcher an accomplished scholar, whose work will be esteemed as long as medical bibliography is of importance; his friends and intimates miss the high-minded, honorable gentleman, the staunch and loyal friend.

FIELDING H. GARRISON.

FLETCHER, William Baldwin (1837-1907), alienist of Indianapolis, was the son of Calvin Fletcher, a lawyer who came from Vermont and settled in the woods on the site of Indianapolis in 1821, and of Sarah Hill Fletcher, of Kentucky. William was born in the town where his life was to be spent, August 18, 1837. His early training was at the academy at Lancaster, Massachusetts, and as a student with Louis Agassiz (q. v.) in Cambridge. Thence he entered the College of Physicians and Surgeons in New York and was graduated M. D. in 1860, beginning practice in Indianapolis at once. For seven years he was a professor in the Indiana Medical College, filling at various times the chairs of anatomy, physiology, and materia medica.

At the outbreak of the civil war Fletcher entered the army as surgeon to the 6th Indiana; transferred to the secret service he was captured and imprisoned for nine months, wounded while trying to escape, condemned to death but reprieved by General Lee. Later in the war he served on the Sanitary Commission and as surgeon on various battle-fields. In 1866 he visited Europe and studied in the hospitals of London, Paris, Glasgow and Dublin. He represented Marion County in the state senate in 1882-83 and in the latter year was appointed superintendent of the Indiana Hospital for the Insane, a position he held for four years, introducing many reforms, such as the abolition of restraint and the employment of women physicians to take charge of the female patients. In 1888 Fletcher established a private sanatorium for the treatment of mental diseases.

He furnished the following papers to the transactions of the state medical society: "Human Entozoa," 1886; "Cerebral Circulation in the Insane," 1887; "Purulent Absorbtion Considered as a Cause of Insanity," 1892; "The Effects of Alcohol upon the Nervous System," 1895; "A Consideration of the Present Laws for the Commitment of the Insane in Indiana," 1901.

Dr. Fletcher married Agnes, daughter of James O'Brien in 1862 and they had three sons and four daughters.

He died at Orlando, Florida, April 25, 1907, aged 70 years. In commemoration of him James Whitcomb Riley wrote a poem, printed in the "Indianapolis Star" the day of his funeral, entitled "The Doctor" (Tr. Ind. State Med. Asso., 1907, 496-99).

One of his friends has described him in the following words: "He was a combination of the scientific mind and artistic temperament. . . . . He was open to conviction and had the rare power of withholding his judgment. He fought a good fight, lived according to his lights, the helpful citizen, father and soldier, the ready, the scientific physician."

FLINT, Austin (1812-1886), of New York, the American Laennec, the fourth in succession of a medical ancestry, was born in Petersham, Massachusetts, October 20, 1812. Thomas Flint came to America from Matlock, Derbyshire, England, and settled in Concord, Massachusetts. Edward Flint, his great-grandfather, was a physician, his grandfather, Austin Flint, did good service as an army surgeon, and his father was a surgeon. The younger Austin studied at Amherst and Cambridge, graduating in Medicine at Harvard in 1833 and at once beginning to practice in Boston. But he did not stay long, most of his early professional life being passed in Buffalo, where, as editor of the "Buffalo Medical Journal" which he started, and subsequently as one of the founders of the Buffalo Medical College, he began to attract general attention by the ability of his writings and teachings and was very soon called to the chair of theory and practice of medicine in the University of Louisville with S. D. Gross as associate. Gross says of Flint in his "Autobiography": "Tall, handsome, with a well modulated voice of great compass, he is as a lecturer at once clear, distinct and inspiring. During his hour no student ever falls asleep. He ranks specially high as a clinic instructor, and as a diagnostician in diseases of the chest he has few equals. I know of no one who is so well entitled to be regarded as the American Laennec."

When in 1859 Flint settled in New York his success was very striking. Moreover, his active pen was not only recording the fruit of his studies but all the time sending forth valuable essays and monographs. His records, begun in 1833, filled 16,922 folio pages. Advancing years did not hinder his open-mindedness towards new ideas; and this was strikingly shown in his advocacy of the bacterial theory of disease. Also he did more than any one to bring the binaural stethoscope into general use. He said: "Much is to be expected from the use of instruments in detecting abnormal action within the body. It seems to me certain that the principle of the telephone will by and by be applied to intrathoric respiratory and heart sounds to transmit them with more distinctness." "With improvement in instruments we may be able to study normal and abnormal conditions of the circulation in all the natural organs of the body by the sounds they make in the processes of secretion and excretion of nutrition and of morbid growths."

The terms "cavernous respiration" and "bronco-vesicular respiration" were proposed by him. His influence was used in offsetting the reactionary influence of Niemeyer, the latter discarding the doctrine of Laennec, that phthisis was dependent on tubercles. Against this Flint threw the whole weight of his experience, analyzing 670 cases and deducing evidence in support of Laennec and Louis.

Among his noteworthy writings were: "Variations of Pitch in Percussion and Respiratory Sounds," 1852; the separate pamphlets on "Chronic Pleurisy," "Dysentery," and "Continued Fever" were published in French in one volume, Paris, 1854; "Compendium of Percussion and Ausculation," four editions, 1865; "On Disease of the Heart," several editions, 1852; "On Phthisis," 1875; essays on "Conservative Medicine," 1874; Treatise on the "Principles and Practice of Medicine," seven editions, 1866. This work is the one by which he is best known, and the London "Lancet," March 12, 1887, reviewing it, said: "America may well be proud of having produced a man whose indefatigable industry and gifts of genius have done so much to advance medicine, and all English-reading students must be grateful for the work he has left behind him."

Some of his positions and honors were: Professor of medical theory and practice, Buffalo Medical College, 1836-1844, 1846-1852: professor medical theory and practice, Rush Medical College, 1844-1845; professor of the same in the University of Louisville, 1852-1856; professor of clinical medicine in the New Orleans School of Medicine, 1859-1861; physician to the Bellevue Hospital, New York, also professor of the principles and practice of medicine there, 1861-1886; professor of pathology and practical medicine, Long Island

College Hospital, 1861-1868; president of American Medical Association; fellow of the Pennsylvania College of Physicians; honorary member of the Medical Society of London, of the Clinical Society of London; LL. D. of Yale, and president of the New York Academy of Medicine.

He married, in 1835, a daughter of Mr. N. W. Skillings of Boston.

Dr. Flint died of apoplexy, March 13, 1886, when seventy-three years old.

FLINT, Austin (1836-1915), New York physiologist and alienist, was born at Northampton, Massachusetts, March 28, 1836, and died in New York City, of cerebral hemorrhage, September 21, 1915. He was the son of Austin Flint (q. v.), one of the most distinguished physicians of his time, and one of the great men in American medicine. The son, who was to become so widely known as a physiologist, was a student at Harvard in 1852 and 1853, and received his professional education in the medical department of the University of Louisville and in the Jefferson Medical College, Philadelphia, where he graduated in 1857, and in 1885 received the honorary degree of LL. D. He began practice with his father in Buffalo in 1857, and became editor of the "Buffalo Medical Journal," founded by his father.

He was professor of physiology in the medical department of the University of Buffalo, and in the New York Medical College in 1859 and 1860 after he had removed to that city.

In 1860 and 1861 he was professor of physiology in the New Orleans School of Medicine, and in 1861, at the age of twenty-five, on returning to New York, he became one of the founders of the Bellevue Hospital Medical College and professor of physiology there, remaining at his post for nearly thirty years. He was also professor of physiology in the Long Island College Hospital from 1865 to 1868, and in 1898 became professor of physiology in the newly organized Cornell University Medical College, and professor emeritus in 1906, when the Carnegie Foundation granted him a retiring allowance.

Dr. Flint served as assistant surgeon U. S. A. at the New York General Hospital during the Civil War, and was surgeon-general of the State of New York from 1874 to 1878. Through his interest in physiology he was led to study physiology and mental diseases from the physiological viewpoint. In 1878 he was appointed a member of the consulting board of the then New York Lunatic Asylum; when this institution was taken over by the state in 1896 he was made president of the medical board, and continued a consultant until his death. He was president of the New York State Medical Association, 1895; member of the executive committee of the New York Prison Association, 1890; president of the Medical Association of the Greater City of New York, 1899; and was decorated with the order of Bolivar (third class) of Venezuela in 1891. He was a member of the following scientific organizations: the American Medical Association; the New York County Medical Association; the American Academy of Medicine (honorary); Association of Military Surgeons of the United States; American Association for the Advancement of Science; the Academy of Science, and the American Medico-Psychological Association, of which he became a member in 1899.

He was a prolific writer and was the author of the "Physiology of Man" in five volumes; a "Text-Book of Physiology" in one volume; Clinical Examination of Urine in Disease "Physiological Effects of Severe and Prolonged Muscular Exercise"; "Source of Muscular Power." Two volumes of his collected essays and articles on physiology and medicine have been published. He also made many other contributions to medical literature.

From the time of Dr. Flint's appointment as a member of the consulting board of the New York City Lunatic Asylum until his death he took great interest in psychiatry and became one of the noted experts in mental disease in New York, being associated in most of the important medico-legal cases before the courts of that state. His testimony was unusually clear and his presence on the stand was commanding, and "to the last he remained a man of active mind, of varied interests, alert, incisive, captious"—he was indeed a personality.

He married Elizabeth B. McMaster, at Ballston, N. Y., December 23, 1862, who survived him with four children, one of whom, Austin Flint Jr. was the sixth in a continuous line of physicians, leaders in the medical profession.

FLINT, Joshua Barker (1801-1864), Kentucky surgeon was born at Cohasset, Massachusetts, on October 13, 1801, and went to Harvard College, graduating A. B. in 1820 and M. D. in 1825. He practiced in Boston for twelve years, served in the legislature, and from 1832 to 1835 edited the "Medical Magazine" there, in conjunction with A. L. Peirson,

Elisha Bartlett and A. A. Gould (q. v. to all). At the instance of Dr. Charles Caldwell (q. v.) he was invited to Louisville in 1837, as teacher of surgery in the Louisville Medical Institute, later known as the University of Louisville. At the close of his third term he retired but was reinstated in the same chair after the lapse of a few years. In the winter and spring of 1847 he administered ether for the first time in Kentucky and perhaps in the west. It was for an amputation of the lower limb, the ether being then called "letheon" and administered by the aid of a complicated apparatus. About this same time Samuel D. Gross administered chloroform for the first time in Kentucky.

From 1852 to 1854 Flint was professor of surgery and dean of the Kentucky School of Medicine. His fine scholarship, literary and professional, made itself evident to all appreciative observers. He was not ostentatious. His sound judgment as a practitioner of surgery and his rare dexterity and coolness as an operator were readily recognized. In the field of operative surgery he was distinguished beyond all other men of his time for his conservatism. In teaching, his style was quiet, eminently and purely didactic. His lectures derived their orament from correct rhetoric and classical illustrations.

His writings included: "An address delivered before the Massachusetts Society for the Suppression of Intemperance," May 29, 1828, in which he shows himself an ardent advocate of temperance; Sketches of Military surgery: "An introductory discourse delivered to the Kentucky School of Medicine," Louisville, 1852; "A lecture, introductory to the course of surgical instruction in the Kentucky School of Medicine," 1854; "A disclosure introductory to a course of clinical surgery," Louisville, 1856.

He died at Louisville, March 19, 1864.

AUGUST SCHACHNER.

FOLSOM, Charles Follen (1842-1907), alienist, hygienist, of Boston, was the son of Nathaniel Smith Folsom, a clergyman, and was born in Haverhill, Massachusetts, April 3, 1842.

His life was particularly rich in experience. After graduation from Harvard College in June, 1862, he went to South Carolina, where he spent three years in raising cotton and serving on various Federal commissions to supervise plantations and care for the "freedmen and abandoned lands." In his work he was brought closely in contact with the late Gen. Rufus Saxton. Having contracted malarial fever in this arduous service, Dr. Folsom took a sailing voyage in October, 1865, around Cape Horn to San Francisco and returned as a sailor before the mast. He then studied medicine at the Harvard Medical School, also under Dr. Jeffries Wyman (q. v.), and received his medical degree in 1870. Now followed a professional career of thirty-seven years in which Folsom rendered invaluable service as a physician at the McLean Insane Hospital, as visiting physician to the Boston City Hospital, and as consulting physician to the Adams Nervine Asylum in Jamaica Plain. In addition, however, to these exacting duties and a large practice, he found time to devote to the study of hygiene. In October, 1873, he went abroad and on his return in August of the following year was appointed secretary of the Massachusetts State Board of Health. As a part of the report of the board of health he published "Diseases of the Mind," later used as a text-book. He was in Europe again in 1875 to investigate and report on the sewage disposal of various foreign cities, and later, as one of a commission, recommended a plan for the sewerage of Boston, which was afterwards adopted in all its essential features. In 1878 he studied experimental hygiene in Munich, and a year later was appointed by the National Board of Health as one of three experts to accompany a committee of that board to report on the sanitary condition of Memphis, and the means to prevent a recurrence of yellow fever. The recommendations of this committee were adopted. Not long after he was appointed by President Hayes a member of the National Board of Health.

Dr. Folson's interest in Harvard University, especially in Harvard College and the Medical School, was great. He was lecturer on hygiene in the latter from 1877 to 1879, lecturer on mental diseases from 1879 to 1882, and assistant professor from 1882 to 1885. Besides this he was an overseer of the University for twelve years. He was president of the Harvard Medical Alumni Association, fellow of the American Academy of Arts and Sciences, honorary member of the Association of American Physicians, and also of a large number of medical societies.

In personal appearance Dr. Folsom was tall and of spare build; he had light hair and blue eyes which had a way of roving about and finally fixing themselves on the person with whom he was talking, followed immediately

by a brilliant smile. Sometimes the conversation revealed the cause of the smile; more often it did not and his vis-à-vis was left in wonder. He had a habit of cherishing one thought in his mind for long periods of time and it would reappear, generally in the form of a query, unexpectedly. Entertaining became a fine art to him and he was happiest when surrounded by his friends. His sick room manner was especially felicitous and he rarely finished a visit without leaving his patient stronger in mind if not in body.

He married Martha Tucker Washburn in 1886. They had no children.

Dr. Folsom died in the Roosevelt Hospital, New York, August 20, 1907, of ulcerative infective endocarditis due to old valvular disease of the heart. In February, 1908, the "University Gazette" announced that the corporation had established in the Medical School a teaching fellowship in hygiene or in mental and nervous diseases in memory of the late Charles Follen Folsom, A. B., 1862, M. D. 1870, overseer 1891-1903. After his death in 1909, there was privately printed, "Studies of Criminal Responsibility and Limited Responsibility," a review of six cases including those of Jesse Pomeroy, Charles J. Guiteau and Jane Toppan.

WALTER L. BURRAGE.

FOLTZ, Jonathan Messersmith (1810-1877), surgeon-general, United States Navy, writer. The family of Jonathan Messersmith Foltz, came from Prussia and settled in Lancaster in 1755. Young Foltz was born in Lancaster, Pennsylvania, April 25, 1810, studied medicine under Dr. William Thompson and was graduated at the Jefferson Medical College in 1830 and in the following year was commissioned assistant naval surgeon, being promoted to the rank of surgeon in 1838. Foltz rendered distinguished services during the Mexican as well as during the Civil War. In the latter, he was with Farragut on the "Hartford" throughout the years 1862 and 1863. During the bloody engagements on the lower Mississippi he was frequently under fire while attending to his duties, and his coolness and bravery under such conditions were conspicuous. After the war he accompanied Farragut to Europe in 1867-8 and then served as president of the Medical Examining Board. He was appointed surgeon-general of the navy in 1871 and retired the following year, dying in Philadelphia, April 12, 1877. Among his writings worthy of mention are: "Medical Statistics of the Frigate Potomac During Her Voyage Around the World" (1834), "The Endemic Influence of Evil Government as illustrated in the Island of Minorca" (1843), and a "Report on Scurvy" (1846).

ALBERT ALLEMANN.

FONERDEN, John (1804-1869), Baltimore alienist. Two friends, Johns Hopkins and John Fonerden, supplemented each other. Dr. Fonerden had great admiration for the business ability of Johns Hopkins, and Johns Hopkins had like admiration for the scholarship and professional ability of John Fonerden. As a natural result Fonerden became Johns Hopkins' physician, and the merchant confided to his friend, not only all his physical ailments, but whatever plans or mental perplexities he might have. And so indirectly, Fonerden, a Baltimore alienist and philanthropist, was connected with the founding of the Johns Hopkins Hospital and University.

Baltimore was his native city and he came into it on January 22, 1804. His M. D. was from the University of Maryland in 1823. He was president of the Medico-Chirurgical Society; professor of obstetrics and diseases of women and children, Washington University, Baltimore, 1845-6, and visiting physician to the Bay View Asylum for the Insane. In 1832 he was city physician of Baltimore during the cholera epidemic, and he was co-editor of the Baltimore "Colonization Journal" in 1835. Fonerden's father died in 1817, when his son was but thirteen, and as he was ambitious and studious, the first thing he did was to go through his father's library and pick out books that he found interesting. Among these books were the works of Emanuel Swedenborg. The father had been one of the first converts to Swedenborgianism in America. In these doctrines Dr. Fonerden became greatly interested and, in fact, thenceforwards was an enthusiastic Swedenborgian all his life.

Dr. Fonerden was the superintendent of the Maryland Hospital for the Insane, from 1846 until his death. He was much troubled by the lack of room and the insufficiency of apparatus of every kind. The dream of his life was of a well-planned, properly erected hospital for the city of Baltimore and state of Maryland. It was the frequent topic of conversation between Johns Hopkins and him. Fonerden was also interested in universities. He was an industrious scholar and one of the early graduates of the Maryland University, and had brought together the library

of the Medical Society of Maryland, and for many years was its librarian at an insignificant salary. A great lover of books and of learning, he longed to see a university in Maryland that was sufficient for the needs of the state.

On May 6, 1896, Dr. Fonerden died in New York and Johns Hopkins was present at his funeral. Soon after the funeral Johns Hopkins began to purchase land for a hospital, and in 1870 he made his will, giving the purchased site to his new hospital corporation and making the university and hospital corporations joint legatees for all of his undevised property. He had already made all the provision he desired to make for his relatives, and he inserted a clause in his will cutting them out, in case they interfered with its provisions, from all participation in its benefits.

Dr. Fonerden published a "Memoir of Dr. Samuel Baker" in the "Baltimore Athenaeum" of January 2, 1836, and a "Report" as physician of the hospital for the insane (1860).

FOOTE, Elial Todd (1796-1877), physician, judge and historian, was born in the town of Gill, Massachusetts, May 1, 1796, and died in New Haven, Connecticut, November 17, 1877. With his parents he went to Sherburne, New York, in 1798, and there later studied medicine with Dr. Samuel Guthrie (q. v.), obtaining a license to practice from the Chenango County Medical Society in 1815 and beginning practice in Jamestown, N. Y., the first physician in the town. In 1813 he was chairman of a meeting of physicians of the county called to organize the Chautauqua County Medical Society, and was first president of that body. He was a member of the legislature in 1820 and in 1826-27; from 1818 to 1823 he held the office of associate judge of common pleas and in the last year became the first judge of Chautauqua County, retaining the position until 1843, when he retired. He owned the land on which the city of Jamestown was built and presented the sites for three of its churches, being known as the "father of Chautauqua County."

About the year 1840 Dr. Foote became interested in homeopathy, as practiced by Dr. Alfred W. Gray, a brother of Dr. John F. Gray; in 1845 he removed to New Haven, Conn., where the rest of his life was spent. He practiced homeopathy and became a member of the American Institute of Homeopathy in 1850; when the Connecticut Homeopathic Medical Society was reorganized in 1864, Dr. Foote delivered the inaugural address, largely historical in character, having reference to homeopathy in that state. He helped found the New Haven Colony Historical Society, and collected much material relating to the early history of Chautauqua County that formed the basis of the history of that county by A. W. Young (Buffalo, 1875).

FORBES, William Smith (1831-1905), author of the Anatomical Act of Pennsylvania, the son of Murray Forbes and Sally Ennis Thornton Forbes, was born in Falmouth, Stafford County, Virginia, on February 10, 1831. His grandfather, Dr. David Forbes, emigrated to America from Edinburgh in 1774. Dr. Forbes received a classical education at Fredericksburg and Concord academies; he began his medical studies under Dr. George Carmichael, and attended lectures at the University of Virginia from 1850 to 1851, completing his course at the Jefferson Medical College in Philadelphia (1852), and while attending lectures was an office student of Joseph Pancoast (q. v.), at that time professor of anatomy there. He graduated in 1852 and in 1853 became resident physician in the Pennsylvania Hospital, where he served as interne until March, 1855. Dr. Forbes then served in the English Military Hospital at Scutari during the Crimean War. Upon returning to America, he opened in Philadelphia, opposite the Philadelphia School of Anatomy, a private school of anatomy and operative surgery, a school which was suspended during the Civil War, but afterwards re-opened and continued until 1870.

In 1862 Dr. Forbes was appointed surgeon of the United States Volunteers, serving as medical director of the thirteenth Army Corps until 1863, and afterwards as contract surgeon in charge of the Summit Hospital at Philadelphia. In 1866 he took his M. D. at Pennsylvania University. From 1879 to 1886 he was demonstrator of anatomy in the Jefferson Medical College, and from 1886 up to the time of his death was also professor of anatomy and clinical surgery.

Dr. Forbes was a popular teacher and after his appointment to the chair of anatomy at the Jefferson Medical College, his practice was subordinated to collegiate duties.

One of the greatest services rendered by him was the drawing up of the anatomical law passed by Pennsylvania in 1867. This law was slightly amended in 1883, and is one of the best of its kind in the country, and has

served as the basis of many similar acts. Curiously enough, Dr. Forbes, fifteen years after this act, was arrested for complicity in the crime of robbing graves in Lebanon Cemetery, but was later acqutited of taking part in a traffic he had done so much to suppress. Perhaps the most important of Dr. Forbes' publications is his "History of the Anatomical Act of Pennsylvania."

He died December 17, 1905, in Philadelphia.

His chief writings included: "Harvey and the Transit of the Blood from the Arteries to the Veins," 1878, "The Liberating of the Ring Finger, in Musicians, by Dividing the Accessory Tendons of the Extensor Communis Digitorum Muscle," 8vo, Philadelphia, 1884 (reprinted from "Proceedings of Philadelphia County Medical Society," 1884); "The Removal of Stone in the Bladder" (reprinted from "Medical News," Philadelphia, 1894, vol. lxiv).

CHARLES R. BARDEEN.

FORCHHEIMER, Frederick (1853-1913), internist of Cincinnati, was born in that city September 25, 1853. He was the son of Meyer S. and Fanny Veith Forchheimer, both of whom came from Bavaria to Cincinnati, where they were married. The son was educated in the public schools of Cincinnati, studied medicine in the Medical College of Ohio, and in the College of Physicians and Surgeons (New York), where he took his degree in 1873. He then spent two years in the universities of Vienna, Würzburg and Strassburg, before settling in Cincinnati, where he rapidly got into the full swing of practice which soon became enormous. For many years before his death he was a leading practitioner and consultant in that region. Hospital and teaching positions came promptly. In 1876-1877 he was lecturer on pathological anatomy in the Medical College of Ohio; in 1877-1879 he succeeded to the chair of medical chemistry and two years later became professor of physiology and clinical diseases of children. From 1894-1897 he was professor of diseases of children; from 1897-1901 he held the chairs of practice of medicine and diseases of children; from 1901 to 1909 he was professor of theory and practice of medicine, and from 1909 until his death he was professor of internal medicine. He was dean of the college from 1905 to 1909 and it was during his term of office that the Miami Medical College united with it and the name was changed to "The Ohio-Miami Medical College of the University of Cincinnati" (1909), the Ohio Medical College having become the medical department of the University in 1896.

He filled various positions on the staff of the Good Samaritan Hospital from 1880-1912, when he resigned. He served on the staff of the City Hospital from 1887-1894 and was pediatrician there until 1897, when he resigned; being reappointed in 1908, he served until his death as staff physician for internal medicine. From its opening in October, 1883, during the five years of its existence, he was physician in chief to the Home for Sick Children, which was the first children's hospital in the West. From 1887 until the close of his life he was consulting physician to the Jewish Hospital.

Dr. Forchheimer contributed widely to the medical journals of this country. He was the translator and editor of "Hoffman and Ultzmann's Urinalysis," 1879-1886; the author of "Diseases of the Mouth in Children (Non-Surgical)," 1886-1892; "Prophylaxis and Treatment of Internal Diseases," 1906-1910, and he edited "Therapeusis of Internal Diseases," in four volumes, which was published in 1913. During the last decade of his life his writings on diseases of children and internal medicine were quoted in every text book that was published.

He was president of the American Pediatric Association in 1895, and of the Association of American Physicians in 1910, being an original member of both. He was a member also of the American Medical Association, of the American Therapeutic Association, and Washington Academy of Sciences. In 1912 he received the honorary degree of Doctor of Science from Harvard University.

Dr. Forchheimer was a virtuoso in music. From early childhood he displayed talent and zeal in it. At fourteen years of age Theodore Thomas was his adviser in his musical studies and in later years, when studying medicine in Germany, he met such artists in music as Joachim and Brahms. He was a member of the University, Queen City, Country and Riding Clubs.

In 1885 he married Edith Strong Perry, daughter of Aaron Fyfe and Elizabeth Williams Perry, and he was survived by her and by a daughter, Frances Elizabeth, and by two sons, Frederick, a business man, and Landon L., a lawyer. Dr. Forchheimer died in Cincinnati June 1, 1913.

A. G. DRURY.

FORD, Corydon La (1813-1894), teacher of anatomy. Corydon La Ford's father was Lieut. Abner Ford, lineal descendant of William Ford who emigrated from England on the ship "Fortune," landing at Plymouth, Massachusetts, November, 1621. Corydon La Ford, was born August 29, 1813, near Lexington, Greene County, New York, and an attack of infantile paralysis in early life left him crippled for severe labor. He taught in the common schools for eight years, the intervals of teaching being spent in studying medicine with the doctors around. He completed his general education at Canandaigua Academy where he formed a deep friendship with Dr. Edson Carr, the physician of Canandaigua, who not only befriended him while at school but introduced him to Geneva Medical College where he supported himself by serving as librarian and curator of the museum. In 1842 he received his M. D. from Geneva Medical College and on the same day was appointed demonstrator of anatomy. In 1847 Dr. Ford was appointed demonstrator of anatomy in the University of Buffalo, New York; in 1849 he was professor of anatomy in Castleton Medical College, Castleton, Vermont. In 1852, to become professor of anatomy in Syracuse Dental College. He resigned both chairs, two years later becoming professor of anatomy and physiology in the University of Michigan. During the vacations he gave courses of lectures at other schools. In 1879-80 and again in 1888-91 he was dean of the medical department of the University of Michigan. In 1859 Middlebury College, Vermont, gave him her M. A., in 1881 Michigan University her LL. D. To the University library Dr. and Mrs. Ford gave an endowment of $20,000.

Nature made him a teacher, and industry and necessity compelled his highest evolution. He taught only the science of anatomy as it applied to the work of the active physician and surgeon, but his own enthusiasm for it so infected his students that they saw the dry bones live and many became notable physicians and surgeons. He was five feet ten inches tall, had dark hair, a large head and prominent features. His mild blue eyes scintillated marvelously to aid in expressing his thoughts always in unison with his gestures and body movements. He was eloquent and admirable as a lecturer. In April, 1863, he married Mrs. Messer of Pittsfield, Massachusetts. They had no children. He died in Ann Arbor, Michigan, April 14, 1894, from apoplexy.

LEARTUS CONNOR.

FORD, William Henry (1839-1897), president of the Philadelphia board of health for twenty-six years, was born in that city, October 7, 1839, the son of William Ford of Chester, Pa., a merchant. His classical education was obtained at the Laurenceville high school and at Princeton college, where he was graduated A. B. in 1860. His M. D. was taken at the Jefferson Medical College in 1863. In 1862 he was appointed acting medical cadet, U. S. Army, being stationed at the Wood street general hospital, Philadelphia, and detailed for a time as medical officer on board the hospital steamer "Willdin" in the Pamunky River. From 1863 until 1864 Dr. Ford served as surgeon to the 44th regiment Pennsylvania volunteers when he was appointed resident physician to the Philadelphia Hospital, a position he held for a year, when he went abroad, studying medicine at the chief medical centres until 1868, and then he settled in practice in his native city. Very soon he published a paper on "Gunshot Wounds of the Chest," and becoming a member of the city board of health began to compile and issue "Statistics of Births, Marriages and Deaths," beginning with the year 1872. First as secretary and later as president he labored to extend the scope and improve the character of the annual publications of the board, especially in regard to the subject of vital statistics. In 1875 he inaugurated the public collection of garbage and the odorless cleaning of cesspools; also he was instrumental in establishing a department for regulating house drainage and one of milk inspection.

Dr. Ford acted as associate editor of the "Philadelphia Medical Times" in 1870-71; was assistant demonstrator of anatomy, 1869-71; a member of the Centennial Medical Commission and chairman of its committee on sanitary science in 1876. He wrote a treatise on "Soil and Water" for Buck's "Hygiene and Public Health" (1879), and "Healthy Dwelling Houses, and How to Build, Drain and Ventilate Them" (Philadelphia, 1885).

Dr. Ford died at his home in Belmar, New Jersey, October 19, 1897, at the age of fifty-eight.

FORDYCE, John Addison (1858-1925), New York dermatologist and syphilologist, born in Guernsey County, Ohio, February 16, 1858, of Scottish ancestry, was the son of John and Mary Houseman Fordyce. Graduation in arts from Adrian College, Michigan, in 1878 (A. M., 1889, and Ph. D., 1901) and from the Chicago Medical College in 1881 was succeeded by an internship in the Cook County Hospital and a brief general practice in Hot Springs, Arkansas.

Following the year 1886 he spent two years of study under Kaposi in Vienna and Koch of the Hygiene Institute of Berlin as well as under Besnier, Vidal, and Fournier of the St. Louis Hospital in Paris. Returning in 1888, with the M. D. of the University of Berlin he settled in New York City to specialize in dermatology and genito-urinary diseases, and was instructor and lecturer in dermatology at the New York Polyclinic from 1889 until 1893 when he became professor of dermatology in the Bellevue Hospital Medical College. After the merger of New York University and Bellevue Hospital Medical College in 1898, he was appointed professor of dermatology and syphilology, and for the first time in New York City the teaching and control of syphilis were fused with the dermatologic department of an undergraduate institution. In 1912, he resigned to take the same chair in the College of Physicians and Surgeons of Columbia University and developed one of our largest and best equipped centers of dermatology and syphilology. In addition to a large private practice, he was connected with the City Hospital from 1893 to 1925, first as visiting genito-urinary surgeon and then as visiting dermatologist; was consulting dermatologist to the Presbyterian, Fifth Avenue, and Woman's Hospitals, New York Infirmary for Women and Children, and the Neurological Institute; and was special consultant to the United States Public Health Service.

Dr. Fordyce was a member of various foreign and American associations and was president of the American Dermatological Association, (1899), chairman of the section on cutaneous medicine and surgery of the American Medical Association, (1903), and secretary-general of the Sixth International Dermatological Congress held in New York City, 1907.

He was an editor of the "Journal of Cutaneous and Genito-Urinary Disease," now the "Archives of Dermatology and Syphilology," from 1889 to 1897; a few years later, with other dermatologists, he formed an editorial committee which controlled and financed the journal until it was taken over by the American Dermatological Association in 1913. His contributions to the literature, about one hundred in all, indicate the wide scope of his work. Fordyce devoted himself to cutaneous pathology when it was receiving little attention. Through his friendship with Paul Ehrlich, he was among the first to receive a sample of 606 for trial and became a staunch advocate of salvarsan in syphilis. The discovery of "Spirocheta pallida" and arsphenamine intensified his interest in keeping syphilis closely linked with dermatology. "Fordyce's disease" is characterized by small nodules on the lips and oral mucosae.

One of his greatest interests was photography, his dermatologic photographs, clinical and histologic, forming a large and valuable collection.

In 1886, he married Alice Dean Smith of New York City.

A chronic appendicitis was recognized too late, and he succumbed June 4, 1925, two weeks after the operation, survived by his widow and two children: Emma Fordyce Swift and Addison Fordyce who followed his father in the choice of a profession.

FORSTER, Edward Jacob (1846-1896), surgeon-general of Massachusetts, author of a manual for medical officers of the militia and of a historical catalogue of the Massachusetts Medical Society, was the son of Jacob and Louisa Webb Forster of Charlestown, Mass. They were descended from Reginald Forster, who settled at Ipswich, Mass., in 1638. Edward was born in Charlestown, July 9, 1846, went to the public schools, took his M. D. at Harvard Medical School in 1868 and then went on to study medicine in Paris and in the Rotunda Hospital at Dublin, where he served as an interne. The following years he became a licentiate in midwifery of the King and Queen's College of Physicians in Ireland, returned to Charlestown and began practice in 1869. He held the office of city physician, also physician to the almshouse, and superintendent and surgeon to the Charlestown Free Dispensary. Before moving to the Back Bay district of Boston, from the Charlestown district, in 1891, Dr. Forster had been appointed visiting physician to the Boston City Hospital, in the South End. When he had served in that capacity for eight years the department of diseases of women was organized at that institution and Dr. Forster was made

one of the two original visiting gynecologists on the staff. This was in 1892. He held the position at the time of his death.

He had a genius for public service and was selected, partly on that account, to be an original member and the secretary of the first Board of Registration in medicine of Massachusetts, in 1894. As early as 1882 he had become surgeon to the Fifth Regiment Massachusetts Volunter Militia; in 1892 he was advanced to be medical director of the First Brigade and when in 1895, he was made surgeon-general he was forced by lack of available time to resign his position on the Board of Registration in Medicine. Other public offices Dr. Forster held were: treasurer of the Boston Medical Library Association (1885-1886), and treasurer of the Massachusetts Medical Society (1891-1896); what with a hospital service and private practice he had enough to keep him very busy. Dr. Forster was the author of a "Manual for Medical Officers of the Militia of the United States," New York, 1877; "Mushrooms and Mushroom Poisoning", Boston, 1890; "A Sketch of the Medical Profession in Suffolk County," Boston, 1894; "A Catalogue of the Officers, Fellows and Licentiates of the Massachusetts Medical Society, 1781-1893," Boston, 1894. He married on September 5, 1871, Anita Damon, daughter of Dr. Henry Lyon (Harvard A. B., 1835), of Charlestown. They had three children, all girls. Dr. Forster died suddenly of cerebral hemorrhage, May 15, 1896, in New York, on his return from Philadelphia, where he had gone on official duty as surgeon-general of Massachusetts.

Short and stout, of dark complexion, his manner was a bit brusque to the casual stranger. He was fond of his joke, especially the "practical joke". His family and intimates knew him as a warm hearted friend who spared no pains to do a favor to those he loved.

WALTER L. BURRAGE.

FORT, George Franklin (1809-1872), physician and statesman, was born June 30, 1809, in the "old homestead," under the crown in the reign of Queen Anne, that had belonged to the family for over two hundred years, and had been the birthplace of the Forts since 1702. It was situated near Pemberton (then called New Mills), in Monmouth County, New Jersey. The father, Andrew Fort, a farmer, came of a family of Friends, who in the early days of Methodism in America joined that body, and was a local preacher under Peter Vanest, one of John Wesley's class-leaders; during the American Revolution he had been a minute man. George's mother was Nancy Platt. Young Fort went to a school in Pemberton, kept by John Bull, then studied medicine with Jacob Egbert, who ran a drug-store. On going to the University of Pennsylvania, he was graduated M. D. in 1830, with a thesis on "Hydro-Arachnitis Infantum." In 1847 he received the honorary degree of A. M. from Princeton University. Although practicing for many years, first at Imlaystown, and later at New Egypt, New Jersey, his public life began early. In 1832 he was an elector on the ticket for William Wirt; in 1844 he was elected to the General Assembly from Monmouth County, after having served on the commission to draft a new constitution for New Jersey; in 1848 he went to the State Senate. Fort was author of the bill creating the State Insane Asylum, and was director of the institution until his death. In 1851 he was elected governor of New Jersey by the democrats over the whig candidate by about 8,000 majority, and served until 1854. He was postmaster of Imlaystown and of New Egypt, and was lay judge of the New Jersey Court of Errors and Appeals, also delegate to the national convention in Charleston in 1860. He wrote fugitive articles of local history of Monmouth, Burlington and Ocean Counties. The books on "Medical Economy of the Middle Ages" and "Early History and Antiquities of Freemasonry," sometimes credited to him, were written by his nephew and namesake, George Franklin Fort.

In 1831 he married Anna Maria, daughter of the Rev. Stacy Bodine. Their children were Stirling, Anna Maria, George F. and Sallie. His nephews were: F. Franklin Fort, governor of New Jersey (1908-1911); William Sexton Fort, graduate of the Medical Department, University of Pennsylvania, 1860, and passed-assistant surgeon in the United States Navy; and John Henry Fort, lawyer, Camden, New Jersey.

Dr. Fort settled in New Egypt, while it was still in Monmouth County (that part of the County later was cut off and given the name of Ocean), and died there April 22, 1872.

FOSTER, Burnside (1861-1917), editor of the "St. Paul Medical Journal," professor of dermatology, University of Minnesota, lecturer on the history of medicine, and consultant in dermatology and genito-urinary diseases, died in his fifty-seventh year at his

home in St. Paul on the thirteenth day of June 1917.

He was the son of Dwight Foster and Henriette Perkins Baldwin, and was born on May 7, 1861, in Worcester, Massachusetts. His ancestors on both sides were distinguished people. His father was a judge of the Supreme Court of Massachusetts, and his maternal grandfather, Sherman Baldwin of New Haven, was a Governor of Connecticut and United States Senator. The first Fosters came to Ipswich, Massachusetts, in 1638. Burnside Foster was graduated in arts with the class of 1882 of Yale. He took his medical course at Harvard, graduating in 1885, spent eighteen months as interne in the Massachusetts General Hospital, and then went to Europe, where he studied in Dublin and Vienna. He began active practice in 1888 in Minneapolis, at which time he was assistant to the professor of anatomy in the University of Minnesota. He remained a member of the medical faculty of that institution until his death. In 1891 he established himself in St. Paul and from that time limited his practice to his specialty.

When the Ramsey County Medical Society established the "St. Paul Medical Journal" in 1898, Foster was appointed editor, a position he held until January 1, 1916. At that time the Editing and Publishing Committee made a statement from which the following is an abstract: "Dr. Burnside Foster has laid down the editorial burden he has carried for seventeen years with such distinguished success. His scholarly editorials, written in his finished style and faultless English, will undoubtedly be missed. The editorial pages of the Journal have repeatedly exerted the most widespread influence."

Dr. Foster was the first to urge the frequent examination of people in apparently good health that they might thus be guided by their physicians in the preservation of their most valuable asset. In recognition of his services in this work he was made a member of the board of trustees of the Life Extension Institute, New York.

As the result of an attack made by him in the editorial columns of the "Journal," upon immoral medical advertisements in the daily papers, the Postmaster General of the United States issued an order excluding papers carrying these advertisements from the United States mails. This has purged the announcements of abortionists "et id omne genus" from the reading matter daily offered to the families of the entire country.

At a very early date he waged war on the practice of splitting fees. On the question of euthanasia he always upheld the right of the individual to live his life. "The St. Paul Medical Journal" under his leadership had the unique distinction of being the only organ of a county medical society that survived the diseases of infancy.

Burnside Foster excelled in all the social virtues. His home and his family were his most highly prized possessions and there it was that he was seen at his best. As a host he was perfect, and no one privileged to enjoy the hospitality of the home presided over by the genial physician and his charming wife could ever forget such a rare experience.

On New Year's Day, 1894, he had married Sophia Vernon Hammond, daughter of General John H. Hammond, who served his country during the Civil War. Their three children and his widow survived him.

In the midst of his numerous activities at the early age of fifty-six after a short illness he breathed his last at his home in the early summer of 1917.

H. Longstreet Taylor.

FOSTER, Frank Pierce (1841-1911), one of the most scholarly of American medical editors and a gynecologist of no mean repute, was born in Concord, New Hampshire, November 26, 1841. He was descended from a long line of New England ancestors, his mother being a niece of Daniel Webster. His early education was obtained in the schools of his native town and he was thoroughly grounded in Latin and Greek, as well as English, in the Concord High School, where, as in similar schools in other New England towns of that day, much more attention was paid to the humanities than is done in most of the colleges at the present time. In his boyhood he chose medicine as a career and at the age of fifteen entered the office of a local physician, Dr. Lyman Gage, where he acquired a practical knowledge of medical botany and was trained in anatomy and chemistry. He entered the Harvard Medical School in 1859, but the following year went to New York and completed his medical course at the College of Physicians and Surgeons, receiving his degree from that institution in 1862. After graduation he served for two years in the New York Hospital and then took a trip as ship's surgeon around the Horn to San Francisco, returning to the East by way of the Isthmus. Upon his return he entered the army as acting assistant surgeon

and at the close of the war in 1865 began practice in New York City.

Early in his medical life Dr. Foster became interested in dermatology. While studying that specialty he had occasion to observe the inconvenience and the evils of arm-to-arm and scab vaccination and was thereby to urge the practice of bovine vaccination which he introduced into America in 1870. About this time he gradually abandoned the practice of dermatology and took up the study of gynecology, with which specialty he was identified during the remainder of his life. In 1873 Yale University offered him the chair of obstetrics, but he thought New York presented a greater field of usefulness, especially in the line of medical literature in which he had already begun to work as a staff contributor to the "Medical Record". In 1880 he accepted the invitation to become editor of the "New York Medical Journal," a position which he retained until his death, which occurred from cancer of the throat on August 13, 1911.

Dr. Foster was a philologist and linguist of unusual ability. The foundation of his classical learning was laid in his school days in Concord and later he taught himself French and German and did it so well that he was called upon to edit one of the revisions of Adler's German and English Dictionary. He was editor of the unequalled "Encyclopedic Medical Dictionary," in four volumes, published 1888-1894, and of "Appleton's Medical Dictionary," in one volume, published in 1904; he was also chairman of the Committee on Nomenclature of the American Medical Association, and was the editor of medical terms in the "Standard Dictionary." He was editor of the "Reference Handbook of Practical Therapeutics," 1899-1900, and wrote the chapter on "Virchow" in "Lord's Beacon Lights of History." For a number of years he was librarian of the New York Hospital.

THOMAS L. STEDMAN.

FOSTER, George Winslow (1845-1904). Although practicing and occupying hospital positions in several states of the union, George Winslow Foster did most of his medical work in Maine, and died while in charge of the Eastern Maine Insane Asylum at Bangor.

He was born in Burnham, Maine, September 2, 1845, the son of Benjamin Oliver and Martha Winslow Foster, but spent the earlier portion of his life in Bangor, graduating from Bowdoin in the class of 1868, obtaining his A. M. and Ph. D. from the same college in 1870, and graduating from the Medical School of Maine in 1874. After some additional study in New York, he practiced at Bangor until 1880, and at that time, having previously been more or less interested in nervous diseases, became, in succession, assistant at the Insane Hospital at Taunton, Massachusetts, at the New Hampshire Insane Asylum at Concord, and then at the female department of the hospital for the Insane at Washington, District of Columbia. At each of these places he was noted for his extreme tact and his true zeal in the study of insanity. About the year 1882 he was obliged to go to the West to settle up the family estate, so continued his work in Lemare, Iowa, and Salt Lake City, Utah.

In the year 1901 the Eastern Maine Insane Asylum at Bangor being nearly completed, he accepted the position of superintendent. Busy and interested in a new and thoroughly equipped hospital, he worked energetically until his sudden death in 1904.

He was a professor in mental diseases in the medical department of the Columbian University of Washington, District of Columbia.

Among his numerous papers was one on "Asylum Needs"; another on "The Hydrotherapeutic Treatment of the Insane" ("American Journal of Insanity," 1891), and one on "Mental Diseases."

Dr. Foster was married to Miss Charlotte Elizabeth Adams, of Wethersfield, Connecticut, October 31, 1871, and had three children, one of whom became a doctor. His charming wife was taken suddenly ill with double pneumonia, December 23, 1903, and despite every possible care, she died on the twenty-eighth. Returning from her grave, Dr. Foster was himself attacked by the same disease, and died January 4, 1904.

JAMES A. SPALDING.

FOSTER, Henry (1821-1901), founder of the extensive popular sanitarium at Clifton Springs, New York, was born at Norwich, Windham County, Vermont, January 18, 1821, the youngest of seven children. His father was the descendant of men who notably served their country in the French and Indian Revolutionary wars, and his mother, Polly Hubbard, was a descendant of Noah Porter, once president of Yale. At fourteen, his father failed in business and the family moved to Rochester, New York. His oldest

brother, Hubbard Foster, who was practicing medicine at Milan, Ohio, invited the lad into his home, and there he attended the Milan Normal School. Later Henry assisted his brother, under whom he began the study of medicine, in the operation of a Water cure at Lowell, Massachusetts. In 1846, he entered the Western Reserve University School of Medicine and was graduated in February, 1848. Immediately afterwards, he became the house physician to the New Graefenberg Water Cure, situated near Utica, New York. When medicine was being revolutionized by Virchow's "Cellular Pathology," he became greatly disturbed, and in his search for some general therapeutic law he was impressed with the effect of mind over matter. From youth, he was deeply religious and held that religion and medicine were necessarily closely related. His views led to the idea of an institution exploiting the infinitesimal dose, applying the principles of hydrotherapy as used by Preissnitz and his followers, and also surrounding his patients with an atmosphere of physical, mental, and spiritual quietude conducive to the recovery of health. To this end, in 1849, he settled near Canandaigua, some forty miles east of Rochester, where there were sulphur springs, and founded the water cure establishment now The Clifton Springs Sanitarium. As the work grew by degrees, he drew around him a competent staff of physicians. Because of his own early poverty, an appreciation of lack of something from not having had a college education, and his religious sentiment, he devoted his now growing and prosperous institution largely to the service of teachers, ministers, and missionaries. Rooms were endowed for them, especially for returned missionaries who had lost their health in the foreign fields. Ultimately Clifton entered more into scientific medicine, and Dr. Foster and his institution became known all over the world.

Rather late in life, he married Miss Mary Edwards, great-great-granddaughter of Jonathan Edwards. Since they had no children, they concluded to execute a warranty deed in trust, conveying the entire sanitarium, with surrounding farms and other personal property, to The Clifton Springs Sanitarium Company, to be operated at once by a self-perpetuating board of trustees who would carry out the purpose of its founder. Excess profits were to be used for the endowment of rooms for free treatment or for improvement.

Dr. Foster was, I believe, the first in this country to establish a highly reputable sanitarium, as well as to adopt the now universal group practice in building up a large efficient staff of coadjutors, representing all the important medical specialties. He died January 15, 1901. He was never a writer but a great organizer and as a physician well-grounded in the medicine of his time.

JOHN A. LICHTY.

FOSTER, John Pierrepont Codrington (1847-1910), of Connecticut, pioneer tuberculosis expert, the first to use tuberculin in America was born March 2, 1847, in New Haven, where he lived nearly his whole life, dying there April 1, 1910. Of an ancestry identified with the best history of the city and colony, he could not be otherwise than intensely loyal to all that pertained to its welfare and good name. His education, preparatory to college was at the Russell Military Institute. He was graduated from the academic department of Yale in 1869. Soon after he was attacked with pulmonary tuberculosis, necessitating a residence of several years in Florida. Feeling himself reasonably safe for a life in the North, he returned to New Haven, studied medicine at the Yale Medical School, was graduated M. D., in 1875 and at once began the practice of his profession. In 1877 he was appointed instructor in anatomy as applied to art, in the school of fine arts in Yale University, a position he held, with great satisfaction to his pupils, until his death. The early part of his professional career was largely among the students of the university; the necessity of some kind of a hospital for them so impressed itself upon him that he advocated in the most strenuous way such an addition to the University equipment. The present Yale Home and Infirmary is the result of his influence upon the friends of the college and upon the administration of President Dwight. It was a disappointment to him that its usefulness was so restricted by the unreasoning fears of some persons in the vicinity which prevented the admission to it of the milder forms of contagious diseases among students, who are still compelled to expose to infection their comrades in the college dormitories.

In 1879 he was appointed post surgeon to the United States Marine Hospital Service, holding the position until his death. Early in his professional career, Dr. Foster became intensely interested in the study of tuberculosis; he was the first physician in this country to use Koch's tuberculin, employing it in

a case of pulmonary tuberculosis on December 3, 1890, having obtained the lymph through Professor Chittenden, of the Sheffield Scientific School, some time before anyone else had it in this country. His mind, being of too broad a cast ever to allow him to become a mere specialist for private practice, the large scope of the tuberculosis question impressed itself overwhelmingly upon him. He was one of the founders of the National Association for the study and Prevention of Tuberculosis, was director and a member of the executive committee and contributed a paper to the first meeting in 1905. His interest in the Association continued unabated until his death. He was also interested in the International Congress of Tuberculosis, was a vice-president of the Sixth Congress in the second Section on Sanatoria, Hospitals and Dispensaries. The piece of work that interested Dr. Foster the most in his professional career and with which he was peculiarly identified, was the Gaylord Farm Sanatorium, near Wallingford in New Haven County, and the success of this was a matter of the greatest pride and gratification to him. The sanitorium opened in September, 1904, and was exclusively for persons in the early stages of pulmonary tuberculosis, of very moderate means and residents of the State. In common with all others engaged in the prevention of the spread of tuberculosis, Dr. Foster appreciated that the State must take part in the struggle and he instituted measures to bring the matter to the attention of the General Assembly and urge early action. Accordingly a commission was appointed, of which he was chairman, with the result that in 1909 a permanent commission was created, empowered to purchase sites, erect suitable buildings, appoint administrative and medical officers in three counties of the State, to be extended to others as the necessities demanded. Dr. Foster threw himself into the work with all his energies. He knew he was overtaxing himself, but the work was before him and he could not rest.

Never of a strong constitution, he had a sharp attack of pneumonia in 1898; with the relics of a former active tuberculosis in his system, the physical strain, the constant combating of political antagonisms where he had anticipated support, the care of private patients, who depended upon him and who would not be denied, all contributed to use up his powers of resistance, so that when in March, 1910, what at first was a comparatively limited lobar pneumonia rapidly extended to involve both lungs; a myocarditis developed to which he succumbed, as distinct a sacrifice to public duty as a soldier on a field of battle.

WILLIAM H. CARMALT.

FOSTER, Thomas Albert (1827-1896), Maine physician, was the fifteenth child of a family of twenty-one, the son of Thomas Dresser and Joanna Carter Foster. He was born in Montville, Maine, February 20, 1827. His mother was left a widow when he was about eight, but when twelve Thomas was able to add to her small income by his labor. He had an ordinary education and taught school for several years, and it was not until he was twenty-six that he began to study medicine with Dr. Nathan Rogers Boutelle, of Waterville. While a student in 1855, he showed his steadiness of purpose by attending fearlessly a large number of cases of cholera at Waterville and Bangor (of which fifteen died), and he was a temporary victim himself of a mild attack, but was saved by powerful sedatives. Graduating at the Philadelphia Medical School in 1856, in 1858 he took a post-graduate course in medicine and settled in Portland in 1859. He served briefly during the Civil War, and was afterwards appointed chief pension examiner. He was a member of the Maine Medical Association, once serving as its president, and was instructor in anatomy and physiology in the Portland School for Medical Instruction for several years. His large obstetric practice placed him in the front in that branch of medicine, and he was the first physician in Maine to do a successful Cesarean section, May 22, 1870.

He contributed to the "Transactions of the Maine Medical Association" numerous papers on obstetrics, physiology, and mental diseases, and was also interested in the co-education of the sexes. He was a great friend of John Fiske, the learned historian, writer and lecturer and encouraged him to read in Portland his remarkable lectures on American history. Like Fiske, he believed that death is the end of all, and that there was nothing afterwards.

A man highly thought of by everyone in the profession, he was often chosen a delegate to the meetings of medical associations as a representative. He was rather short and spare, walked with a quick step, had a sandy head of hair, and beard trimmed short.

The bent of his mind is best shown by the subjects chosen by him for prize essays to be written by members of the association:

"Physiology of Habit"; "Habits Which Endanger Health"; "Hygiene of Country Towns and Villages"; "Hereditary Causes of Disease."

Dr. Foster was married three times and had seven children, two of his sons, Barzillai Bean and Charles Wilder, becoming doctors.

He had a very firm belief in the influence of mind upon the body, as demonstrated in the dealings which he had with the lives of many families and practitioners.

After a long illness, he died suddenly from chronic Bright's disease November 27, 1896, ending a life which all could recall with pleasure.

JAMES A. SPALDING.

FOWLER, George Ryerson (1848-1906), Brooklyn surgeon was born in New York City, December 25, 1848, son of Thomas Wright (1825-1897) and Sarah Jane Carman Fowler, both natives of Long Island, as was also his grandfather, Duncan B. Fowler, who participated in the war of 1812. The family is of English origin, the American branches descending from three brothers who were among the early settlers of Connecticut, and two of whom later removed to Long Island, one settling on the northern shore and the other on the southern. From the former Dr. Fowler's father was descended, while his mother, a resident of Brooklyn, was a descendant of the latter.

George Ryerson received his early education in a public school at Jamaica, Long Island, where his parents settled in 1856. It being the wish of his father, who was a master mechanic of the Long Island Railroad, that he become versed in all technical knowledge pertaining to railroad management, at the age of thirteen George entered the local office of the road, and after spending over a year in the study of telegraphy and in familiarizing himself with the general duties of a station agent, became an apprentice in the machine shop of the company. Having early evinced a taste for anatomical study, however, at the end of his apprenticeship in 1866 he abandoned the railway profession and entered the Bellevue Hospital Medical College, New York City, from which he was graduated M. D. in 1871, having at intervals of service meanwhile earned the needed money to complete the course. He at once entered upon the practice of his profession in Brooklyn, and pursued a general practice of medicine and surgery for fifteen years.

From that time until his death he gave his attention exclusively to surgery and had one of the largest practices in his field on the American continent.

He was a member of the staff of the Central Dispensary, 1872-74; the first visiting surgeon to the Bushwick and East Brooklyn Dispensary on its organization in 1878, presiding officer of its medical staff until 1887, and consulting surgeon, 1887-1906; surgeon to the Methodist Episcopal Hospital from its foundation in 1887; visiting surgeon to St. Mary's Hospital from its organization in 1889 to 1901, being surgeon-in-chief to the department of fractures and dislocations, and later in charge of its entire surgical department; he was also surgeon-in-chief of the Brooklyn Hospital, 1895-1906; senior surgeon of the German Hospital of Brooklyn, 1899-1906; consulting surgeon to the Relief Hospital of the East District, the Norwegian, St. John's, St. Mary the Immaculate (Jamaica) and the Bushwick Hospitals.

Dr. Fowler was one of the founders and secretary of the anatomical and surgical society in 1878, its president in 1880, and for several years associate editor of its publication, "Annals of the Anatomical and Surgical Society" (afterwards "The Annals of Surgery"); president of the Brooklyn Surgical Society, 1891; fellow, from 1891, and treasurer, 1898-1906, of the American Surgical Association; fellow and vice-president of the New York Academy of Medicine; member of the Medical Society of the State of New York; a member of the New York Surgical Society, the Society of Medical Jurisprudence, the National Association of Railway Surgeons (honorary member), the Medical Association of the Greater City of New York, the Associated Physicians of Long Island, and the Association of Military Surgeons of the United States; and a membre de la Société Internationale de Chirurgie.

When, in 1890, a law was enacted separating the educational and licensing powers in the State, the state medical society recommended Dr. Fowler as a member of the medical board, and he was accordingly appointed by the board of regents of the University of of the State of New York, and at the first meeting of the board was made examiner in surgery, retaining this position to the time of his death. He was also chairman of the committee for the preparation of a syllabus for the use of the board. For five and a half years he held the chair of surgery in the New York Polyclinic School, and upon his resignation was elected professor emeritus to that

institution. For many years until his death Dr. Fowler was prominently associated with the National Guard of the State of New York, first as captain and assistant surgeon of the Fourteenth Regiment on the staff of Colonel (afterwards General) James McLear, and finally surgeon-general of the State of New York on the staff of General Roe, 1902. He served throughout the Spanish-American War, being commissioned by President McKinley, June 4, 1898, chief surgeon of a division U. S. Volunteers, with the rank of major, and assigned to duty as medical inspector, consulting surgeon and chief of the operating staff of the Seventh Army Corps, General Fitzhugh Lee commanding. On February 1, 1899, he received an honorable discharge, having won distinction not only as a surgeon, but also as executive officer, for his able services in the organization of hospital and sanitary work accomplished under his direction.

Dr. Fowler traveled extensively both at home and abroad, combining the pleasure of his travels with a constant search for valuable facts that might tend to perfect his knowledge of surgery and medicine. To his efforts is due the credit of organizing a system of hospitals for the use of disabled soldiers. While in Europe in 1884 he attended a meeting for the distribution of ambulance certificates, held at a watering-place on the Lancashire coast, and as a result decided to establish classes for instruction in first aid to the injured on his return to America. His connection with the National Guard enabled him to present the matter to the military authorities, and in 1885 his first classes were established at the New York State Camp at Peekskill. Instruction was afterward given in the armories, and by military order imparted to all National Guard organizations, the possession of such knowledge being regarded as part of a soldier's qualification. This was followed by an order from the adjutant-general's office in Washington to the effect that similar instruction be given at all military posts in the United States.

He was one of the organizers and first president of the Red Cross Society in 1890, instruction to members of the police force in cases of emergency being one of its objects. In 1897 he was elected a delegate to the International Medical Congress which convened at Moscow, and in 1900 to that which met in Paris. Upon the former occasion he visited Athens, Greece, and while there, upon the recommendation of the adjutant-general of New York, inspected the medical departments of the Greek and Turkish armies, an account of his observations being published in the "Medical News", August 21, 1897.

Dr. Fowler was a voluminous writer on topics relating to surgery. He was the author of the chapters on "Injuries and Diseases of the Patella" in "Wood's Reference Hand-Book of the Medical Sciences," and the section on "Injuries and Diseases of the Bladder" in "Appleton's System of Genito-Urinary Surgery"; a "Syllabus of a Course of Lectures on First Aid to the Injured," for the use of the medical officers of the Second Brigade, N. G. S. N. Y., 1887; a similar work for the use of candidates for examination, 1892, and "A Treatise on Appendicitis," 1894; enlarged edition, 1900, translated into German, 1896, His articles, presented before the various professional bodies of which he was a member, and which were subsequently published, were numerous and may be found in the "Index Catalogue" of the surgeon-general's office at Washington, D. C. Best known for his "elevated drainage posture," he was an early operator for appendicitis. For twelve years prior to his death he had been working on "A Treatise on General Surgery." The work was published in March, 1906, in two octavo volumes of 725 pages each, and contained 888 original illustrations.

Dr. Fowler took an active and prominent part in the work of the societies of which he was a member, attending meetings, presenting papers and taking part in discussions. As a member of the Joint Conference Committee of the Medical Society of the State of New York and the State Medical Association, he took an important part in the negotiations between the two societies which finally led to their union, a union he lived to see accomplished. He was also secretary of the Centennial Celebration Committee of the Medical Society of the State of New York, and during the celebration was seized with his last illness.

Dr. Fowler was a member of the Protestant-Episcopal Church of the Messiah; also of the Tuscan Lodge, No. 704, F. and A. M., and of the Kismet Temple Mystic Shrine.

He married, June 10, 1873, Louise Rachel, daughter of James and Rachael Schrach Wells of Norristown, Pa. They had four children; Russell Story, who graduated M. D. from the College of Physicians and Surgeons, 1895; George R., who died in infancy; Florence Grace; and Royal Hamilton, a graduate of the Cornell University Medical School.

Dr. Fowler died of appendicitis, complicated with intestinal paralysis, at Albany, N. Y., February 6, 1906.

RUSSELL S. FOWLER.

FOX, George (1806-1882), inventor of an apparatus for fractured clavicle which was used for over half a century, was born in Philadelphia, May 8, 1806. His father, who died two years after his son's birth, was Samuel M. Fox, a trustee of the University of Pennsylvania, a manager of the Pennsylvania Hospital (1794-1797), a director of the Philadelphia Library and president of the Bank of Pennsylvania; his grandfather was Joseph Fox, speaker of the Colonial Assembly in 1765, who belonged to a distinguished family of Friends.

George Fox received an early education at Wylie and Engel's School, and then entered the University of Pennsylvania, graduating A. B. in 1825 and M. D. in 1828, with a thesis on "Colic," in the meantime having studied medicine with his brother, Samuel M. Fox (University of Pennsylvania, 1822), and with Joseph Parrish (q. v.). The next two years he was resident physician in the Pennsylvania Hospital. On February 3, 1834, he was appointed on the first surgical staff of the Wills Eye Hospital, serving with Isaac Parrish (q. v.), Squier Littell (q. v.) and Isaac Hays (q. v.). In 1831 he was elected a fellow of the College of Physicians, was a member of its building committee, and was the prime mover in securing the site at Thirteenth and Locust Streets.

He was appointed on the medical staff of the Pennsylvania Hospital in 1848, resigning in 1854, giving up professional work and moving to a farm at Paoli, Chester County, Pennsylvania. In three years he removed to his estate on the Delaware River, above Torresdale, where he lived the rest of his life, spending the winters in Philadelphia. There he died, December 27, 1882.

Dr. Fox married Sarah D. Valentine, of Bellefonte, in 1850, and they had four sons and two daughters; one of the sons was Joseph M. Fox who was graduated in medicine at the University of Pennsylvania in 1877.

Fox, William Herrimon (1814-1883), pioneer settler and physician in Dane County, Wisconsin. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 408 and 409.

FRANCIS, John Wakefield (1789-1861), of New York, medical editor and writer, had for father a German immigrant who kept a grocer's shop in New York, where John was born on November 17, 1789. First a printer's apprentice, he afterwards went to Columbia University and was graduated in 1809 and from the College of Physicians and Surgeons, New York, in 1811, between these years studying under Hosack (q. v.) and becoming his partner on graduating. One year before this Hosack started "The Medical and Philosophical Register". Up to 1812 it appeared anonymously, but thereafter with the co-editorial names of Hosack and Francis. The latter was able to sign himself professor of the institutes of medicine and materia medica in the College of Physicians and Surgeons, though only twenty-five years old at the time. In the first volume appeared Francis' "Case of Enteritis," which was really one of septic peritonitis due to strangulation of the ileum by a Meckel's diverticulum coincident with an appendicitis. The four volumes of the "Register" are full of information and owe their delightful tone to his writings.

Francis was most popular as a lecturer. Up to 1820 he was incessantly teaching, writing and practicing, his receipts for the last year amounting to $15,000, a large sum for a young man but nine years in practice in a small city such as New York then was. His work broke down his health and he went to Europe for a year, returning in 1815 when he was made professor of the institutes of medicine in the College of Physicians and Surgeons; in 1817 it was of medical jurisprudence, and in 1819 of obstetrics.

In 1826, with Hosack, Mott, McNevin and Mitchell, he resigned from the college and organized Rutgers' Medical College, where he became professor of obstetrics and forensic medicine. After five years the institution was ended by legislative act, and with this the teaching of Francis also.

Thirty years later this busy popular physician died February 8, 1861. Dr. James G. Mumford (q. v.) has given pleasant glimpses of him in his "Narrative of Medicine in America" (1903).

His writings included: "A Case of Enteritis," 1810; "An Inaugural Dissertation on Mercury," 1811; "An Historical Sketch of the Origin, Progress and Present State of the College of Physicians and Surgeons of the University of the State of New York," 1813; "Cases of Morbid Anatomy," 1815; "Letter on Febrile Contagion," 1816; "New York

During the Last Half Century," 1857; "Reminiscences of Samuel Latham Mitchill," 1859. There is a portrait of Dr. Francis in the Library of the Surgeon-General, at Washington. See biography of his son, following.

FRANCIS, Samuel Ward (1835-1886), of New York. This physician, who did so much biographically to perpetuate the memory of his confrères, was born in New York City, December 26, 1835, the son of Dr. John Wakefield (q. v.) and Maria Eliza Cutler Francis. His mother was a grandniece of Gen. Francis Marion and a relative of Charlotte Corday.

Samuel Ward took his A. B. and A. M. from Columbia College, New York, in 1857 and in 1860 respectively, and his M. D. in the latter year from the University of the City of New York, having been a student of most of the noted physicians and surgeons of the city, at various times. In 1859 he married Harriet H., daughter of Judge McAllister of California. When he became M. D. he also became physician for diseases of the head and abdomen at the Northern Dispensary.

After two years' practice in New York, Dr. Francis moved to Newport, Rhode Island, where, with the exception of three years, he lived until his death, which occurred in that city, March 25, 1886. For the last thirteen years of his life he was in active practice. He was a prolific writer. Some of his best known writings were: "Report of Prof. Valentine Mott's Surgical Clinics in the University of New York," 1859-60 (Mott prize essay); "Life and Character of Prof. Valentine Mott"; "Curious Facts Concerning Man and Nature," 1874, and with additions, in 1875; "Invention of Transparent Treatment." His "Biographical Sketches of Distinguished Living New York Surgeons" and "Distinguished Living New York Physicians," published in 1866 and 1867 respectively, are fine pieces of work and give the reader many personal touches of Hosack, Mitchill, Mott and others.

Dr. Francis patented twelve inventions, including a gynecological examining table and a device for heating and ventilating railroad cars.

FRANK, Mortimer (1874-1919), Chicago ophthalmologist and medical historian, was born in Buffalo, New York, May 26, 1874. In 1897, he received the S. B. of the Massachusetts Institute of Technology and during the next two years was a civil engineer on the Cleveland, Cincinnati, Chicago, and St. Louis Railroad. An inclination for medicine developed, however, and he took his M. D. at the University of Illinois in 1901, with postgraduate work in New York and Philadelphia. Frank settled in Chicago to practice, specializing in ophthalmology to which he contributed valuable papers, notably those on "Congenital Sincipital Encephalocele," 1903, "Color Perception in Relation to Distant Signal Lights," 1904, "Eye Symptoms in Myasthenia Gravis," 1905, "Rachitic Erosions of the Teeth in Lamellar Cataract," and "Schematic Eye," contributed to the Osler Anniversary volume in 1919. His great work, cut short by early death, lay in medical history and bibliography. His collection of rare medical historical books, some incunabulae, and engravings are in the libraries of the University of Chicago and of the Surgeon-General at Washington. Among his published papers are "John Taylor," 1905, "Sir William Read," 1905, "Resurrectionists," 1907, "Philip Syng Physick," 1911, "Caricature in Medicine," 1911, "Medicine in English Literature before the Eighteenth Century," 1915, and "The Discovery of the Secretory Glands," read before the medical history clubs of the Johns Hopkins University and Harvard University in 1916. In 1915, he became the editor of the "Bulletin of the Chicago Society of Medical History," which he greatly improved. Frank's researches led to the laborious and brilliant undertaking of translating Choulant's "History and Bibliography of Anatomic Illustration" (1852), completed in two years and sent to the publisher just before his death. A committee made up of his friends published the volume as a memorial. He was a fellow of the American Academy of Ophthalmology and Oto-Laryngology.

Dr. Frank was "a tall, lean man, smooth faced, of light complexion and with light brown hair and blue eyes," and of a "highly attractive and friendly character, generous, sportsmanlike, of unfailing good nature and with the well-born gentleman's innate delicacy and sure intelligence." There is a portrait of him in the Annals of Medical History. 1919, Vol. ii.

On October 4, 1905, he married Dorrie Katz; they had two daughters, Katherine Jane and Mary Elizabeth.

He died at his home of cerebral hemorrhage, April 21, 1919.

FRANKLIN, Benjamin (1706-1790). The medical side of Franklin—little known—is, necessarily, the only one to be dealt with in

a book about physicians. Born January 17, 1706, he was the youngest of seventeen children of Josiah Franklin of Boston, Massachusetts. The whole family some thirty years later were glorified by the fame of the member who had become statesman, diplomat, philosopher and author, and when he died in Philadelphia April 17, 1790, at the ripe age of eighty-four, did not see him descend into the obscurity his early modesty had predicted when he wrote:

THE BODY
OF
BENJAMIN FRANKLIN
LIKE THE COVER OF AN OLD BOOK
ITS CONTENTS TORN OUT
AND STRIPPED OF ITS LETTERING AND GILDING
LIES HERE, FOOD FOR THE WORMS.
BUT THE WORK SHALL NOT BE LOST,
FOR IT WILL, AS HE BELIEVES APPEAR ONCE MORE
IN A NEW AND MORE ELEGANT EDITION
REVISED AND CORRECTED
BY
THE AUTHOR.

Although not a graduate of any medical school, Franklin was elected a member of several medical societies. In those days many practiced who had no degree, and an old engraving by P. Maren has under the bust "A. Benjamin Franklin, Docteur en Medecine." Among the many medical subjects he discussed with his doctor friends was one on which he afterwards wrote; this was "Diet and its Effect on Health and Disease," in which he remarked that "in general, mankind, since the improvement of cooking, eat about twice as much as nature requires." He also remarked that bathing would quench the thirst and stop diarrhea, and that in the case of fevers bathing or sponging with water or spirits would reduce the temperature by evaporation. One of his most valuable letters is on the heat of the blood and the cause thereof, and also upon the motion of the blood; he had in his library a glass machine demonstrating this motion through arteries, veins and capillaries. He discussed learnedly the absorbent vessels and sweat glands of the skin and carried on experiments to prove his theories, while sleep, deafness, and nyctalopia all engaged Franklin's attention. He invented bifocal lenses for spectacles describing and illustrating a pair of glasses made for him by Dolland, London's famous optician, also a flexible catheter and was much interested in medical education, holding decided views on the subject. He helped many young medical students in their desire to study abroad, among them Rush, Morgan, Shippen, Kuhn, and Griffits (q. v. to all).

His letters on lead poisoning are remarkable, and would have been a credit to any physician of that age; his observations upon gout —and they were personal observations—are shrewd and exact. Much could be written of his treatment of nervous diseases by electricity, for many patients consulted him; many doctors wrote to him for advice; even Sir John Pringle begged him to come and treat the daughter of the Duke of Ancaster. Franklin was not carried away by his temporary successes with his method of treatment—"Franklinism," as it has been called—but gives a very reserved opinion upon its value.

Interested in vital statistics and the mortality of different diseases, he wrote about the great death rate of foundlings and among children not nursed at the breast by their own mothers, and on the growing habit among the French to neglect this duty. He discussed the doctrines of life and death. On several occasions he wrote about the possibility of infection remaining for long periods in dead bodies after burial. His ability and knowledge in everything pertaining to medicine led the King of France to appoint him a member of the commission which investigated Mesmer's work, and it was Franklin who wrote the report. He proved himself a comparative anatomist in a description which he wrote about some fossil elephant teeth that he examined. Even Dr. Jan Ingenhousz, physician to Maria Theresa and Joseph II, sought his advice before inoculating the young princes.

One of Franklin's papers was "A Conjecture as to the Cause of the Heat of the Blood in Health and of the Cold and Hot Fits of Some Fevers" (1750?). A curious little pamphlet is a "Dialogue between Franklin and the Gout," dealing with the hygiene and treatment of the disease which plagued him. It was written during one of his visits to Passy.

The principal founder and first president of the Pennsylvania Hospital (1751), he wrote by request "Some Account of the Pennsylvania Hospital from its First Beginning to the Fifth Month, called May, 1754." Fifteen hundred copies were printed in quarto at his own press.

Desirous of helping those who knew little of vaccination, he wrote "Some Account of the Success of Inoculation for the Smallpox in England and America, together with Plain Instructions by Which any Person may be Enabled to Perform the Operation and

Conduct the Patient through the Distemper." London. Printed by W. Strahan, MDCCLIX.

Franklin received the Copley medal from the Royal Society in recognition of his discoveries in electricity and held the LL. D. from St. Andrews; the Yale and the Harvard A. M. for the same reason.

He married, in 1730, a widow who had been Deborah Read, an early love, and they had a son and daughter.

FRAZEE, Louis J. (1819-1905), writer and editor of Louisville, son of Dr. Ephraim Frazee, of Mayslick, Mason County, Kentucky, was born in that town, August 23, 1819. He read medicine with his uncle, Dr. Anderson Doniphan, in Germantown, Kentucky, and was graduated from the Louisville Institute (now University) in March, 1841, settling in Maysville in 1842. With the exception of an absence in Europe, of eighteen months during 1844-1845, he practiced medicine there until December, 1851, when he removed to Louisville. In 1849 he published "The Medical Student in Europe," a volume of 197 pages, descriptive of his trip, referring to some of the objects worth seeing in Europe, with sketches of the prominent physicians, surgeons, and hospitals of Paris. A second edition appeared in 1852. He was editor of the "Transylvania Journal of Medicine" in 1852 and 1853; also of the "Louisville Medical Gazette" in 1859, and wrote a report on "Indigenous Botany," and one on the "Mineral Waters of Kentucky," both published in the Transactions of the Kentucky State Medical Society. He also contributed some articles to journals and held the chair of materia medica and therapeutics in the Kentucky School of Medicine for seven years, and the same chair during one session in the University of Louisville. For four years he was dean of the faculty of the first-named school.

Freeman, Nathaniel (1741-1827), Massachusetts physician, colonel of militia during the Revolution, judge and public speaker. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 411 and 412.

FREER, Joseph Warren (1816-1877). Of this Chicago surgeon, Joseph Warren Freer, one biographer gives just the dry facts, the other some of the struggles with fortune which form the basis of his life's romance. One Elias Freer, of Washington County, mechanic, weds Polly Paine of Vermont, on the tenth of August, 1816, at Fort Ann, New York. Joseph Warren comes into the world, leads the life of many country boys, helping, until he is sixteen, in his father's business, and attending winter school. The future surgeon has a taste of a dry-goods store; of the drug-shop of his uncle, Dr. Lemuel C. Paine, where he picks up a little medicine. Meanwhile his family buy a claim—Forked Creek—in Wilmington, Illinois, and Joseph quits medicine, and for nine years lives a free hard-working life on the farm.

In 1844 he marries Emmeline, daughter of Phineas Holden, and his wife dies two years later, leaving him with a little boy, Henry C.

Now Joseph Warren had an idea that his wife's life had been sacrificed to scanty medical knowledge, so he is seized with a desire to return to the study of medicine. He mounts a load of wheat that he may not lose time, and repairs to Dr. Brainard (q. v.) in the then village of Chicago and asks to be taken as pupil. Although seeming to be rather a rustic specimen, this young widower from the farm, Dr. Brainard was wise in taking him, and Joseph graduated at Rush Medical College in 1848. After this he spent his life there as demonstrator of anatomy, professor of physiology and microscopic anatomy, and president. Besides other appointments, he was on the staff of the Mercy Hospital and St. Joseph's Hospital. His practice was devoted largely to surgery. He performed nearly all the operations of note, including excision of the knee-joint, the elbow-joint with the entire ulna and head of the radius. This was before J. M. Carnochan's case (q.v.)

In June, 1849, he married Catherine Gatter of Würtemberg, Germany, and had a daughter and three sons. Two sons became physicians, Paul Caspar (q. v.) and Dr. Otto Freer, laryngologist, of Chicago; the eldest son, Frederick Warren, was an artist. A good many months each year, from 1868 to 1871, were passed in foreign clinics, with the result of much added brain power and a large collection of curiosities, the latter all swept away in the Chicago fire.

He died on the twelfth of April, 1877, when sixty-one years old.

DAVINA WATERSON.

FREER, Paul Caspar (1862-1912), organizer of the government laboratories in Manila. The Freer family is of Dutch origin. Dr. Joseph Warren Freer (q. v.), the father of Paul Caspar, removed from an Illinois farm

to Chicago, was graduated at Rush Medical College, was a professor there and ultimately its president. His wife, Catherine Gatter, was a highly educated lady of German extraction. Their son, Paul Caspar, was born in Chicago, March 27, 1862. He received his early education in the native country of his mother, but returned to the United States to attend the High School of Chicago, from which he was graduated at the head of his class. He studied medicine at the Rush Medical College and obtained the degree of Doctor of Medicine in 1882. Freer showed very early a predilection for chemistry. To perfect himself in this branch he again went to Europe and studied under the celebrated chemist, Baeyer, at the University of Munich, which bestowed upon him the degree of Ph. D. "summa cum laude" in 1887. After spending a few months at Owens College in Manchester as assistant instructor in chemistry, he returned to America and was at once appointed instructor in chemistry at Tufts College, Massachusetts. In 1889 he accepted a position at the University of Michigan as lecturer in general chemistry and in the following year was appointed professor of general chemistry.

In 1891 Dr. Freer married Miss Agnes May Leas. The union proved to be a very happy one. Freer was now already known as one of the foremost chemists of the country. In 1901 he accepted the important position of Superintendent of Government Laboratories in the Philippine Islands. Here he found a field in which he could develop all the faculties of his extraordinary mind. Having an exceptional talent for organization he planned and organized the various Government laboratories, which now take a prominent place in the scientific world, forming one of the glories of the American occupation of those islands. In 1905 Freer was appointed director of the Bureau of Science and in the following year he was elected dean of the College of Medicine and Surgery of the Philippine Islands. Dr. Freer was a tireless worker. With all the cares weighing upon him he found time to fill the chair of chemistry at the University of the Philippines. He was also the founder and editor of the "Philippine Journal of Science."

He published a great number of articles in American and German chemical journals besides two text-books, "The Elements of Chemistry," and "Descriptive Inorganic Chemistry." Freer loved science for its own sake; he was an enthusiast in his work and he knew how to impart the fire of inspiration to his pupils.

Unceasing hard work and the unfavorable climate gradually undermined his health. He died of nephritis, April 7, 1912.

ALBERT ALLEMANN.

FRENCH, George Franklin (1837-1897), army surgeon, practitioner and teacher of medicine in Maine and Minnesota, the son of John Andrew and Mary Elizabeth Twombly French, was born on October 30, 1837, in Dover, New Hampshire, fitted for college at the Dover High School, and was graduated A. B. from Harvard in 1859 and M. D. in 1862, the A. M. being conferred on him by his alma mater in 1871.

After nearly a year's experience in the hospitals of Alexandria, Virginia, as acting assistant surgeon he was, in 1863, commissioned surgeon of the United States Volunteers by Pres. Lincoln and entered on the personal staff of Gen. Grant, with whom he remained until the latter departed for Washington in 1864, when he was assigned to duty in establishing field hospitals in the wake of Sherman's army. On Sherman's march to the sea he was surgeon-in-chief of the first division of the fifteenth army corps. At the close of the war he was breveted lieutenant-colonel and tendered a commission in the regulars, which he declined, entering into practice at Portland, Maine, where he remained thirteen years, occupying also the chairs of physiology, practice of medicine and obstetrics in the Portland School of Medical Instruction.

On October 14, 1862, he married Clara A., daughter of Dr. Levi G. Hill of Dover, New Hampshire. In 1879, on account of the ill health of his wife, he removed to the city of Minneapolis, Minnesota, where he lived until his death. Here he was at once accorded first rank by his professional brethren. He had the zeal of a true humanitarian, laboring assiduously and earnestly to build and foster hospitals and a school of medicine in his adopted city, where he died on July 13, 1897.

He was one of the founders and incorporators of the Minnesota College Hospital and professor of gynecology there, later occupying the same chair in the Minnesota Hospital College, now the University of Minnesota. He was president of the Maine Medical Association and of other medical organizations. His contributions to the current medical literature of his day are in "The Medical and Surgical History of the War of the Rebel-

lion," "The Maine Medical Association Transactions," "American Journal of Obstetrics," and the "Reports of the American Medical Association."

BURNSIDE FOSTER.

FRICK, Charles (1823-1860), of Baltimore, pathologist and teacher of materia medica, was a son of the Hon. William Frick, judge of the Superior Court of Baltimore City and was born in Baltimore on August 8, 1823. Educated at Baltimore College, he afterwards studied engineering, but after three years abandoned this intention and in 1843 began to study medicine under Dr. Thomas H. Buckler. In 1845 he graduated M. D. in the University of Maryland, his inaugural thesis being on "Puerperal Fever," the contagious character of which he maintained in accordance with the view then recently advanced by Dr. Oliver Wendell Holmes, and he supported his opinion by cases observed by himself at a time when the character of the disease in this respect was not so generally admitted. An important pamphlet from his pen in 1846, in which Dr. Washington F. Anderson was associated with him, consisted of cases illustrating the pigmentary changes in the liver in remittent fever corresponding with the observations of Dr. Stewardson, which were then new. While still an under graduate, Dr. Frick gave much attention to the study of renal pathology and published, in 1850, his work on "Renal Affections." In this he aimed at clearing up the somewhat confused ideas existing as to the relation between albuminuria and the organic changes in the kidney, and showed that the mere presence of albumin does not of itself indicate organic disease—a truism now, but one which he helped to establish. He wrote also: "Analysis of the Blood," 1848, "On Diabetes," 1852; "On Urinary Calculi," 1858.

In 1847, with three others, he organized the Maryland Medical Institute, a preparatory school of medicine, and took charge of the department of practical medicine. From 1849 to 1856 he was attending physician to the Maryland penitentiary. In 1858 Dr. Frick was elected to the chair of materia medica and therapeutics in the University of Maryland. His didactic and clinical instructions from this chair gave proof of original thought and wide learning and fully justified the expectation which had been formed of his success as a teacher. But his career in this new field of work was short. In attempting to give relief to a poor patient he contracted malignant diphtheria, of which he died on March 25, 1860, in his thirty-seventh year.

In memory of his virtues and worth, his friends within and without the medical profession founded the Frick Memorial Library in the Medical and Chirurgical Faculty of Maryland in his native city of Baltimore.

SAMUEL C. CHEW.

FRICK, George (1793-1870), the first in America to restrict his professional work to ophthalmology, author of a valuable treatise on diseases of the eye, the first work on this subject written in America, was born in Baltimore in 1793. After obtaining a broad classical education he entered the University of Pennsylvania, where he obtained his M. D. in 1815, and in 1817 was admitted as licentiate of medicine into the Medical and Chirurgical Faculty of Maryland. He then spent several years abroad, returning to Baltimore about 1819 to engage in the practice of ophthalmology. He was appointed surgeon to the Baltimore General Dispensary in 1823. In 1822 he delivered clinical lectures at the Maryland Hospital.

He was a member of the various medical societies; secretary of the Medical and Chirurgical Faculty in 1823, and joined the Maryland Medical Society in 1822. He was much interested in general science, and was one of four physicians to organize a society for promoting its study in 1819.

He devoted himself to the practice of ophthalmology and to the cultivation of general scientific studies, as well as to music, for a number of years. He was unfortunate in growing very deaf before middle life, and it is probable that this interfered greatly with his practice of medicine; for somewhere about 1840 he entirely relinquished it and left Baltimore to spend most of his time in Europe, paying occasional visits to this country. He was a man of very retiring and modest character and of kind disposition, a careful scientific student whose work and writings deserve high praise.

His first writing was his thesis for the degree in medicine; its subject, "On the Melœ Vesicatorius" (1815). In 1820-21 his article on "Observations on Cataract and the Various Modes of Operating for its Cure" appeared in the "American Medical Recorder" of Philadelphia. These articles cover over forty pages. In 1821 an article on "Observation of the Various Forms of Conjunctivitis" appeared in the same journal, and in

1823 his paper on "Observation on Artificial Pupil and the Modes of Operating for its Cure." His most important work, however, was "A Treatise on the Diseases of the Eye; Including the Doctrines and Practice of the Most Eminent Modern Surgeons and Particularly Those of Prof. Beer," which was published in Baltimore in 1823. It was inscribed to his teacher, Dr. Physick (q. v.), of Philadelphia. It is well and clearly written, the system upon which it is classified is excellent, and no greater praise could be given it than stating the fact that it was republished three years later in London by an English surgeon, Richard Welbank, a member of the Royal College of Surgeons and of the Medical and Chirurgical Society of London, and dedicated to the ophthalmologist, William Lawrence. Numerous foot-notes were added, but the text suffered no change.

HARRY FRIEDENWALD.

FRIEDBERG, Stanton Abeles (1875-1920), Chicago oto-laryngologist, was born in that city, December 1, 1875, the son of Cass and Laura Abeles Friedberg. After a public school education in Leavenworth, Kansas, he attended the University of Michigan (1892-93) and in the autumn of 1893 entered Rush Medical College and was graduated in 1897. He began his work in oto-laryngology in Chicago in 1900, assisting E. Fletcher Ingals (q. v.). In 1903, he was appointed on the staff of Cook County Hospital, but in July of that year left to study in Vienna returning in 1904 to resume work with Dr. Ingals. From 1906-1913, he was attending oto-laryngologist to Cook County Hospital and from 1913 to 1919 was chief of the eye, ear, and nose department of that hospital. He was also an assistant instructor at Rush Medical College (1905) and consulting oto-laryngologist to the Durand Hospital of the John McCormick Institute for Infectious Diseases (1907) where "urged and encouraged" by Ludwig Hektoen he worked on tonsillectomy in diphtheria. In 1906, Friedberg did his first operation by bronchoscopy and esophagoscopy, "a specialty within a specialty." In 1909 he was attached to the Presbyterian Hospital. After serving eight months in the Base Hospital, Camp Doniphan, Fort Sill, Oklahoma, he went to France in September, 1918, with the rank of major and was discharged May 1, 1919.

Dr. Friedberg's interest in the history of medicine began early and he had an excellent collection of historical texts and engravings, notably basic texts in oto-rhino-laryngology. His published bibliography numbers thirty titles. He succeeded Mortimer Frank (q. v.) as secretary of the Society of Medical History of Chicago and edited the number of the "Bulletin" which contained the notice of his own death, that occurred at the Presbyterian Hospital from the sequelae of an operation for mastoiditis, May 27, 1920.

In 1906, he married Aline Liebman of Shreveport, Louisiana, who survived him with three children.

FRIEDENWALD, Aaron (1836-1902), Baltimore ophthalmologist, was the son of Jonas Friedenwald, who emigrated from Germany to Baltimore in 1832. He was born December 20, 1836, in Baltimore, Maryland, and after receiving an ordinary school education, entered a counting room. When he reached the age of twenty-one he took up medicine, becoming an office student of Dr. N. R. Smith (q. v.), and graduating in the spring of 1860 at the University of Maryland. He then visited Berlin, Prague, Vienna, Paris, and London to continue his medical studies. He was particularly attracted by Arlt and Von Graefe. While spending much time on general medicine, he devoted himself especially to ophthalmology. Returning to Baltimore in 1862 he did not limit himself to special work, but like many others of that day practiced general medicine beside the specialty. At the time of his return there was no other ophthalmologist in the city, George Frick, (q. v.) having retired from practice a long time before. In 1873 he was elected to the professorship of diseases of the eye and ear in the College of Physicians and Surgeons, a position which he filled with great merit until his death, August 26, 1902.

"He was always interesting . . . and enthusiastic. As he grew older his interest did not flag, and there was no change in the tone and vigor of his lectures. He was always ready for a joke or a good story to enliven his class, and there existed between teacher and student a very pleasant good fellowship."

He held a high position in the profession of his state, and in 1890 was elected president of the Medical and Chirurgical Faculty of Maryland. Dr. Friedenwald kept always in mind the relation of ocular diseases to general medicine; his most important contributions being "Opticneuritis," "Optic Nerve Atrophy," "Ocular Paralysis," "Uraemic Amaurosis" and, perhaps better than all, "The Relation of the Eye to Spinal Diseases."

He published an important literary contribution on "The History of Jewish Physicians," in 1897. He was one of the founders of the Maryland Ophthalmological Society and served as its first president, besides being visiting ophthalmologist to the city, physician to the Hebrew Hospital and to the Nursery and Children's Hospital. He was deeply interested in all medical affairs and in communal matters as well. A service of the most important kind was his calling into existence, in 1890, the present Association of American Medical Colleges, which has played so important a part in raising the standard of medical teaching in this country.

He died in Baltimore August 26, 1902.

HARRY FRIEDENWALD.

FRISSELL, John (1810-1893), surgeon of West Virginia, was born in Berkshire County, Massachusetts, March 8, 1810, his father a farmer, Amasa Frissell, whose forebears were Scotch, his mother of English parentage, by name Wilcox. Their four sons were given a good education and John Frissell went from the old Hadley Academy to Williams College, where he was graduated A. B. in 1831. He then studied medicine with Dr. Ebenezer Emmons, a physician in Williamstown. Young Frissell served as his assistant for two years in the laboratory and during the next three years attended lectures at Berkshire Medical Institution, Pittsfield, Massachusetts, graduating M. D. in 1834 and taking the degree of A. M. from Williams College the same year. During these years and the year following he was also prosector and demonstrator of anatomy under Professor Willard Parker (q. v.).

In 1846 he went to Wheeling, West Virginia, and soon became the leading surgeon of the state and of the adjacent parts of Pennsylvania and Ohio. He was the medical founder of the Wheeling Hospital in 1850 and served as superintendent of the Military Hospital at Wheeling during the Civil War, with the rank of assistant surgeon. His work during fifty-five years of practice covered the whole field of surgery. For ten years before Morton's discovery of surgical anesthesia Dr. Frissell did capital operations on patients who heroically suffered or were nauseated and relaxed by antimony and wine of tobacco, or stupefied by whiskey. He practiced during the periods when bleeding was a universal remedy and when it had been entirely abandoned. He saw the rise and fall of many remedies, extolled as specifics, whose very names are now forgotten. He was always the thoughtful, careful, conservative surgeon, and the wise, cautious and observing practitioner.

Dr. Frissell was one of the charter members and the first president of the West Virginia State Medical Society in 1867.

Dr. Frissell married, in 1850, Elizabeth Ann Thompson, daughter of Col. John Thompson, of Moundsville, Virginia. They had three sons: John Thompson, who died at twenty-six of typhoid fever; Charles M., who became a Wheeling practitioner, and a third son, Walker I.

He died at his home in Wheeling, West Virginia, at the advanced age of eighty-four.

JOHN L. DICKEY.

FROST, Henry Rutledge (1790-1866), Charleston physician and teacher of medicine, was born at Charleston, South Carolina, October 6, 1795. The boy had as father a clergyman, one Thomas Frost, M. A., graduate of Caius College, Cambridge, England, who emigrated to America in 1775, and for mother a woman of Hugenot ancestry descended from the Rev. Francis Le Jau, who fled to South Carolina after the revocation of the Edict of Nantes. Henry was educated at the Academy of Dr. Moses Waddell, at Wilmington, South Carolina, from which he graduated with honors, and then began to study medicine under Dr. Philip G. Prioleau, and was graduated from the University of Pennsylvania in 1816. For the following two years he was resident physician in the Philadelphia Almshouse. From 1824 to 1832 he occupied the chair of materia medica in the Medical College of South Carolina and filled the same position in the Medical College of the State of South Carolina from 1832 to 1866. He was dean of the faculty from 1843 to 1846 and again from 1849 to 1861.

In 1818 he began to practice at Charleston and was for several years physician to Shirras Dispensary. In 1822, in association with Dr. Dickson (q. v.) and Dr. Ramsay (q. v.), he delivered private lectures in the Charleston Almshouse to such students as were resident in the organization of the Medical College of South Carolina, in whose faculty he was elected to fill the chair of materia medica. During the many years when he was dean of the faculty he discharged the duties of his office with untiring energy.

His skill and his warm tenderness won for him an enviable place in the hearts of the community in which he labored.

His most important publication was a volume entitled "Outlines of a Course of Lectures on the Materia Medica," published at Charleston, South Carolina, 1851.

He married Mary Deas, by whom he had six children.

Dr. Frost died on April 7, 1866, from diarrhea.

ROBERT WILSON, JR.

FROTHINGHAM, George Edward (1836-1900), of Ann Arbor, Michigan, specialist in ophthalmology and otology, was born in Boston, Massachusetts, April 23, 1836, of English ancestry, and his general education was obtained in the public schools and in Phillips Academy at Andover, Massachusetts. After teaching for a time, he began to study medicine with Dr. W. W. Greene (q. v.), professor of surgery in the medical department of Bowdoin College, Maine, and in 1864 received his M. D. from the medical department of Michigan University. After four years' practice at North Becket, Massachusetts, Dr. Frothingham became demonstrator of anatomy and prosector of surgery at Michigan University, but spent some time at the eye hospitals of New York and cultivated eye and ear work at Ann Arbor. As a result, these cases became inconveniently numerous for the surgical clinic and a new chair was formed for him in 1870 as professor of ophthalmology and otology, and to meet the needs of a rapidly changing faculty, he for brief periods filled other chairs too. Thus in 1875 he was professor of practical anatomy; in 1876 professor of materia medica and therapeutics. While living in Massachusetts Dr. Frothingham was a member of the Massachusetts Medical Society and the Berkshire District Medical Society. In 1874 he was president of the Washtenaw County Medical Society; in 1889 president of the Michigan State Medical Society. Until 1889 he was ophthalmologist and aural surgeon to the University Hospital at Ann Arbor; from 1889 consulting ophthalmic surgeon to the Children's Free Hospital and Harper Hospital, Detroit, and during 1869-71 an editor of the "Michigan University Medical Journal." His activity, both physical and mental, was ceaseless; whatever he undertook had all his power, all his time.

He published papers on ophthalomology and otology in the Transactions of the Michigan State Medical Society, the "Journal of the American Medical Association," and in other periodicals.

In 1860 he married Lucy E. Barbour, and had four children. Dr. George Frothingham died April 24, 1900, at his home in Detroit from arteriosclerosis.

The eldest son, George E., Jr., took up his father's specialty and became ophthalmic surgeon to Harper Hospital and clinical professor of ophthalmology in Detroit College of Medicine.

LEARTUS CONNOR.

FRY, Henry Davidson (1853-1919), obstetrician of Washington D. C. was born April 11, 1853 in Richmond, Virginia, the son of Hugh Walker Fry, Jr., and Mary Davidson. Among his colonial paternal ancestors was Colonel Joshua Fry, appointed by Colonel Dinwiddie as commander-in-chief of the Virginia forces; he was buried by Lieutenant Colonel George Washington who cut on a large oak tree near by, "Under this oak lies the body of the good, the just and the noble Fry."

Henry was educated in a private school of Richmond and in the preparatory department of the Columbian (now George Washington) University. He received his medical degree from the University of Maryland in 1876 and the D. Sc. in 1907.

After an internship in the Charity Hospital of Jersey City, he began practice in 1878 in Washington, D. C. Out of a large general practice he carved his specialty in gynecology and obstetrics. In 1890, he was made professor of obstetrics in Georgetown University, a position held until 1918 when he became emeritus professor. For many years he conducted a private hospital. In 1890, he did the first successful Cesarean section in Washington and a year later the first symphyseotomy. He was an early earnest advocate of antisepsis in obstetrics and a close student of the relative values of symphyseotomy and Cesarean section. In 1886 we find him advising against the use of antiseptic vaginal douches without special indication and advocating scrubbing the hands with a stiff brush and a bichloride solution of 1-1000.

He became a fellow of the American Gynecological Society in 1890, vice-president in 1905, and honorary fellow in 1916; he was also a fellow of the Southern Surgical and Gynecological Association and of the American College of Surgeons.

In 1887, Fry translated Paul Bar's "Antiseptic Methods as applied to Obstetric Practice"; in 1907, he brought out his manual on "Maternity." Thirty nine contributions to

special literature from his pen are listed in the "In Memoriam", by Dr. J. Wesley Bovée in the Transactions of the American Gynecological Society where also there is a portrait.

He died of diabetic thrombus, May 12, 1919. A widow and two daughters survived him.

FULLER, Samuel (1580-1633), the first physician to visit New England, a passenger in the "Mayflower" was born in England and baptised in Redenhall Parish Church, Norfolk County, on January 20, 1580. He was the son of a butcher, Robert Fuller, but of his education nothing is known. We do know that he was in Leyden, Holland, where he was a deacon of the church and emigrated to America with the Pilgrims in 1620. In Leyden he had been thrown into contact with many learned men, among them William Brewster. Our chief source of information about this pioneer who did so much for the Pilgrims especially during their first terrible winter is William Bradford who set down with care the happenings of this time. Bradford, in his History of Plymouth Plantation, 1606-1646, says that Fuller took up the occupation of silk-maker while in Leyden; William Bradford was a fustian-maker and William Brewster taught English and was a publisher. Fuller studied medicine at Leyden. He was forty years old when he arrived at Plymouth. In the list of passengers on the "Mayflower" we find this entry: "Mr. Samuell Fuller, and a servant, called William Butten. His wife was behind, and a child, which came afterwards." Also: "Mr. Fuller his servant died at sea; and after his wife came over, he had two children by her, which are living and grown up to years; but he died some 15 years ago." The last entry was made by Bradford thirty years after his arrival, so he said. Affairs of the soul so preoccupied men's minds at this time that disease, which appeared to be God's will, was rated as a matter of minor importance. In 1624 a Mr. Lyford was accused of traitourous communications with people in England concerning the Plymouth colony. Bradford wrote: "So as they begane againe to conceive good thoughts of him (Lyford) upon this his repentance, and admitted him to teach amongst them as before: and Samuel Fuller (a deacon amongst them), and some other tender harted men amongst them, were so taken with his signs of sorrow and repentance, as they professed they would fall upon their knees to have his censure released." Lyford and another had set up a separate meeting of their own and had been convicted by a court and ordered to be expelled, Lyford having six months to stay.

Bradford, being at this time governor, notes that in the year 1629 some of those who had come over from Leyden had come in ships which landed in Salem, where John Endicott had chief command. They were attacked "by infection that grue amonge the passengers at sea, it spread also among them ashore, of which many dyed, some of the scurvie, other of an infectious feaoure, which continued some time amongst them (though our people, through Gods goodness, escaped it). Upon which occasion he write hither for some help, understanding here was one that had some skill that way, and had cured diverse of the scurvie, and others of other diseases, by letting blood, and other means. Upon which his request the Govr hear sent him unto them," On May 11, 1629 Governor Endicott wrote Governor Bradford: "I acknowledge my selfe much bound to you for your kind love and care in sending Mr. Fuller amongst us, and rejoice much that I am by him satisfied touching your judgments of the outward forme of Gods worshipe." The following year Fuller wrote Governor Bradford: "I have had conference with them all till I was weary. Governor Endicott is a goodly wise and humble gentleman and very discreet, and of a firm and good temper." And again in 1630 he wrote his friend Bradford "I have been to Matapan (a part of Dorchester) and let some twenty of those people blood". By a letter to Bradford written in August 1630, it appears that Fuller was then in Charlestown treating the immigrants. He lamented the lack of medical supplies with which to work.

Writers on this period agree that the professional visits of Dr. Fuller among the Puritan settlements did much to dissipate the distrust and hostility of the Puritans, both at Salem and in England, to the Pilgrim settlement at Plymouth, thus fostering a vigorous growth of the colonies. Although Fuller was known as "Mr." that was the title of a deacon of the church, which was, of course, his important function; moreover medical men of the time were so called, as are the surgeons in England today.

Dr. Fuller died in the year 1633 as is shown in the following quotation from Bradford: "It pleased the Lord to visite them this year with an infectious fevoure, of which many fell very sicke, and upward of 20. per-

sons dyed, men and women, besids children, and sundry of them of their anciente friends which had lived in Holland; as Thomas Blossome, Richard Masterson, with sundry others, and in the end (after he had much helped others) Samuell Fuller, who was their surgeon and phisition, and had been a great help and comforte unto them: as in his faculite, so otherwise, being a deacon of the church, a man godly, and forward to doe good, being much missed after death; and he and the rest of his brethren much lamented by them, and caused much sadness and mourning amongst them."

Dr. Fuller was thrice married, his third wife, Bridget Lee, of Leyden, came over in the "Anne" in 1623. His widow was held in high repute as a midwife, even receiving a call to settle in that capacity in the town of Rehoboth, Mass., in the year 1663. She declined, however, and died the following year. Dr. Fuller's son, Samuel, became a clergyman and was the first minister of the church in Middleborough, Mass.

In the "Mayflower and Her Log," by Azel Ames, M. D. Boston, 1901, mention is made of one Giles Heale, chirurgeon, who sailed as physician to the "Mayflower" and her crew of probably thirty-five persons. He was not mentioned by Bradford because he was a member of the crew and not a passenger. Recently (1927, Trans. Mass. Historical Society) Col. Charles E. Banks has found not only that Heale's name was attached to the will of one William Mullins, who died aboard the Mayflower in Plymouth Harbor, a fact mentioned by Ames, but he has found in the record office that Heale served as an apprentice to the Guild of Barber Surgeons of London and was given the right to practice in the year 1619, the year before the sailing of the "Mayflower". Heale returned to England in April 1621 and practiced his profession in Drury Lane, London, until his death.

WALTER L. BURRAGE.

FULTON, John (1837-1887). John Fulton, anatomist and surgeon, editor of the "Canada Lancet," was born in Southwold, Ontario, February 12, 1873, the son of a farmer of Irish origin and a woman of Scotch ancestry, he showed all the quickness of the one race and the shrewdness and perseverance of the other. His education was begun very young, and he continued at home on the farm until he was eighteen years of age, when his health, never robust, was such as to warrant him in seeking a less laborious and more congenial occupation. He became a school teacher and evinced a rare power of making clear to every pupil the points which he himself saw clearly, a power which characterized him all through life in his subsequent career as a prominent professor of medical science. He began his medical studies under the supervision of Dr. J. H. Wilson of St. Thomas, and displayed great zeal and untiring industry in his professional studies, doing as much work in the way of study in a week as would take most young men a month to master. He entered the medical school and was graduated in medicine at the University of Toronto, after which he went to New York and became a house officer in Bellevue Hospital. Later he visited London, Paris and Berlin, following the great masters of those capitals around the hospitals, and increasing his already large store of professional knowledge.

Shortly after his return to Canada he was married, in 1864, to Isabella Campbell of Yarmouth, Ontario, whose premature death in 1884 all but crushed his heart, and from the shock of which he never recovered. Dr. Fulton settled in Fingal, Ontario, and was given the professorship in anatomy in the medical school of Toronto. In 1869-70 he lectured on physiology and botany, and in 1871 he accepted the professorship of physiology in Trinity Medical College, which he held until a few years before his death, when he took the chair of surgery. This he filled until his death, and he was also one of the surgeons to the Toronto General Hospital. In 1867 he completed his work on physiology, which he subsequently rewrote and enlarged for a second edition. He began a work on materia medica, which he never was able to finish, from stress of other labors.

In August, 1870, he bought from its proprietor the "Dominion Medical Journal," which had been carried on for a short time, and into which Dr. Fulton at once infused life and vigor. He changed its name to the "Canada Lancet," and under this title it appeared for the first time in September, 1870; through Dr. Fulton's able editorship it became the most influential and widely-circulated medical journal in the Dominion of Canada. As an editor of a medical journal, he was earnest, painstaking, and thorough in an unusual degree; the same, too, may be said of him as a medical teacher, and indeed in every other relation in life where he had duties to perform. All his efforts in life were crowned with success, as a result of his perseverance and industry, for he was essentially

a self-made man, and a man of unusual force of character.

He died of pneumonia June 15, 1887. He left behind him a son and three daughters.

FUSSELL, Bartholomew (1794-1871), physician and early advocate of medical education for women, was born in Chester County, Pennsylvania, son of Bartholomew Fussell, a farmer. He went to Maryland where he taught school while studying medicine and was graduated M. D. at the University of Maryland in 1824. He settled in Cecil County, Maryland, but later moved to Kennett Square, Pennsylvania. While in Maryland he became deeply interested in the slaves and instructed them in religion, holding classes on Sunday, and he protected and aided them later at his home in Pennsylvania. He signed the "Declaration of Sentiments" issued in 1833 by the American Anti-Slavery Society, and was at the last meeting of the Pennsylvania Anti-Slavery Society when the organization was dissolved after slavery had been abolished.

He was in favor of common school education, of temperance and of women studying medicine; in this last he was influenced by his sister Esther. In 1840 he gave medical instruction to a class made up of women, and with unabated interest in 1846 he told his plan for the medical education of women to a few liberal-minded professional men. He called a meeting of men and women to consider the Woman's Medical College (incorporated in 1850 under the name of Female Medical College of Pennsylvania; changed in 1867 to Woman's Medical College of Pennsylvania). He always considered his proposition which led to establishing the college as one of the "most important results of his life."

Fussell counted among his friends William Lloyd Garrison and John Greenleaf Whittier, and his name appears in Whittier's "The Response," addressed to politicians who were against the abolitionists:

"Go, hunt sedition—search for that
In every peddler's cart of rags,
Pry into every Quaker's hat,
And Dr. Fussell's saddle-bags;
Lest treason wrap with all its ills
Around his powders and his pills."

Whittier also calls him "the beloved physician of Kennett Square" ("Atlantic Monthly," February, 1874).

In 1826 Fussell married Lydia, daughter of Moses Morris. He died near Chester Springs, Pennsylvania, January 14, 1871.

HOWARD A. KELLY.

FUSSELL, Edwin B. (1813-1882), born in Chester County, Pennsylvania, June 14, 1813, was a nephew of Bartholomew Fussell (q. v.), with the same tastes and enthusiasm for what he believed to be just causes as was his uncle. He graduated in medicine at the University of Pennsylvania in 1835 with a thesis on "Acute Peritonitis."

He settled in Pendleton, Indiana. There he rendered surgical aid to Frederick Douglass and sheltered him in his house after he was mobbed in 1843, but was driven out because of his opposition to slavery. He returned to Pennsylvania, and helped to secure medical education for women. He was one of the group called together by Bartholomew Fussell to consider the founding of the Woman's Medical College of Pennsylvania. Others invited to discuss the movement were Franklin Taylor, Ezra Michener, and Elwood Harvey. He was dean of the College from 1856-1866 and the professor of histology, practice of medicine, obstetrics and diseases of women. "When Dr. Fussell accepted a professorship in a woman's medical school he did so at the risk of forfeiting the fellowship of his medical brethren," the cause being unpopular among the physicians of the time.

Dr. Fussell died in 1882.

FUSSELL, Milton Howard (1855-1921), professor of applied therapeutics in the University of Pennsylvania, was the son of Milton and Tamar H. Fussell. He was born at Belvedere, Chester County, Pennsylvania, November 24, 1855. His paternal ancestry was English, one Solomon Fussell having emigrated from England and settled in Philadelphia in 1704. Bartholomew (q. v.), grandson of Solomon, the first doctor in the family, practiced at Kennet Square. Bartholomew's son, Morris (1829-1901), was a graduate of Jefferson Medical College and practiced successfully, and a nephew, Edwin (q. v.) advanced the cause of woman's education in medicine. Edwin's son, Linnaeus (1842-1907) was a physician. Milton Howard Fussell was a great nephew of Bartholomew. Howard, as he was called most often, was a graduate of the Friends' Central School, Philadelphia; taught in the county school at Radnor from 1876 to 1881, and then studied medicine with vicissitudes and

he remained for a time, but later returned to Woodstock, where he died October 12, 1849.

His best work, the full title of which is "Sketches of Epidemic Diseases in the State of Vermont from its First Settlement to the Year 1815 with a Consideration of Their Causes, Phenomena and Treatment, to which is added Remarks on Pulmonary Consumption," was published in 1815 in Boston. It is a work which involved apparently considerable labor and without doubt represented correctly the views at that day in regard to epidemic diseases. He published a more elaborate work in two volumes on the "Institutes of Medicine" in 1839 and besides these was a prolific writer of papers for the state medical societies. He was a commanding figure in the medical profession of Vermont for at least two decades. He was the fourth surgeon in America to perform ovariotomy.

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was in charge of botanical work in the Department of Agriculture at Washington, throwing light on the flora of the Peninsula. He accompanied Baron Eggers, the Danish botanist, on a botanical expedition to the Island of St. Thomas, and in 1881 visited Porto Rico, where he made a small collection of plants. He returned to his home in June, but his depleted condition forced him to the mountains of central Pennsylvania, where he died at Renova, Clinton County, Pennsylvania, August 25, 1881. He was laid away in the old family burying ground on the farm.

In 1885 his brother, Hiram L. Garber, sold for a nominal sum the Garber herbarium to Franklin and Marshall College, with the understanding that it should be known as "The Abram Paschal Garber Herbarium;" part of this collection has been transferred to Columbia University and part to the Botanical Garden in New York, in exchange. Dried plants of Dr. Garber's are in the United States National Herbarium in the Smithsonian Institution; 142 Porto Rican plants are in Kew Gardens, London; other plants are in the Gray Herbarium at Harvard, and at the Academy of Natural Sciences of Philadelphia. A monotypic genus of thistles has been named Garberia, by Asa Gray. The plant Garberia fruticosa is found in the sandy soil of peninsular Florida. A euphorbia bears his name—Chamaesyce garberi (Engelman) also an orchid, Habenella garberi (Porter) Small, found in the hammocks of peninsular Florida. "Xanthoxylum emarginatum" is a West Indies species found by Garber on an island in Bay Biscayne in 1877, "growing as a small shrub. It has not since been seen in the United States, although the shores of Bay Biscayne have been several times explored by botanists" (Sargent).

An appreciative biographical sketch with portrait was published by the Lancaster County Historical Society (1914, xviii, No. 8) from the pen of George C. Keidel, Ph. D.

JOHN W. HARSHBERGER.

GARCEAU, Edgar (1865-1913), Boston urologist, gynecologist and author, was born in Roxbury (Boston), Massachusetts, December 26, 1865. His father, Trefflé Garceau, whose ancestors came to Canada from Picardie, France, practiced in Roxbury after 1863, the year he had come to Boston from Montreal, his native city. Edgar's mother was Emelia O. De Angelis, whose ancestors were Neapolitans. Edgar was graduated from the Roxbury Latin School in 1884 and from Harvard Medical School in 1890, serving as interne in the Boston City Hospital, and then going to study surgery in Paris, France. Settling in Boston, he became connected with St. Elizabeth's Hospital as gynecologist to out-patients and with the Free Hospital for Women in the same capacity. Later he was visiting gynecologist to the former and to the Boston Dispensary. He evinced a studious disposition, became much interested in the use of electricity, in the treatment of the diseases of women, and went to Paris to study under Georges Apostoli, later translating some of his papers into English. His next great interest was the diseases of the urinary organs in the female and he published "Ureteritis in the Female," "Amer. Jour. Med. Sci.," Feb., 1903; "Results of Operations on the Kidney for Tuberculosis," "Ann. Surg.," Oct., 1903; "Cystites Rebelles chez la Femme," in "Annales des Maladies des Organes Genito-Urinaires," Paris, April, 1904, and in the succeeding years published a long series of articles in the "American Journal of Obstetrics," the "Boston Medical and Surgical Journal," and other medical periodicals. Finally, in 1909, he brought out his chief work, "Renal, Ureteral, Perirenal and Adrenal Tumors and Actinomycosis and Echinococcus of the Kidney," a well illustrated volume of 421 pages.

Among the societies of which he was a member may be mentioned: The Obstetrical Society of Boston, American Urological Association, American Gynecological Society, L'Association Francaise D'Urologie, Association Internationale D'Urologies.

Garceau was inventive and perfected a urethroscope, several cystoscopes that are figured in his book, and a conical catheter. In person, he was tall and dark and he took life seriously, but was a most devoted husband and father and a true friend.

Dr. Garceau married Sally Holmes Morse, of Taunton, May 6, 1905, and the union was blessed with three sons.

He died of recurrent carcinoma of the cheek in Boston, April 29, 1913.

WALTER L. BURRAGE.

GARCELON, Alonzo (1813-1906), governor of Maine, was the great-grandson of David Davis, one of the earliest pioneers of New England. He was born in Lewiston, Maine, May 6, 1813, the son of Col. William and Mary Davis Garcelon. As a boy he lived mostly on a farm of his father's in the outskirts of the city and worked on it tilling the soil, but he had an excellent education at the acade-

mies in Monmouth, Waterville, and New Castle, Maine, and was graduated at Bowdoin College in the class of 1836, afterwards teaching school at Alfred, Maine, and Freyburg, but studying medicine in the meanwhile with Abiel Hale, of the latter town, and earning enough money to attend the medical school at Dartmouth. While there, he attracted the attention of Prof. Reuben Dimond Mussey (q. v.) by his anatomical dissections, so much so that the professor invited him to act as his anatomical demonstrator at the Medical College of Ohio, then situated at Cincinnati, where Garcelon took his degree in 1839. Not long after he returned to Lewiston, and began at once an active practice which continued for sixty-seven years.

In 1841 he married Miss Ann Augusta Waldron, of Dover, New Hampshire, by whom he had four children. She dying in 1857, he married in 1859 Miss Oliva Spear, of Rockland, Maine, and had a daughter.

It is said of him that he did the first mastoid operation ever done in Maine, also it has been claimed that he was the first in the state to remove the thyroid gland. He soon became one of the best known medical men in Maine, and with the outbreak of the Civil War, came rapidly to the front as a most capable military surgeon. He was appointed surgeon-general of the state early in 1861, and gave his entire time to the preparation of troops, later going himself, and being present at the first battle of Bull Run. After that he went through the Peninsula Campaign, was at Antietam and elsewhere until, worn out with malarial fever, he came home for a rest. Recovering rapidly, he returned to the army and was chief surgeon at the "White House" and "City Point" in Virginia during Grant's campaigns, finally returning home after four years of active service. Dr. Garcelon resumed practice at once, but gradually became again interested in politics. He was also elected president of the Maine Medical Association and read before it several papers of medical and surgical interest. In 1886, when seventy-three years old, he read an excellent paper on "Dislocation of the Shoulder Backward."

The first newspaper in Lewiston was started by Garcelon and he was for a long time its chief editor in spite of many demands on his time as a medical man. He was chosen governor of Maine by the Legislature in 1879.

Dr. Garcelon maintained his remarkable vitality to the last; he had neither ache nor pain to the day of his death, testifying as an expert only a few weeks before this occurred, and also he made a fine address on "Preventive Medicine" before the City Board of Health a few weeks before he died. He was found dead in bed December 8, 1906, while making a visit to his daughter in Medford, Massachusetts.

In his old age he was thin and spare of feature and body, clean shaved, rather peaked in the face, which was largely free from wrinkles, and wore always an old-fashioned black stock with a high standing wide open collar giving him a venerable appearance.

JAMES A. SPALDING.

GARDEN, Alexander (1728-1791), botanist, was born in Scotland in 1728, son of the Rev. Alexander Garden of Aberdeen. Alexander Garden came to the United States and stayed thirty years. Yet not one in a thousand either here or in England knows after whom the "Gardenia Jasminoides" was named. His medical education was with the celebrated Dr. John Gregory in Edinburgh and at Aberdeen University (1748). He arrived in South Carolina in 1752 and settled down to practice with a Dr. Rose in Prince William parish. At once he started on his favorite study of botany, but ill health compelled a voyage northward and he was offered but declined a professorship in the New York Medical College. Returning to Charleston, he began what was to be a very successful practice. An odd little glimpse of his life at this time is given in a letter to John Bartram the botanist: "Think that I am here, confined to the sandy streets of Charleston where the ox, where the ass, and where men as stupid as either fill up the vacant space, while you range the green fields of Florida." The study of zoology, especially fishes and reptiles, filled up his leisure left from a large practice and botanizing. He kept up an active correspondence also with Linnaeus and with John Ellis the botanist who named the beautiful Cape Jessamine "Gardenia" in his honor.

In 1773 he was made a fellow of the Royal Society of London and eventually vice-president. Garden married Elizabeth Peronneau.

Eager to extend his knowledge, Garden in 1775 accompanied James Glen, governor of South Carolina, when he penetrated into the Indian country and formed a treaty with the Cherokees and discovered an earth equal to that used for Worcester china, but history does not record what came of the discovery. He introduced into medical use the "Spigelia Marilandica" or pinkroot as a vermifuge, and

anyone who would like to know more of Garden's travels and reverent letters about nature should get the "Linnaean Correspondence" edited by Sir J.E. Smith. A somewhat pathetic interest is attached to his little granddaughter named Gardenia. Her father Garden's only son, joined Lee's Legion against the British and was never forgiven; nor was the little girl with the flower name ever received into the house.

Tuberculosis, hitherto successfully fought, began to tell on Garden's health in 1873 and, although it was hoped that "revisiting the haunts of his youth and the pleasing recollections of juvenile scenes would have salutary influence in arresting the disease," nothing of the kind occurred. As far as can be seen the good times every learned man tried to give him during his progress homewards and while travelling in Europe must have considerably exhausted his strength. He stayed with his wife and two daughters in Cecil Street, off the Strand, London, and there, patiently realizing there was nothing to be done, he put on paper all he could of his Carolina work, enjoyed the men who flocked to him, and got ready for the last long journey. That he was ready all biographers show, and he died peacefully in London April 15, 1791.

HOWARD A. KELLY.

GARDINER, Silvester (1707-1786). A great deal has been written concerning Dr. Gardiner of Boston, as a landed magnate in Maine, but hardly anything concerning his useful career as a physician. For this reason many newly discovered facts are worth while recording in this book.

If you open your Virgil at the "Bucolics" you will see that the word "silvester" in the second line is spelled with an "i," and Silvester Gardiner in imitation of the Latin always spelled his given name in that way. Some writers say that they have seen it spelled with the "y," but they forget that this occurs in documents written by others, while Dr. Gardiner never in his life wrote his name otherwise than "Silv," except just once in his will, where he signed it "Silvester" in full.

Dr. Gardiner was born June 29, 1707, on what was then called "Boston Neck" in South Kingston, Rhode Island. His parents were William and Abagail Remington Gardiner, of high standing in their little community. The father was a farmer, cordwainer and wheelwright, glad to be busy at any trade. The boy, however, was delicate, and took early to his books. About the time that he was thirteen, there came out from the "Society for the Propagation of the Gospel in Foreign Parts," Rev. James McSparran who preached with fiery eloquence first in Narragansett, and later in South Kingston, and Boston. When he married "handsome Hannah Gardiner," a sister of Silvester, the boy was taken into his home and educated classically, and as he finally showed a bent for medicine, he was sent abroad, and studied eight years in all in London and Paris. As a medical student in London, he was taken in hand by Cheselden of St. Thomas' Hospital, who in 1723 had suggested the high operation for stone, and in 1727, about the time when Gardiner reached London, the lateral operation for the same disease. The "Gentleman's Magazine" for 1731 relates an instance in which Cheselden removed from the bladder a stone in a single minute, and he prints in a later issue in 1732 a poem from the patient, grateful to Cheselden for his cure. Of the studies of Gardiner in Paris we know nothing except that in later years he spoke with fervor of escaping by hard work at his books, the licentiousness of the city of Paris under the Regency of Orleans. It would seem that Dr. Gardiner must have settled in Boston as early as 1734, for in 1735 he was chosen one of the vestry of King's Chapel, a position which he would not have received as a mere stranger in the town. The newspapers of 1736 contain an article on the examination of physicians by a board of physicians and surgeons to be appointed by the General Court, and from the style it was probably written by Gardiner. The same may be said of another and later paper on "The Measels" from a public health point of view.

About this time, also, he established a "Medical Society of Boston, New England," and read before it lectures on anatomy, illustrated with plates brought from Europe. And again in the presence of this Society, October 8, 1741, he performed a rapid and successful operation for stone on a boy six years of age, named Joseph Baker. The boy had had trouble from birth with symptoms of stone, and was now emaciated and slowly dying. It was death or an operation. Dr. Gardiner performed the lateral operation of Cheselden, and removed the stone, "Lapidis Instar Arenosi," like a sand stone, only harder and more compact. It was oval and measured seven inches in circumference. The urine trickled through the incision for three days, then through the natural channels, and in three weeks the flow was natural. Thus was Dr. Gardiner's diagnosis confirmed and his

surgical skill demonstrated. It was then the fashion for physicians to compound drugs in their own dispensary, and Dr. Gardiner, following the custom, became convinced of the waste of his time, and opened an apothecary shop in which the work could be done both for himself and for other physicians. He went on from this beginning, importing drugs and chemicals until his profits ran into the thousands, year after year, from his establishment under the "Sign of the Unicorn and Mortar" on the corner of Washington and Winter Streets. He also opened shops in Meriden and Hartford, Connecticut, that proved equally lucrative. These shops "specialized," as it were, in "Galenical and Chymical Medicines," and in "Ship's medicine Boxes, put up in the neatest manner for Merchant Ships as they are put up for the Royal Navy at Apothecary's Hall in London."

Being, at first, of an easy-going nature, Dr. Gardiner trusted his partners without statements handed in, but discovering that he was being cheated, he was obliged to go to law. The newspapers of that period are overflowing with bitter accusations and virulent rejoinders between Dr. Gardiner on the one hand and Mr. James Flagg and Dr. Jepson on the other, until both of these men were at last glad to liquidate their debts, according to the decisions of the judicial referees. In his mansion on Winter Street, with a garden extending to Tremont, Dr. Gardiner entertained lavishly the grandees of the day: Early Percy, Governor Hutchinson, Sir William Pepperell, Admiral Graves, General Gage, and many others. In this way he showed his devotion to the Crown of England, and as a physician he built an excellent hospital, surrounded with a stockade fence, for the officers and sailors of His British Majesty's New England Fleet. Moreover, when in 1761, smallpox inoculation came into vogue he offered to build another hospital near his own, at a cost to patients of $4 for inoculation and medicines and $3 daily during their stay. This offer was, however, not accepted, because the situation did not seem so salubrious as that afforded by other hospitals.

It is now time to say something concerning Dr. Gardiner's adventures in Maine. In 1752 the Kennebec Company was founded with his money, chiefly, and with Dr. Gardiner as "Perpetual Moderator." The charter gave title to seven and a half miles on each side of the Kennebec up as far as fifty miles from its mouth, and in this region Dr. Gardiner built towns, sawmills, and churches, and induced people to settle by offers of land at low interest. The town of Dresden of today was so named in order to induce Germans to settle within its borders. In addition to these riches, Dr. Gardiner had shares in the Pejepscot Company and I also note his lucrative lumber dealings in Saco with Dr. Donald Cummings, who was bound to get rich. Dr. Gardiner prospered tremendously until the Revolution, when he avowed himself a loyalist and quarrelled with John Hancock, long a very close friend. Embittered at last by the confiscation of his drugs by Dr. John Morgan, surgeon-general of the army by the orders of Washington, then commanding the Continental Army in Dorchester,—for the rest of his life Dr. Gardiner entitled him: "That Thief Washington,"—he collected some $2,000 in gold, and with a party of eight people fled to Halifax. For an ideal, the British Crown, he had sacrificed everything: his practice, his stock in trade, his real estate in Boston, and his vast dominions in Maine. His drugs were confiscated, his books and furniture sold at auction for $8,000, while his real estate in Boston was taken. As for the Kennebec Company, invaders squatted where they chose and cut off timber. Amongst this set of marauders I find four physicians, two of whom had the inpudence at later dates to sell the land as their own to settlers who were careless about accurate deeds.

Meanwhile Dr. Gardiner reached England, where he received a pension from the Crown, lived and practiced at Poole, in County Dorset, and went now and then to London, where in Spring Gardens he had many talks with Dr. Richard Huck Saunders, whom he had met in New England as surgeon in the British Army during the colonial wars. He obtained some money from practice, had a pension which was at one time increased by an additional grant of 50 pounds a year from the Crown, and his son-in-law, Oliver Whipple, of Portsmouth, New Hampshire, sent him cash from time to time. He returned to America in 1785, with the hope of putting his landed estates into shape. They were finally returned to his heirs, chiefly in the form of enormous acreages of timber land in eastern Maine. He settled in Newport, Rhode Island, practiced steadily despite his advancing years, but died suddenly of a malignant fever, August 8, 1786, at the age of seventy-nine. He was buried from Trinity Church in that city and the flags were halfmasted during his funeral.

Dr. Gardiner was a public-spirited, able man, but obstinate in his opinions. He prac-

tically disinherited his oldest son because he was "not an efficient man," and treated his second son in the same fashion because he became a Unitarian. He gave most of his property to the children of a sister, who had married a Hallowell, on condition that her children should change their name to Gardiner. He was devoted to the Church of England, was a warden in King's Chapel, Boston, gave money for its communion wine and endowed with money the church in Gardiner, Maine, within whose portals can still be seen a monument to his name and fame. He was very devout, prayed much, and composed a book of "Devotions," published in London in 1785.

Copley has painted Gardiner with a clean shaven face, heavy jaws and mouth, a dominating nose, and full eyes, crowned with rounded eyebrows. Underneath the engraving of that portrait in "Frontier Missionaries," by Bartlett, 1853, is his signature, "Your Very Humble Servant—Silv Gardiner." A skilful reader of faces, however, can read in those words the meaning that by humility overdone, he was to increase his domination over those with whom he came in contact.

He married thrice, first, Ann Gibbins, daughter of Dr. John Gibbins (as Gardiner spells it in his will), secondly the widow of William Eppes of Salem, and last, Katharine Goldthwaite, who survived him. He had six children, and as has already been said, he left most of his property to the children of his sister Hannah, who were to change their name in perpetual memory and honor of their famous grandsire, Dr. Silvester Gardiner of Boston, New England.

JAMES A. SPALDING.

GARDNER, Augustus Kinsley (1821-1876), of New York, author, the first to use chloroform in labor, was born in Roxbury, Massachusetts, July 31, 1821, one of three children and the only son of Samuel Jackson Gardner and Mary Bellows Kinsley. His maternal grandfather was the first representative to Congress from Maine and was judge of the Court of Common Pleas. After attending the grammar school in his native town, Augustus studied for three years at Walpole Academy, and later at Philips Academy, at Exeter, New Hampshire, when Benjamin Abbott was its president. He went to Harvard, where his father and his maternal grandfather had graduated, and was a member of the class of 1842, but left at the close of his junior year to take up the study of medicine, graduating M. D. from Harvard in 1844 with a thesis on "Syphilis." The University gave him an A. M. in 1852. He worked two years in the Marine Hospital, Chelsea, Massachusetts, under George W. Otis; eight months in the Poor House and Lunatic Asylum, South Boston, with Charles H. Stedman, and at the Tremont Medical School under Bigelow, Holmes, Storer, Reynolds and J. B. S. Jackson (q. v. to all).

In 1844-45 he visited Europe, and while there wrote "Old Wine in New Bottles; or, The Spare Hours of a Student in Paris." Returning to America, he settled in New York City, where he held the office of attending physician to the City Dispensary and to the Northern Dispensary for six years, and to the Lying-In Asylum District for several years. For three years he had charge of the Private Hospital, Bloomingdale. During the Civil War, when the blockade prevented medicine reaching the residents of the chills and fever districts of the South, Gardner made a protest at a medical convention in New York and proposed that quinine and other remedies be permitted to pass the Federal lines. The motion was lost, but credit was given him for his kindness of heart and boldness. He was the first to propose drinking hydrants or fountains in New York, and the first in New York to give chloroform in labor.

Among his writings are: "Essays on Swill Milk," "Report on the Meat of New York," translation of Scanzoni's "Diseases of the Sexual Organs of Females, with additional and original matter." He wrote much for both medical and general journals.

He invented a guarded crochet, and modifications of vectis, crochet, and craniotomy forceps.

He married Anna Louise Hidden of New York, June 27, 1850. He was a Unitarian.

He died in New York, April 7, 1876.

GARLICK, Theodatus (1805-1884), Cleveland surgeon, was born in Middlebury, Addison County, Vermont, March 5, 1805. His father, though a poor farmer, was respectably connected, and probably furnished his son with as good an elementary education as his situation afforded. In July, 1816, when only eleven years old, in company with an elder brother, Abner, he walked from his home in Vermont to Elk Creek (now Girard), Pennsylvania, where his oldest brother, Rodolphus, had settled some six years before and was occupied as a blacksmith. The boy remained with his brother Rodolphus for

some two years and learned the trade of a blacksmith, but about 1818 travelled on to Cleveland and learned stone cutting from Abner who had come west with him and had settled in that city. The next years were spent in Cleveland, on Black River or in Newbury, Geauga County, sometimes with one brother, sometimes with the other, but always engaged in either blacksmithing or the lettering of tombstones. Indeed, from the period when he left home in 1816 the doctor assures us that he never received any pecuniary aid from his father, but supported himself by his own work. In 1830 another brother, Anson, rented a farm in Brookfield, Trumbull County, Ohio, and joining this one, Theodatus resolved to study medicine and prepared himself for the work by collecting a large number of stones suitable for tombstones, and manufacturing for himself the tools necessary to enable him to cut them properly. Having secured a suitable shop for his work, he then enrolled himself as a student of medicine with Dr. Ezra W. Gleason of Brookfield, and, after the removal of Dr. Gleason, with Dr. Elijah Flower, a reputable physician of the same town. His system of labor was to spend his morning hard at work in his shop, accomplishing if possible a full day's work in this time. At noon he removed his overalls, washed himself clean and devoted the remainder of the day and the evening to the study of medicine. A careful pursuit of this rigid system enabled him to save some money, and in 1832 he felt able to meet the expense of a course of medical lectures. Accordingly he went on to Baltimore and matriculated there in the Washington Medical College. His chief aspiration was to become a good surgeon, and with this in view he devoted a large share of his time to careful dissection. In the spring of 1833 he returned to Brookfield and resumed faithfully his old system of work and study, so that in the autumn he was again prepared to take another course of medical lectures. On this occasion, however, he matriculated in the University of Maryland, taking also a course of clinical lectures in the infirmary connected with that institution. Dissection of the human body was again his delight, and one of his dissections was commended by the professor of anatomy as the best made in the university. Graduating in the spring of 1834, Dr. Garlick remained in Baltimore until late in August assisting Dr. Nathan R. Smith (q. v.) in his operative work.

The winters of 1850 and 1851 were largely spent in Cleveland, and in the dissecting-room of the Cleveland Medical College, where Dr. Garlick devoted much time to dissecting the important surgical regions of the body and to the preparation of plaster casts. It is probable that this work brought him into contact with Prof. Horace A. Ackley (q. v.) of the college and led to the partnership which speedily ensued. At all events, Dr. Garlick came to Cleveland in 1852 and formed with Dr. Ackley a partnership which continued until a few months before the lamented death of that surgeon in 1859. Garlick's death was due to an obscure disease of the posterior spinal nerve roots, the beginning of which he himself dates very precisely as January 30, 1864. After an uninterrupted course of more than twenty years it resulted in his death December 9, 1884.

Dr. Garlick married three times. His first two wives were sisters, and daughters of his preceptor, Dr. Flower. The third wife, who survived him, was Mary M. Chittenden of Youngstown, whom he married in 1845. One son, Dr. Wilmot Hall Garlick, did not engage in medical practice.

Dr. Garlick was an interesting character and a man of wonderful versatility. A courageous and skilful surgeon, he had twice tied the common carotid artery, thrice he had removed one-half the lower jaw, once he had removed for necrosis the entire outer table of the frontal bone, and in the allied department of operative midwifery he had performed version, embryotomy and Cesarean section. The manufacturer of a set of amputating and trephining instruments for his own use was one of his feats, and there is in the museum of the Cleveland Medical Library Association a pair of obstetric forceps, the handiwork of Dr. Garlick, which only very careful examination can distinguish from the work of the best instrument-makers of New York or Philadelphia. But his life had also an artistic side. Even while in attendance upon the lectures of the University of Maryland in 1834 he made medallion likenesses in bas-relief of Dr. Eli Geddings, (q. v.) the dean of the faculty, and of professors N. Potter, N. R. Smith, Robley Dunglison and Hall, (q. v. to all) all of which were so excellent that Dr. Garlick was invited to go to Washington and model a similar likeness of President Andrew Jackson. The fine anatomical models constructed and colored by the doctor in 1851 were readily disposed of to various colleges. Prof. R. D. Mussey purchased a set for him-

self, and declared them far superior to the work of Auzoux of Paris. A number of casts of pathological specimens colored by Dr. Garlick were equally admired.

It is also worthy of remark that in December, 1839, Dr. Garlick made a camera with which he took one of the earliest daguerreotypes ever taken in this country (a landscape), and in the following year he was able to take likenesses with the same instrument.

Finally it should be recorded that Dr. Garlick was the first person in this country to essay the artificial culture of fish, an experiment which he carried out successfully on the farm of Dr. Ackley, some two miles out of Cleveland, as early as 1853. His experiments and results were reported in a paper read before the Cleveland Academy of Natural Sciences on February 7, 1854, and were published under the title "A Treatise on the Artificial Propagation of Fish, with Description and Habits of Such Kinds as are Suitable for Domestic Fish Culture", 1857. A second edition was published by the Kirtland Society of the Natural Sciences in 1880. An autobiography in pencil was in possession of his daughter.

HENRY E. HANDERSON.

GARNETT, Alexander Yelverton Peyton (1820-1888), of Essex County, Virginia, prominent surgeon of the Confederate Army, came of a well-known Virginia family. He was born September 19, 1820, and was educated by private instructors on his father's plantation and graduated in medicine at the University of Pennsylvania in 1841, his thesis being "Extrauterine Gestation." Soon after he was commissioned assistant surgeon in the United States Navy, and after five years' service in different parts of the world returned to the United States in 1848 and married Mary E. Wise, the daughter of the well-known Virginia governor. Then he retired from the navy and began to practice medicine in Washington, District of Columbia. When the Civil War broke out Garnett chose the fortunes of his native state and entered the Confederate Army as surgeon. He was the physician and intimate friend of Jefferson Davis and General Lee. At the close of the war he resumed practice in Washington where by his skill and urbanity he rose to be one of its first practitioners. Garnett was a classic writer on medical subjects and took active part in the medical life as well as in the promotion of all benevolent and charitable institutions of the capital. He died in the summer of 1888.

ALBERT ALLEMANN.

GARRETSON, James Edmund (1828-1895), creator of oral surgery as a specialty, was born in Wilmington, Delaware, October 18, 1828. After studying dentistry in Wilmington, he began to practice near Woodbury, New Jersey; later he entered the Philadelphia College of Dental Surgery (progenitor of the present Pennsylvania College of Dental Surgery) and received his dental degree February 29, 1856. In 1859, he was graduated in medicine from the University of Pennsylvania. When the Philadelphia Dental College was organized in 1862, Garretson was elected to the chair of pathology and therapeutics but, before delivering lectures, resigned to succeed D. Hayes Agnew (q. v.) in the Philadelphia School of Anatomy in which he had been a demonstrator for five years; here he remained until 1864 when he became professor of anatomy and surgery at the Philadelphia Dental College. During the Civil War he was in active military service. In 1859, he married Beulah, daughter of George Craft of Upper Greenwich, New Jersey, who with two daughters survived him. In 1869, he was appointed oral surgeon to the Hospital of the University of Pennsylvania. From 1880 he was dean of the Philadelphia Dental College until his death October 26, 1895.

Garretson was a pioneer in a new department of surgery and created much of its technique; he had the dexterity of a skilful dentist and the ability to devise prosthetic appliances and, in addition, the boldness of the surgeon well acquainted with anatomy. Although a creator of oral surgery as a specialty, he was conservative in methods and worked always with a view to cosmetic results; to this end, he avoided as far as possible external incisions even in the removal of the entire superior maxilla. In operations on the inferior maxilla he would leave a thin basilar rim of bone and periosteum to induce the re-formation of a maxillary ridge to be utilized for the support of a dental armature. He used the dental surgical engine for his operations and did work impossible without it; the evolution of this at one time much used instrument is closely connected with his work. His "System of Oral Surgery" went through six editions from 1869 to 1895, and in time dealt with all manner of operations on the head and neck, including dentistry. This constituted an early effort to break the nar-

row limitations of the dental art and to bring it into closer relations with general surgery, —an effort realized at a later date on different and more fruitful lines, including in its scope general medicine as well as surgery. He had much, therefore, to do with the final acceptance of dentistry as a branch of general medicine and to place it on a parity with the other special branches.

Garretson was a lover of philosophic and metaphysic studies. In 1855, he wrote on the "Ether Question" in the "Dental News Letter" and contributed more than a hundred articles to "Dental Cosmos." Under the "nom-de plume" of John Darby, he was the author of "Brushland"; "Hours with John Darby"; "Thinking and Thinkers"; "Odd Hours of a Physician"; "Nineteenth Century Sense," and "Man and His World."

HOWARD A. KELLY.

GARRIGUES, Henry Jacques (1831-1913), who introduced antiseptic obstetrics into America, was born in Copenhagen, Denmark, June 6, 1831, and died at Tryon, North Carolina, July 7, 1913, in the beginning of his eighty-third year. He was of French Huguenot extraction. His father, for some time Consul General from Denmark to Cuba, was named Jacques Garrigues, and his mother's maiden name was Cecile Luntzfelt, coming from a family prominent in the commercial world. Dr. Garrigues was graduated A. B., with honors, from the Metropolitan College of Copenhagen in 1850, and A. M. in 1863. He studied medicine both in Copenhagen and in Paris, with long interruptions due to ill health, and received his M. D. from the University of Copenhagen in 1869 when 38 years old.

He married Louise Riemer, who bore him six children, three sons and three daughters, the eldest son, Dr. Leon F. Garrigues, following his father's profession.

Dr. Henry Garrigues' first appointment in New York City was as gynecologist to the German Dispensary in 1879; next, in 1881, obstetric surgeon to the New York Maternity Hospital. He was made attending physician to the New York Infant Asylum, gynecologist to the German Hospital in 1885, professor of obstetrics at the New York Post-graduate Medical School in 1886, gynecologist to St. Marks Hospital, and later consulting surgeon to the New York Maternity Hospital, professor of gynecology in the School of Clinical Medicine. He became a fellow of the American Gynecological Society in 1877, was vice-president in 1897; in 1901 he was made an honorary fellow, and in 1902 an honorary fellow of the Obstetrical Society of Edinburgh.

He was author of several books, of which the best known are "Diagnosis of Ovarian Cysts," 1882; "Practical Guide to Antiseptic Midwifery," 1886; "Text-book of Diseases of Women," 1894-97 and 1900; "Text-book of Obstetrics," 1902-07; "Medical and Surgical Gynecology," 1905. He was a voluminous writer in the medical journals. Dr. Garrigues' greatest work and that which will cause his name to be long remembered, was the development and introduction of a rational antisepsis into obstetrical practice in the United States. "In the first nine months of 1883, of 345 deliveries at the New York Maternity Hospital, 30 women died and the serious morbidity was enormous. In September the conditions were at their worst. Ten of the women delivered during the month died—about one in four—and the survivors escaped miserably with their lives. Compare this with the present mortality in our maternities, a mortality from sepsis of less than 0.1 per cent. At this time (October 1) the rotation of service brought Dr. Garrigues in charge. He proved to be the man superior to the emergency. Appalled at the frightful conditions he had already formulated, he at once carried into effect a detailed plan for driving out the pestilence. The plan consisted of rigid cleanliness, the use of bichloride solution, the rapid alternation of wards, and fresh bedding and clothing. On December 21, less than three months after the institution of the new régime, Garrigues, in reporting the result of his work, was able to say: "The effect of the treatment has been wonderful. As if by magic all trouble disappeared. Ninety-seven women have been delivered since its introduction, and not only has none of them died, but there has been scarcely any disease among them; only three had any rise of temperature. The pavilions are scarcely recognizable. Where we used to have offensive odors; feverish, protrated, or despairing patients, overworked nurses and despondent doctors, the air is pure, the patients look well, their temperatures are normal, the nurses are cheerful, and the doctors happy." As Brooks H. Wells (q. v.) said in his "In Memoriam": "Could there be a greater triumph than this? Was ever greater lesson taught more quickly? And Garrigues lived to know we knew the value of his deed; lived to know the place of honor he held in the hearts of his fellows."

Dr. Garriguès was a man of unusual cultrue, strong character, a very hard worker. He retained his activity of mind almost to his death. He was much interested in botany and languages, and at the age of seventy-eight took up Esperanto and became an authority on its pronunciation.

LEON F. GARRIGUES.

GASTON, James McFadden (1824-1903), for a long time the leading surgeon and teacher in the South, was the son of Dr. John Brown and Polly Buford Gaston and was born December 27, 1824, near Chester, South Carolina. He attended the common schools of his native county and at Russell Place in the Kershaw district. Graduating A. B. at the South Carolina College, Columbia, in 1843, he began the study of medicine under his father, attended one course of lectures at the medical department of the University of Pennsylvania and a course at the Medical College of South Carolina, receiving his M. D. there in 1846. Immediately entering on practice in partnership with his father in Chester, he stayed there until 1852, when he removed to Columbia. At the opening of the Civil War Dr. Gaston enlisted in the Columbia Grays and was appointed chief surgeon of the South Carolina forces, serving in various capacities throughout the war.

At the close of hostilities in 1865, Dr. Gaston went to Brazil, where he attended the lectures of the Imperial Academy of Medicine, and in 1873 received an "ad eundem" degree, entitling him to practice medicine in that country. He established himself with his family in the province of St. Paulo in 1867 and practiced medicine for six years in the interior towns. In 1874 he removed to Campinas, Brazil, and practiced until his return to the United States in 1883. Then he made his home in Atlanta, Georgia, until his death, November 15, 1903, at the age of seventy-nine.

Soon after settling in Atlanta he opened a surgical infirmary in connection with his surgical practice, and in 1884 was elected professor of the principles and practice of medicine in the Southern Medical College, Atlanta. Dr. Gaston wrote extensively for medical journals and for the Southern Surgical and Gynecological Association, of which he was president in 1892. His papers on surgery of the gall-bladder and ducts, yellow-fever inoculation, appendicitis and ovariotomy received the most attention. He was chairman of the surgical section of the American Medical Association in 1891; he was also a member of the American Surgical Association.

Dr. Gaston married Sue G. Brumby, daughter of Professor R. T. Brumby of the University of South Carolina, in 1852, and they had ten children, one son following in his father's footsteps.

He was tall, fair haired, wiry and alert. He was the first surgeon to demonstrate the feasibility of cholecyst-enterostomy by use of the elastic ligature on dogs. This original work was done in Atlanta in 1885. One remembers him as an enthusiastic surgeon of an original and inquiring type of mind. He was not careful in his antisepsis, but was one of the first surgeons to appreciate the value of tincture of iodine as a local antiseptic. He was a bold operator, and always reported his untoward results with absolute fidelity.

GATEWOOD, James Duncan (1857-1924), authority in naval hygiene, was born May 24, 1857, in Halifax County, Virginia, the son of Robert (D. D.) and Harriett Elizabeth Duncan Gatewood. After graduating in medicine from the University of Virginia in 1879, he rose from assistant surgeon in the Navy, 1880, to Medical director, 1911. From 1912 to 1916, he was in command of the United States Naval Hospital in Washington, D. C., and the United States Naval Medical School. The early days of the World War found him senior medical officer at the Naval Training Station, Gulfport, Mississippi; here he was in command of the Naval Hospital from 1918 until he was retired in 1921 with the rank of commodore. At one time, he was president of the Naval Examining Board and was a delegate to the International Congress on Leprosy in Berlin, 1897, and the International Sanitary Conference of American Republics in Mexico City, 1907.

Gatewood was the author of "Notes on Naval Hospitals, Medical Schools, and Training Schools for Nurses," 1893, and "Naval Hygiene," 1909.

He married Anne Wythe Mallory Critcher of Westmoreland County, Virginia, June 12, 1883. His death occurred February 27, 1924.

GATTINGER, Augustin (1825-1903), Tennessee botanist, was born in Munich, Bavaria, February, 1825 the son of August and Rosa Gattinger. The father, a receiver of moneys due the Crown from states or principalities, died when his son was seven; the relationship between the two had been peculiarly tender and all his life the younger Gat-

tinger treasured his father's last birthday gift, a silver spoon. After attending the Latin School and the Gymnasium, Augustin entered the medical school of the University of Munich. A participant in a student celebration of the birthday of Washington, to laud the blessings of civic liberty, Gattinger was haled before the authorities and only released on his promise to quit the country. On April 24, 1849, the day of his marriage to Josephine Dury, daughter of Nicholas Dury of Munich, he set sail for America; in June they reached Chattanooga, Tennessee. Gattinger bought a practice at Cave Spring near Kingston and purchased a farm. After the farm experiment failed, he moved to Charleston and was resident surgeon to the copper mines of Ducktown, in the high mountains of east Tennessee. During the Civil War, he served as assistant surgeon in the United States Army. In 1864, he moved his family to Nashville, where he was State Librarian for five years. Born with the zeal of a naturalist, he had studied chemistry, mineralogy, and general and medical botany at the University of Munich. Now he turned his energies to the geology and botany of Tennessee; in the botanically unexplored middle Tennessee, he was the pioneer. In 1883, he published at his own expense a "Catalogue of Plants or Flora of Tennessee," containing a systematic enumeration of seventeen hundred and eight species. He distributed his catalogues widely, thus unifying the botanists and collectors of the State. His correspondence and exchanges extended to the leading botanists of the United States. He furnished a list of his collected grasses to the state commissioner of agriculture for a work on Tennessee grasses and forage plants; prepared a publication on the trees and shrubs suitable to the soil and climate of Nashville for the Nashville Board of Health; collected for the census specimens of the timbers and building stones, exclusive of marbles of Tennessee, and for the Louisville and other exhibitions specimens of minerals, building stones, and plants. In 1894, he compiled a list of the medicinal plants of Tennessee. As a member of the state committee on minerals and mines in connection with the Centennial Exposition, in 1893, he made a collection of the copper ores and smelting products of the Ducktown Mines and Smelting Works, including a rich display of ingots and of Tennessee granites in blocks. In 1890, Dr. Gattinger's entire collection was presented to the University of Tennessee; he gave his botanical library to the University of the South, at Sewanee. In 1901, he published his "The Flora of Tennessee and a Philosophy of Botany," containing over four hundred species not in the first edition. In 1869 he discovered a fossil shell which J. M. Safford, state geologist, named "Conularia Gattingeri."

Dr. Gattinger continued to practice medicine to the close of his life. He died of pneumonia July 18, 1903, survived by three daughters.

GAULTIER, Jean François (1708-1756).

Gaultier was a King's Physician of Quebec, after whom was named the checkerberry plant, "Gaultheria procumbens." Botanists, Asa Gray among them, have mistaken the identity of our physician, a friend of the Swedish naturalist Kalm, when the latter visited Quebec in 1749, assigning the sponsorial honor to Hugues Gaultier, a Parisian surgeon, and surgical and botanical writer, who took his medical degree at Montpellier in 1763 and died in France in 1778. The orthography of the name Gaultier has caused botanists much discussion, but they agree that the name "Gaultheria" should stand as the proper spelling, in whatever way the original name may have been written.

Jean François Gaultier (also Gautier or Gauthier) was the son of René Gautier, of Lupénin, and of Françoise Colin, of La Croix, diocese of Avranches, Normandy. He was born in 1708, for his burial certificate in 1756 gave his age as 48 years. We learn that Gaultier on his arrival in Quebec from France attended law lectures given by the procureur général Verrier, which were begun in 1733 (Roy. Hist. du Notar, au Canada, vol. i, p. 384). In 1740 Verrier, writing to the minister of Marine, mentions Sieur Gaultier, physician, as one of his pupils and as exciting the emulation of the others by his zeal, he "giving to his law studies as much time as he could spare from his professional duties."

In 1741 Gaultier was made King's Physician for Canada. Then he sailed to France in the vessel "Le Rubis," returning in 1742, after he had walked the hospitals of Paris. According to the early records of Quebec, Gaultier became a member of the Superior Council in 1744 and an assessor, first taking his seat in the following year. In the year 1745 the Royal Academy of Sciences of Paris made him a correspondent of M. du Hamel, one of its members, and he soon sent over a collection of specimens having to do with natural history which was placed in the King's

gardens; again in 1749 a collection of different sorts of seeds met with a similar disposition. Gaultier followed in the footsteps of his predecessor, Michel S. Sarrazin (q. v.), in being Royal Physician to the Province, in his membership in the Supreme Council, in becoming a corresponding member of the Academy of Sciences and in his researches in natural history. In 1742 he began a journal, at the request of M. du Hamel, containing records of daily temperatures, state of the weather, direction of the wind and descriptions of animal and plant life. The journal was sent to M. du Hamel, who read extracts to the Academy. In the history of the Royal Academy of Sciences of Paris for the year 1744, page 135, is to be found a memoir by M. Guettard, comparing Switzerland with Canada. In this the writings of Gaultier on the minerals and mines of the country are cited frequently, especially those on a lead mine at Baie-St. Paul, for which Gaultier received a "gratification" of 400 pounds from the president of the Navy Board in 1750.

Gaultier demonstrated to the Academy the superiority of the Canadian tea berry to that found in France. He said it made an excellent aromatic beverage without sharp taste or bitterness, and having diuretic properties especially valuable for people who lead a sedentary life and were subject to stone.

In 1748-49 the Swedish naturalist, Peter Kalm, visited New England and Canada. At Quebec he met Gaultier, who, at the command of the Marquis de la Galissonnière, edited Kalm's list and description of plants of Canada, the Marquis himself correcting and annotating it with his own hand. Gaultier was named by the Governor to accompany Kalm. They visited the Hotel Dieu August 8, 1749, two days after Kalm's arrival and the latter refers to his guide as "a man of great learning in physics and botany and now the physician to the convent" (Voyage de Kalm, in Mém. Soc. Hist. de Montreal, Sec. livr., 1881, p. 101). Kalm copied into his account of his voyage Gaultier's botanico-meteorologic observations during the year 1745.

Kalm is said to have given the name "Gaultheria procumbens" to the Canadian teaberry, in honor of his friend. In the year 1753 Gaultier presented a paper on the subject of maple sugar to the Academy, one of the eight papers that were thought worthy of printing and now to be found in the Transactions.

Jean François Gaultier married Marie Anne Tarieu of Lanaudière, March 12, 1752. She was described as being about 44 years old, daughter of Pierre Thomas Tarieu, Sieur de la Pérade, lieutenant in the army.

Gaultier died in 1756, probably a victim of an epidemic introduced to Quebec by the frigate "Leopard" of the squadron that brought over Montcalm. His funeral at the Church of Notre Dame de Quebec, July 11, 1756, was largely attended. His widow lived until 1776, when she died in Quebec at the age of 68.

MICHAEL JOSEPH AHERN.
GEORGE AHERN.

GEDDINGS, Eli (1799-1878), professor in the Medical College of South Carolina, writer, was born in Newberry District, South Carolina, in 1799. He received his early education in Abbeville Academy, and was licensed to practice by the Examining Board of the Medical Society of South Carolina in 1820, in Charleston. In 1820-21 he took a course of lectures at the University of Pennsylvania and in 1825, at the inauguration of the Medical College of South Carolina, had the proud satisfaction of receiving the first degree at the first commencement. In the spring of 1825 he went to Europe to attend Paris and London hospitals, especially the former. In May, 1826, and for one year he discharged the duties of demonstrator of anatomy in his alma mater. In 1831 he was invited to accept the chair of anatomy and physiology in the University of Maryland and stayed there until 1837. While in Baltimore he edited in 1833 the "Baltimore Medical and Surgical Journal," a quarterly which was converted in 1834 into a monthly journal known as the "North American Archives of Medical and Surgical Sciences," and his prolific pen was often engaged in contributing valuable papers to the present "American Journal of the Medical Sciences." The chair of pathological anatomy and medical jurisprudence having been created for him, he returned to Charleston in 1837 and filled it until that of surgery was made vacant by the death of his colleague, Dr. John Wagner (q. v.). In 1847 Dr. Samuel Henry Dickson (q. v.) removed to New York and Dr. Geddings was transferred to the chair of practice of medicine. Here he remained, discharging the duties with his accustomed ability until 1850 when Dr. Dickson returned and he resumed the chair of surgery.

Dr. Geddings received many offers of foreign service during his professional career: About 1830, when Prof. Eberle (q. v.) removed to Cincinnati, he was chosen to the vacant chair of the practice of medicine in the Jefferson Medical College, and upon the organization under Chancellor Mathews of the New York University, was solicited to take the professorship of anatomy. When Prof. Drake seceded from the Medical College of Ohio and formed a new school, Prof. Geddings was offered the chair of anatomy with a guarantee, and on the organization of the University of Louisville, was offered by Caldwell the choice of whichever chair he should desire.

Familiar with Latin, French, German and Spanish, Dr. Geddings performed an incredible amount of literary work. Previous to the civil war he had so far completed a work on "The Practice of Medicine" that the title page had been set up in Philadelphia, but the stirring events of 1860-1865 put an end to all that, for he served as surgeon in the Confederate army during the war. His rare medical library, which had been sent to Columbia, was destroyed in a conflagration.

Dr. Geddings was married to Mrs. Gray, née Wyatt, by whom he had three sons and one daughter. His sons all became physicians. Dr. Geddings was married to Laura Postel, a second wife but had no children. He died in Charleston, South Carolina, October 9, 1878.

An excellent portrait is in the hall of the Medical Society of South Carolina and a steel engraving with a biographical sketch was printed in the "Charleston Medical Journal" for 1857.

W. Peyre Porcher.

GEIKIE, Walter Bayne (1830-1917), medical educator of Canada, was born in Edinburgh, May 8, 1830, the son of Rev. Archibald Geikie, a Congregationalist minister, who came with his family to Canada in 1843 and first resided in Mooretown, near Sarnia. He came of a family which has earned much distinction. A brother, Rev. J. Cunningham Geikie, was author of the well-known "Life of Christ." Sir Archibald Geikie, for some years Director-General of the British Geological Survey, and then president of the Royal Society of Great Britain, was a first cousin, as was the dean of the faculty of Science of Edinburgh University, Professor James Geikie; an uncle, Walter Geikie, produced admirable etchings of Scottish life and character. Dr. Geikie was licensed as a medical practitioner by the Medical Board of Upper Canada in 1851 and held the degree of M. D. from Victoria University and Jefferson Medical College, Philadelphia, in 1852. Other degrees were: C. M. from Victoria University, D. C. L. from Trinity University, 1889, LL. D. from Queen's University, 1907, L. R. C. P. of London, F. R. C. S. and L. R. CC. S. of Edinburgh.

A period of more than half a century, 1856 to 1907, was spent in the work of medical education in Ontario. During the period from 1878 to 1903, he was dean of Trinity Medical College, Toronto. In 1856 he became professor of materia medica in Victoria University, Cobourg, where he was associated with the late Dr. John Rolph (q. v.), and later was appointed to the chairs of anatomy, surgery and midwifery. In 1870 he severed his connection with Victoria University and a year later suggested the establishment of a medical faculty in Trinity University, Toronto, which, in 1877, was incorporated under an independent charter as the Trinity Medical College. Under his able direction, the work of the College rapidly developed and its amalgamation in 1903 with the University of Toronto was a great blow to him, and was the cause of his retiring from educational work. He was for many years on the active staff, and later on the consulting staff of Toronto General Hospital. He represented Trinity Medical College on the Council of the College of Physicians and Surgeons from 1877 to 1902.

His association with the Upper Canada Bible Society was especially notable, having extended over a period of sixty-five years. He was a member of the Presbyterian church. He retained to the last of his life an unimpaired interest in medical training in its higher and more humanitarian aspects, and was still able, at the beginning of the World War, to regard as one of its compensating advantages to humanity the improvements it was sure to bring in discoveries and inventions.

He married Frances M. Woodhouse, daughter of James Woodhouse, in 1854, and one daughter and two sons, both doctors, survived him.

Dr. Geikie died at his home in Toronto, January 12, 1917, at the good age of nearly eighty-seven years.

Gentsch, George Theodore (1850-1880), a young chemist and medico-legal expert of

Cleveland. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 432.

GERHARD, William Wood (1809-1872), who distinguished typhoid from typhus fever, Philadelphia professor, was born in that city July 23, 1809, of German and Moravian descent, was educated at Dickinson College (A. B., 1826), and graduated from the University of Pennsylvania in 1830. He studied medicine under Dr. Joseph Parrish, going that same year to Paris, then the medical center of the world, to study under Chomel, Andral and Louis.

"He appears," says Osler, "to have been an indefatigable worker, and the papers which he published based upon material gathered in Paris are among the most important we have from his pen. With Pennock he described Asiatic cholera in 1832. Devoting himself particularly to studying diseases of children he issued a very interesting paper on small-pox and two of very special value—one on tuberculosis meningitis and one on pneumonia in children. Both of these mark a distinct point in our knowledge of the two diseases. He is usually accorded the credit of the first accurate clinical study of tuberculosis meningitis. Above all he avoided any dependence on books and relied chiefly on personal observation and study. His thoughtful works on pediatrics are now little known, but the essential part of them still benefits the physician of to-day.

In 1833 he returned to Philadelphia and became resident physician to the Pennsylvania Hospital and while there demonstrated the common continued fever of the United States to be identical with the typhoid he had studied in the wards in Paris. When in 1836 typhus broke out in Philadelphia he had opportunities of studying hundreds of cases and showed the identity of the disease with that seen in Edinburgh and the dissimilarity of both to typhoid. The honor of the discovery has been divided between Perry of Glasgow (1836), Lombard of Geneva (1836), Gerhard and Pennock of Philadelphia (1836), Shattuck of Boston (1836), and others, but according to Osler, Gerhard's papers in the "American Journal of the Medical Sciences," 1837, are the first in any language which give a full and satisfactory account of the clinical and anatomical distinctions we now recognize.

Gerhard's training made him specially desired as clinical lecturer at the Philadelphia Hospital, and he soon had a reputation in diseases of the heart and lungs. At his lectures students saw that truth was his object, not display. An attack of typhoid fever in 1837 hindered work and left him broken in health, so that a visit was made in 1843 to Europe. In 1868 he retired after a busy life and on April 28, 1872, Philadelphia lost one of her most genial, kindly and clever physicians.

He held among other appointments the post of resident physician to the Pennsylvania Hospital, 1834; assistant professor institutes of medicine, University of Pennsylvania, 1838; visiting physician Pennsylvania Hospital, 1845; member of the Philadelphia Medical Society, College of Physicians, American Philosophical Society, and president of the Pathological Society.

Among his writings are found:

"Observations on the Cholera in Paris," 1832 (with C. W. Pennock); "On the Typhus Fever Which Occurred in Philadelphia in 1836, Showing the difference between This . . . and Typhoid," Philadelphia, 1837; "Diagnosis, Pathology and Treatment of Diseases of the Chest," Philadelphia, 1842.

DAVINA WATERSON.

GERRISH, Frederic Henry (1845-1920), anatomist and surgeon of Portland, Maine, was born in that city, March 21, 1845, the son of Oliver Gerrish and Sarah Little. From his father, a watchmaker, he inherited accuracy of detail and from his mother, a descendant of Timothy Little (q. v.), his love for anatomy. After the necessary preparatory education in the public schools of Portland, he entered Bowdoin and was graduated in 1866, a member of the Phi Beta Kappa, and in 1869, in medicine, with a thesis on the Caesarean section. He immediately took a lectureship in several branches of medicine in the Portland School for Medical Instruction. In 1873-74, he was lecturer in therapeutics and materia medica in the University of Michigan, followed by the professorship the following year. Called back to Bowdoin, he accepted and held the same chair there from 1875 to 1882 when he took the professorship of anatomy. He remained the head of this department until 1904 and then became professor of surgery. In 1911, he was made emeritus professor of surgery. His last activity was that of professor of medical ethics in 1911-15, thus rounding out some forty years of preeminently fruitful service in this institution. The University of Michigan bestowed the LL. D. on him in 1904 and Bowdoin, in 1905.

As a lecturer Gerrish was inspiring; in anatomy he was greatly aided by his skill in drawing. He accomplished much by working in close cooperation with the other instructors; for example, the consideration of diseases of the heart by the chair of medicine would be preceded by an anatomical lecture on that organ. His "Writing of Prescriptions for Students Unfamiliar with Latin" (1878) and his "Medical Dictionary" (1891) were widely used. His years of teaching were also years of intimate connection with the Maine General Hospital, where he was successively secretary of the board, pathologist, surgeon, consulting surgeon, and director. Also he did much for his state in promoting a high standard of nursing. From 1885 to 1889, he was president of the Maine State Board of Health.

It is as an anatomist that Dr. Gerrish will best be remembered, and that through his excellent "American Anatomy" (1899) of which many of the illustrations of the lymphatics and many drawings of the insertions of the muscles are his own originals and two-thirds of the text drawings came from his pen. His "Anatomical Nomenclature" called attention to the need of greater accuracy and uniformity in this field. He was a good operator, and, in Maine, a pioneer in hysterectomy, appendectomy, and prostatectomy. In the late seventies, in the case of a post mortem on a student who had died from the so-called "typhlitis" he remarked as he lifted up the gangrenous appendix, "Some time, and that before long, we shall be removing the appendix, by an early operation and so save many lives." He early cultivated Listerism and became so stirred by his results that he translated and published Lucas-Championnière's "Aseptic Surgery" in 1881. He contributed lymphatic surgery to the "Systems" (1895) of Keen, Dennis, and Park.

Gerrish joined societies for the purpose of promulgating his views, and of most of them, he became president in time. He contributed to the Maine Medical Association articles on the microscope, salicylic acid, sanitary conditions in Portland and in Maine, and the dangers of the venereal peril; in the last problem he was especially active. He also wrote on compensation of physicians and on the metric system. His presidency of the Association marked an advanced public health policy. As a writer of brief obituaries of the members, he was unsurpassed. For the American Academy of Medicine, he wrote on "Medical Education," "Sociology," "The Venereal Peril," "Hypnotism," and "Psychotherapy," including his presidential address "On the Best Equipment for Medical Study." Before the American Therapeutic Society, of which he was president, he read papers on "The Relations between Physicians and Pharmacists," and "Legal Control Needed in the Treatment of Drug Addicts." Among papers in the "Boston Medical and Surgical Journal" were "The Use of Morphia Hypodermatically as a Substitute for Hanging," "Urinary Calculi," and "Removal of the Uterus." His many addresses before various societies show a remarkable versatility and astonishing wit; he was noted for ready repartee. Psychotherapy always interested him deeply, and he was always attracted to the subject of sex hygiene. He aroused much discussion at a meeting of the American Medical Association by insisting that the sexual relation should be limited to procreation. He was also a Fellow of the American Surgical Association and a member of the American College of Surgeons, Société Internationale de Chirurgie, the New England Surgical Society, and a governor of the State of Maine Society of Colonial Wars, 1916-20.

Dr. Gerrish married Emily Manning Swan of Portland, December 31, 1879.

He was the victim of a spasmodic diplopia, associated with excitability, which was reflected in his language and conduct and often disturbed his social relations.

On September 8, 1920, Dr. Gerrish died.

JAMES A. SPALDING.

GERSTER, Arpad Geyza (1848-1923), New York surgeon, was born December 22, 1848, at Kassa, Hungary a son of Nicholas and Caroline Gerster and a descendant of men closely identified for centuries with the municipal life of Basel, Switzerland, and Kassa, Hungary. During his school days in the Gymnasium in Kassa, an attachment for a young student of medicine influenced Arpad's choice of a profession, and he was graduated in 1872 from the University of Vienna as Doctor of Surgery. At once he worked off his year's compulsory military service, as second lieutenant and assistant surgeon; then took charge of the pathological department of the City Hospital in his birthplace until he left in January, 1873, for America, with letters of introduction to Marion Sims (q. v.) and others. On board ship he met Anna Barnard Wynne, a musician of Cincinnati, whom he married December 14, 1875. Gerster settled first in Brooklyn and then in

New York and was soon able to devote himself to surgery, becoming surgeon to the German Hospital in 1878 and to Mt. Sinai Hospital in 1879. In 1882, just after the New York Polyclinic was organized, he was called to the chair of surgery which he relinquished in 1894 because of increasingly heavy demands upon his time and effort at Mt. Sinai. In 1910, he accepted the professorship of clinical surgery at the College of Physicians and Surgeons of New York, terminating on the date of his retirement by age limit from active service at Mt. Sinai, January 1, 1914.

He was president of the New York Surgical Society in 1891 and a fellow of the American Surgical Association in 1890, president in 1911. He enjoyed especially his membership in the Charaka Club and the relation of history, letters, and the arts to medicine that it cultivated. The love of natural history fostered by his mother was ever assertive. He was particularly fond of camping, canoeing, and fishing. A disciple of the burin, many of his etchings are treasured by friends. His love of music was intensified in his sister, Etelka, a prima donna of world wide renown. A great enjoyment lay in reading the classics in the original. In his teaching, he was intolerant of laxity but free with deserved praise and recognition. He was the author of papers on surgical subjects and two books: "The Rules of Aseptic and Antiseptic Surgery," 1888, which passed through three editions, and "Recollections of a New York Surgeon," 1917.

He died of angina pectoris, March 17, 1923.

A son, John Carl Arpad Gerster, born November 27, 1881, is assistant professor of clinical surgery at the Cornell University Medical College.

GESNER, Abraham (1797-1864), Canadian geologist, who gave the name to Kerosene, was born at Cornwallis, Nova Scotia, May 3, 1797, and died in Halifax, Nova Scotia, April 29, 1864. His father, Col. Henry Gesner, was a native of New York, and served during the Revolutionary War on the royalist side, subsequently settling in Cornwallis. Young Gesner had but little opportunity of securing a good general education, but he had that vigor and activity of mind which find a way to intellectual achievement in spite of difficulties. A "self-made man" in general learning, he early took to reading the book of nature at first hand in the rocks and minerals, fauna and flora, of his native land, and throughout life, geology, mineralogy, and the chemistry connected therewith were his favorite studies. By the time he was twenty he had made considerable advance in these subjects, and eagerly grasped at an opportunity afforded him of visiting the West Indies and part of South America that he might extend his scientific knowledge by an examination of the earth and its products in other countries than Nova Scotia. For some years he continued these studies abroad and at home, and about 1825 became a student of medicine in London, where he studied at both St. Bartholomew's and Guy's. In connection with his numerous papers published in the "Geological Journal" (London) the author's name regularly appeared thus: "Abraham Gesner, M. D., F. G. S." He was also fellow or member of many other learned societies in both America and Europe. Having practiced for a time in Cornwallis, he removed to Parrsboro, and from the preface to his first published work, "Remarks on the Geology and Mineralogy of Nova Scotia," it is shown that in 1836 he was still there and practicing. This book proved of great public service, both by bringing many of the reading people of Nova Scotia into touch with geological science, and by becoming the guide-book to the greatest geologist of the age, Sir Charles Lyell, who, in 1842, visited the province and made a "careful examination of some of the most difficult features of its geologic structures." He had not only Gesner's book, but also the author himself as guide on part of that survey, and both proved of great assistance to him.

Among Gesner's other and separately published works are the following: "Reports on the Geology of New Brunswick," Nos. 1, 2, 3 and 4, St. John, 1839-42; "Report on the Geology of Prince Edward Island," 1846; "New Brunswick, Early History, Natural History, Etc.," London, 1847; "Industrial Resources of Nova Scotia," Halifax, 1849; "A Practical Treatise on Coal, Petroleum, and Other Distilled Oils," New York and London, 1861. Second revised edition, 1865.

Dr. Gesner has been frequently referred to as the discoverer of kerosene and the originator of the name, derived from the Greek "Knpōs," wax. As early as 1846 Dr. Gesner had extracted oil from the "Albertite" of New Brunswick, and other bituminous minerals. From 1843 to 1851 he was engaged in making analyses for Lord Dundonald of the bitumen of Trinidad and other products of the West Indies. Next he sought to turn his scientific discoveries to commercial use, and, proceeding to New York, set up two large factories for the manufacture of

the illuminating oil he called kerosene. The "New Oxford Dictionary," under the definition of the word kerosene, says: "First manufactured by Abraham Gesner shortly after 1846."

Dr. Gesner was of vigorous frame, always busy, but of kindly social disposition, and held in great respect by his intimate acquaintances and scientific men of his day.

Shortly after his medical graduation, Dr. Gesner married Miss Webster of Kentville, Nova Scotia, a sister of the naturalist, Dr. Webster, and had a large family.

A portrait of Dr. Gesner was published in the special mining number of "The Nova Scotian" (Halifax), October, 1903.

DONALD A. CAMPBELL.

Gibbes, Lewis Reeve (1810-1894), astronomer, mathematician and naturalist of Charleston, South Carolina. See American Medical Biographies. H. A. Kelly and W. L. Burrage Balto. 1920, page 434.

GIBBES, Robert Wilson (1809-1866), writer, collector, ornithologist of South Carolina, was born in the city of Charleston, South Carolina, on July 8, 1809, and died at his home in the city of Columbia, South Carolina, October 15, 1866. He was descended from an English family, several branches of which settled in Barbadoes, and was graduated at the South Carolina College in 1827 and the following year was elected assistant professor of chemistry, geology and mineralogy. He took his M. D. in medicine at the Medical College of South Carolina (Charleston) in 1830. In 1834, having severed his connection with the South Carolina College, he entered on practice in the city of Columbia, where he established a large clientage, which in later years he turned over to his son, Robert Wilson. Dr. Gibbes was often selected as delegate to the American Medical Association, and for several years was president of the Medical Association of South Carolina. He had a genius for scientific pursuits and published papers in the "Journal of the Academy of Natural Sciences;" in the second volume of the "Smithsonian Contributions," and in other journals. He made very large and precious collections of autographs, coins and specimens in paleontology, geology, mineralogy and conchology, and his collection of fossils of South Carolina was important, as illustrative of the tertiary formation. He devoted much attention to the subject of ornithology. Apart from his medical and scientific papers, Dr. Gibbes made other publications of value, including a "Documentary History of the American Revolution" (three volumes, 1853); a "Memoir of DeVeaux," a young South Carolina artist of promise, and a volume entitled "Cuba for Invalids" (1860). In 1852-60 he edited the "Daily South Carolinian." During the Civil War Dr. Gibbes was surgeon-general of South Carolina, and twice held the office of mayor of Columbia.

He married Caroline Elizabeth Guignard and left a large family. His son, Dr. Robert Wilson, became a doctor in Columbia, South Carolina, also his grandson, Dr. Robert Waller Gibbes, practiced in the same city.

The following is a partial list of the societies in which he held membership: American Association for the Advancement of Science, New York Historical Society, Pennsylvania Historical Society, Royal Society of Northern Antiquaries, of Copenhagen, Academy of Natural Sciences, Philadelphia.

ROBERT WILSON, JR.

GIBBONS, Henry (1808-1884), organizer of the Female Medical College of Pennsylvania and also of the California Medical Society, was born in Wilmington, Delaware, September 20, 1808, where his father, William Gibbons, (M. D. University of Pennsylvania, 1805) was a practicing physician. His mother was Rebbecca Donaldson; his grandfather was James Gibbons, teacher of languages in the Friends' Academy, Philadelphia, before the Revolution, and his ancestor, John Gibbons, followed William Penn and bought a large tract in what is now Chester County, Pennsylvania.

Henry Gibbons took his M. D. at the University of Pennsylvania in 1829 with a thesis on "Varioloid." Returning to Wilmington, Henry practiced with his father until 1844 when he moved to Philadelphia. In 1847-48 he held the chair of the institutes of medicine in the Philadelphia College of Medicine; he was one of the incorporators of the Female Medical College of Pennsylvania, in Philadelphia (1850).

In 1850 he went to live in San Francisco, California, where soon after opening his office he was consulted by a miner who dropped an ounce of gold dust on his table for a fee. He co-operated with Elias S. Cooper (q. v.) in founding the California Medical Society, the beginning of the state association, and served as its president in 1857 and, again, in 1871. He continued to be associated with Cooper and accepted the chair of materia

medica and therapeutics in the first medical school on the Pacific coast, recognized in 1882 with the name of Cooper Medical College. He was a member of the California State Board of Health from its establishment until his death.

Gibbons was interested in botany and in meteorology and was a good lecturer on scientific and moral subjects; he won a prize with an essay, "Tobacco and Its Effects," 48 pp., New York, 1868. In 1864 he became co-editor of the "Medical Press," later merged with the "Pacific Medical and Surgical Journal" with which he was connected until 1883. For several years he was a member of the State Prison Commission.

He married Martha Poole; their son was Henry Gibbons (q. v.), himself a physician. For the eight years previous to his death the father was in ill health. In the autumn of 1884 he visited his old home in Wilmington and died there, November 5, 1884.

GIBBONS, Henry (1840-1911), dean of Cooper Medical College, son of Henry Gibbons (1808-1884) (q. v.), was born in Wilmington, Delaware, September 24, 1840; his mother was Martha Poole. His parents moved to San Francisco while he was a boy and his early education was had in the public and private schools of that city. He received an M. D. from the University of the Pacific in 1863, after which, until 1865, he was acting assistant surgeon, United States Army, at the General Hospital, Washington. In 1870 he returned to California and was dean and professor of materia medica in Cooper Medical College; in 1882 he was appointed professor of obstetrics, gynecology, and diseases of women and children. From 1870 to 1873 he was health officer of San Francisco; 1880-1883, member of the Board of Health; 1889-1890, of the Board of Education. In 1875 he was president of the San Francisco Medical Society. From 1867 to 1883 he was co-editor of the "Pacific Medical and Surgical Journal."

Gibbons married Marie Conger, daughter of S. A. Raymond, in 1871. He died September 27, 1911, at his home in San Francisco.

GIBBONS, William Peters (1812-1897), printer, botanist, of California, was born April 9, 1812, at Wilmington, Delaware, and died at his home at Alameda, California, May 17, 1897. He was a son of Dr. William Gibbons (1781-1845), long the Nestor of the medical profession in Delaware, and a younger brother of Dr. Henry Gibbons (1808-1884) (q. v.), editor for years of the "Pacific Medical and Surgical Journal" and member of the California state board of health. In his youth William learned the printing trade, but he was also interested in science, and combined the two in the "Advocate of Science," a short-lived journal edited and published by him at Philadelphia in 1834 and 1835. Later, he removed to Poughkeepsie, New York, where he had charge of a boarding school for young ladies. He had been studying medicine for some years, even attending medical lectures while still in Philadelphia, but finally received the degree of M. D. in 1847 from the University Medical College of New York City. He sailed from New York for California in 1852, by way of Panama; was delayed on the Isthmus and nearly lost his life by an attack of cholera; in January, 1853, landing in San Francisco, where he entered at once upon the practice of his profession. Later he spent several years in various parts of the Californian Sierras and in Nevada, but finally, about 1862, settled at Alameda, where he spent the last thirty-five years of his life. He was chairman of the committee on indigenous botany of the State Medical Society from 1872 until his death, and was president of the society for the season of 1885-86.

Soon after his arrival in San Francisco, the California Academy of Sciences was established, and he was one of its charter members. At this time his chief scientific interests seemed to center in ichthyology and "Gibbonsia," which, perpetuating his name in the nomenclature of natural science, is a genus of fishes; but he was always keenly interested in botany as well, and most of his work for many years, outside of that demanded by his professional duties, was in this branch of science.

Dr. Gibbons married, in 1835, Mary Robinson, of New York, and they had eight children, of whom three survived him.

J. H. Barnhart.

GIBSON, Charles Bell (1816-1865), Virginia surgeon, was born in Baltimore, Maryland, February 16, 1816, the son of Dr. William Gibson, (q. v.) professor of surgery in the University of Pennsylvania, and Sarah Hollingsworth of Baltimore. He was named after his father's preceptor, Sir Charles Bell. Charles was a student in the academic department of the University of Pennsylvania from 1829 to 1830, and his professional education was received at the same university where he re-

ceived his M. D. in 1836, the subject of his thesis being "Apoplexy."

In 1848 he was elected professor of surgery in the medical department of Hampden-Sidney College, later the Medical College of Virginia. In 1861 Gov. Letcher appointed him surgeon-general of the state of Virginia, a position he held until the military affairs of the state were merged into those of the southern Confederacy.

Dr. Gibson was a noted and skilful surgeon and a teacher of marked ability. He was one of the first in Virginia to make use of anesthetics, and in 1848 reported five cases of the successful employment of chloroform or ether, the former being used in three cases and the latter in two (Transactions American Medical Association, vol. i). In 1851 he was one of a committee of the Medical Society of Virginia appointed to report upon anesthetics, which they did in a full and valuable paper entitled "Report on the Utility and Safety of Anesthetic Agents" ("The Stethoscope,' vol. i, April, 1851). He was an extensive contributor to medical literature and published reports of many of his most interesting cases.

He died in Richmond April 23, 1865.

The following are some of his contributions to medical literature: "Aneurysm of both Femoral Arteries Cured by Ligature." ("American Journal of Medical Sciences," vol. xii, 1847); "Dislocation of the Femur into the Foramen Ovale probably Complicated with Fracture of the Acetabulum, Etc." ("Virginia Medical and Surgical Journal," vol. iv, 1854); "Surgical Reports" (ibid. iii, 1856); "Excision of an Osteosarcomatous Tumor of the Inferior Maxilla." (ibid. iv, 1857.)

ROBERT M. SLAUGHTER.

GIBSON, William (1788-1868), surgeon of Baltimore and Philadelphia, scientist, scholar, artist, musician, traveller—some one should write a life of him," says Dr. Mumford in his "Medicine in America"; and if the diary which William Gibson continued for sixty years, running to one hundred and fifty volumes, could be found, every side of him could be written up.

He was born in Baltimore March 14, 1788, one of twin boys, and was educated at St. Johns College, Annapolis, and at Princeton, leaving before his class graduated. He began to study medicine with Dr. John Owen of Baltimore and in 1806 heard lectures at the University of Pennsylvania. Here, as at college, his refreshing frankness spoke out on occasion; he was afraid of no one. He did not stay long in Philadelphia. In 1806 he took his bachelor's degree from Princeton and left for four years in Europe. The first three were given to Edinburgh where he took his M. D. in 1809 with a thesis "De forma ossium gentitium," and John Bell was his master in surgery. That same year he went to London and followed Sir Charles Bell, who became his friend. He took also to painting and studied under Robert Haydon, the eccentric artist, and then busied himself on Bell's great work "On the Hand." He added to this, music, ornithology, botany, fishing and boxing. He enjoyed splendid health, but with all these distractions he was a brilliant student. Astley Cooper taking him on his journeyings about England loved him and predicted great things of him. The Peninsular War was then raging and Gibson espoused the cause with the greatest enthusiasm. In December, 1808 he with some friends chartered a transport and sailed for the scene of the fighting and was in time to see the battle of Corunna where his friend Sir John Moore was killed. Six years later on a subsequent visit to Europe he was travelling in the neighborhood of Waterloo and took part in the battle, seeing much hard fighting and receiving a slight wound. Returning to America from his first visit he had scarcely settled at his old home in Baltimore when he became interested in establishing a medical department for the University of Maryland, and in 1811, with sundry other spirits of kindred ambition, succeeded in launching the new school, himself in the chair of surgery. And at this time he was only twenty-three! The school throve apace and Gibson as a bold original operator seems to have been a great attraction. As he grew in experience he acquired a vast intimacy with the fine arts, literature, history, politics and men which, with his direct, homely, convincing way of lecturing captivated his hearers. It fell to his lot to do an operation which made him famous. In 1812 he tied the common iliac artery for aneurysm—an operation never before performed on the living, a proceeding almost as bold and original as Astley Cooper's ligature of the aorta, five years later, but, like that, unsuccessful. Later, on March 16, 1828, he ligated the left subclavian artery following its rupture the previous day in an attempt to reduce a dislocation. The patient died of erysipelas in a week.

In 1814, the United States being at war with Great Britain, Gibson operated on Win-

field Scott after Lundy's Lane and extracted a bullet. He saw the repulse of the British at Baltimore and from all this found abundant material for his surgical skill. Eight years he held the chair of surgery in Baltimore and after the retirement of Physick (q. v.) (1819), the same chair in the University of Pennsylvania until 1854.

In Philadelphia, Gibson had a long and honorable career. For nearly thirty years he divided the surgical honors with George McClellan (q. v.), and it was not until 1855 that advancing age compelled him to retire from teaching. During his active years he produced his best book, "The Institutes and Practice of Surgery," which for eight editions was a deservedly popular text-book. There were other productions which are better worth reading today: "Rambles in Europe," (1839) containing sketches of the eminent surgeons abroad; "Lecture on Eminent Belgian Surgeons and Physicians" (1841), and his numerous addresses before the University students.

He had one hobby—to lead a crusade against tobacco; and became vice-president of an anti-tobacco society, though in other respects he liked the good things of life. Perhaps from the beginning what astounded people most was his absolute frankness. He published his surgical failures and told how in four cases he ruptured axillary arteries and the patients died. But, on the other hand, he had the unique experience of twice doing successfully Cesarean section (1835 and 1838), on the same woman, the life of the mother and of both children being saved. Of his remarkable memory one admirer tells how he made an off-hand bet that he could quote 300 lines of Virgil taken at random, and reeled off the hexameters until his audience begged him to stop.

He withdrew from the university at the age of sixty-seven, having filled the professor's chair thirty-six years, and for thirteen years longer—a keen bright-eyed old man—he watched the busy world. He saw the end of the Civil War and resumed his travels about the world when it was over and continued them until he died in Savannah March 2, 1868.

Before the founding of the Maryland School he had married Sarah Charlotte Hollingsworth and became the father of three sons and two daughters. Later on he married a second wife and had three children. The careful recorder adds "he was five feet seven inches tall, broad and round-shouldered."

His son, Charles Bell Gibson (1816-1865), (q. v.) studied under his father and became professor of surgery at Washington Medical College, Baltimore, in 1843, and three years later at the Medical College, Richmond, Va. During the war he was surgeon-general of the state.

GIFFARD, Robert (1587-1650?), the second medical man to settle in Canada and builder of the first manor house, was born at Mortagna, France, in 1587, son of wealthy parents who were able to give him a good education. Giffard's first visit to Quebec, was in 1627, the year in which Louis Hébert (q. v.), the medical pioneer, died. Giffard went to the new world on a hunting trip, accompanied by his wife, who was Maria Renouard. Hearing that there was abundance of game at a place on the St. Lawrence just below Quebec, called Beauport, he went there and built a small log house, spending the summer months in hunting. Never before had he enjoyed such sport, for he found vast numbers of ducks, teal, snipe and curlew feeding in the marshes. At the close of the summer he returned to France only to come back again the following year as surgeon to Roquemont's fleet. The ships were captured by Kirke and the surgeon, with all those on board, sent back to France. After the treaty of St. Germain-en-Laye, when Quebec was restored to France, Giffard resolved to return to Canada and settle, drawn by the lure of the wild. He applied for and was granted a tract of land at Beauport, one of the conditions being that he should bring out colonists. Accordingly he proceeded to organize an emigrant association and drew together a number of the best type of settlers, agriculturists of proven worth, who, when transported to Beauport, soon cleared the forests and built their houses. Giffard was superintendent, personally conducting the affairs of the settlement, and two years after he had been granted the property, with the accompanying title of Seigneur of Notre Dame of Beauport, he had built his own house, the first manor house in Canada, a pretentious building made of native stone. While the house was going up Giffard lived in Quebec with his family, visiting Beauport daily. One hundred and forty years later some workmen found beneath the corner stone of the mansion a circular plate of lead bearing an inscription and the date: July 20, 1643. The documents which were rolled in the plate had crumbled to pieces, more is the pity. What might they

have told us of this first Canadian mansion in the wilderness? Soon the Company of New France granted Giffard two acres of land at Quebec, near the home of Hébert, where he built a town house and laid out a small garden. He was a good friend to the Indians, and many a sick child was nursed and cared for by him and his family at the manor house; sometimes the children were baptised as converts, Giffard being one of the churchwardens and a man of strong religious convictions. The records show that he was held in high esteem, this first Seigneur of the new world, a worthy successor to Hébert and often spoken of in the same way in the writings of the time.

Gihon, Albert Leary (1833-1901), naval surgeon, author of "Practical Suggestions in Naval Hygiene." See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 438.

GILE, John Martin (1864-1925), surgeon of Hanover, N. H., called "savior of the north country", when he received the degree of Sc. D. from Dartmouth in 1922, was born in Pembroke, N. H. March 8, 1864. There he was prepared for Darmouth which gave him an A. B. in 1887 with Phi Beta Kappa rank, and an M. D. in 1891. He began practice in Tewksbury, Mass. in the following year and joined the Massachusetts Medical Society. Four years later he returned to Hanover, N. H. to become professor of the practice of medicine in Dartmouth Medical School, a chair that he filled until 1910 when he changed to the professorship of clinical surgery and at the same time was made dean of the medical faculty. He was elected a trustee of Dartmouth in 1912 and continued to hold all three of his positions in college and medical school during his lifetime, for he was a man of forceful character. A hard worker he made his way in life by his own unaided efforts. From a small surgical practice he developed such a reputation for skill that, with the advent of the motor car he often went as far as a hundred miles to consult and operate. His administrative abilities were of a high order, as displayed in his offices in college and hospital—Mary Hitchcock Hospital. At one time Dr. Gile had a leaning towards politics and served as chairman of the Republican State Convention in 1910. During the World War he was a lieutenant in the Medical Reserve Corps and an aide to the governor of the state. He was a frequent attendant on medical meetings and in 1920-21 was president of the New England Surgical Society; he also held membership in the American College of Surgeons and was a Mason. He married Vesta Fowler in 1892 and they had four children, one of them, John F. following his father's profession.

Dr. Gile loved the out of doors, his garden and occasional trips in the woods with rod and gun. He suffered with angina pectoris during the last year of his life and death overtook him while riding with his family, July 16, 1925. There is a portrait of Dr. Gile in the Transactions of the New Hampshire Medical Society, 1926.

GILBERT, David (1803-1868), Philadelphia surgeon, was born in Adams County, Pennsylvania, July 27, 1803, son of George Gilbert and Elizabeth Stites. In 1825 he took an A. B. at Jefferson College, Canonsburg, Pennsylvania, then read medicine with Dr. J. Payson, in Gettysburg, Pennsylvania; he attended lectures at Jefferson Medical College, Philadelphia, graduating in 1828. He settled first in Northumberland, Pennsylvania, moved to Gettysburg in 1832, and went to live in Philadelphia in 1851. He was appointed physician of the port of Philadelphia.

When the faculty of the Medical Department of Pennsylvania College was reorganized in 1844, Gilbert was made professor of surgery.

Following Wallace of Philadelphia, who used adhesive plaster for making extension at the ankle, he wrote on "Adhesive Plaster the Best Counter-extending means in Fractures of the Thigh" ("American Journal of the Medical Sciences," 1858, "n. s. vol. xxxv, 105-109"), after testing it extensively in "keeping up extension and counter-extension." He says: "Adhesive plaster, when well applied to the surface, becomes united with the skin, so as to form a composite body, consequently friction and pressure are transferred to the areolar, adipose and other tissues beneath. . . . The skin is thus protected, and, consequently, abrasion, excoriation, or ulceration . . . do not occur." He published an account of his first case of "severely complicated fracture of the thigh" in his paper on "Cases of Surgery" ("American Journal of the Medical Sciences," 1851, n. s., 1851, vol. xxl, 70-76).

Dr. Gilbert married Jane E. Brown, of Gettysburg, Pennsylvania; they had eight children—Dr. W. K. Gilbert, a son, died in Philadelphia in 1880.

Dr. Gilbert died in Philadelphia July 28, 1868, of disease of the liver.

HOWARD A. KELLY.

GILLIAM, David Tod (1844-1923), pioneer gynecologist of Columbus, Ohio, was born April 3, 1844, in the village of Hebron, Ohio the son of William and Mary Elizabeth Bryan Gilliam who had come to Ohio early in the century from their home in Virginia. As a lad of seventeen, he enlisted in the Second West Virginia Loyal Cavalry and was made a corporal in Company I. He was with Garfield during his march against Humphrey Marshall on Big Sandy River, Kentucky; from there, he was sent to Wheeling, West Virginia, as recruiting officer and later ascended the Kanawha River and took part in many skirmishes; he participated in the battle of Lewisburg under General Crook. After being wounded and captured by the Confederates at Gauley River, Virginia, he escaped and made his way home to Middleport, Ohio. Becoming seriously ill in a parole camp at Columbus, in the spring of 1863, he was discharged from the army and sent home to die. Upon recovery, he attended a business college at Cincinnati. A few years later, he took up medicine and was graduated from the Ohio Medical College in 1871. Dr. Gilliam first settled in Nelsonville, Ohio, but went to Columbus in 1877 to fill the chair of pathology at the Columbus Medical College. In 1879, he resigned to become professor of physiology at the Starling Medical College, succeeding to the chair of gynecology and obstetrics in 1885. Later he was made professor emeritus in gynecology in the medical department of the Ohio State University. As a teacher he was successful and impressive. One of his teaching hobbies was the "dos and donts" of obstetrics and gynecology. He was gynecologist to St. Anthony's hospital and to St. Francis' hospital and a trustee of Starling Medical College. The Franklin County Medical Society elected him to its presidency and the American Association of Obstetricians and Gynecologists to its Vice-presidency (1905-06).

His writings comprise: "Pocket Book of Medicine" (1882), "Essentials of Pathology" (1883), and "Practical Gynecology" (1903), and, in collaboration, "Medical History of Ohio" (Randall and Ryan—1912). Aside from his medical contributions, he wrote "Rose Croix" (1906) and "Richard Devereux" (1915). At his death he left unfinished: "God and Religion as Revealed in Nature." He devised sundry surgical instruments and the Gilliam operating table. In 1899, he originated a round ligament ventro-suspension of the uterus, commonly called Gilliam's operation, widely used and the prototype of operations threading the round ligament through the abdominal walls, as well as a method to repair cystocele and one to cure incontinence of urine in the female.

On October 7, 1866, he married Lucinda Ellen, daughter of Judge Thomas L. Mintun of Nelsonville, Ohio, who survived him with their two sons and a daughter. For thirty five years prior to his death on October 2, 1923, from cerebral hemorrhage, his son, Dr. Earl M. Gilliam was intimately associated with him.

EARL M. GILLIAM.

GILMAN, Chandler Robbins (1802-1865), obstetrician and medico-legal expert of New York, was born September 6, 1802, at Marietta, Ohio. His father and grandfather were among the earliest pioneers of Washington County, and, in his later days, Dr. Gilman was fond of telling stories of Indian life and adventure. When eleven years old he was taken by his father to Philadelphia to live, and shortly afterwards was sent to Phillips Academy at Andover, Massachusetts, and later to Harvard College. At the latter, however, owing to adverse circumstances, he had no opportunity to continue his work. For a time he studied medicine under the famous Dr. Joseph Parrish (q. v.), but afterwards attended the medical department of the University of Pennsylvania, where he received his M. D. in 1824. Soon after graduation Dr. Gilman removed to New York City. There he underwent the sorest trials and struggles while attempting to secure a professional foothold. At this time he married Serena Hoffman, daughter of a New York merchant.

In 1835 he became severely afflicted with rheumatism. To recover his health he visited, in company with a friend, the pictured rocks of Lake Superior. In the territory round about these rocks he remained for a long time, fishing, trapping, and hunting. At last his health was completely restored. On his return to civilization, he published the results of his observations on the lake region in a little book entitled "Life on the Lakes." Another volume from his pen soon appeared, entitled "Legends of a Log Cabin." He then for a long time assisted his relative, Charles Fenno Hoffman, in editing the "American

Monthly Magazine." During these literary labors he was also practicing medicine.

In November, 1840, he was made professor of obstetrics and diseases of women and children in the College of Physicians and Surgeons in the city of New York. In 1841-42 he lost by death his wife and two of his children. The shock was very great, and for a time his friends almost expected to see his reason dethroned. In September, 1844, he married Miss Hannah Marshall, daughter of Capt. David Marshall, of New York City. In 1851, on the death of Dr. John B. Beck (q. v.), the chair of medical jurisprudence in the College of Physicians and Surgeons, which had been held by Dr. Beck, was offered to Dr. Gilman and accepted.

His contributions to medical magazines and to Appleton's "Encyclopedia," were highly valued, and so was his admirable memoir of Dr. John B. Beck. He revised and published the manuscript notes of that author on "Materia Medica," and also edited two of the editions of Dr. Theodric Romeyn Beck's (q.v.) "Elements of Medical Jurisprudence."

In person Dr. Gilman was tall but heavily set, of dark complexion and with jet black hair and eyes. He was careless in his dress, and disregardful of the conventions of society. He displayed, however, to those who had fallen in the world, a deference and a courtesy which other people seldom had a chance to see in him. In 1863 his health again began to fail—this time permanently. A summer which he spent amid the Pompton Hills in New Jersey was expected to improve his condition, but did not. On the evening of September 26, 1865, while all his family and a number of his older friends were sitting round about him, he seemed suddenly to fall asleep. All efforts to rouse him were unavailing. The good doctor had indeed gone, and in the very manner in which he had always prayed that his final departure might be permitted—"very calmly and very swiftly."

He was buried in the cemetery at Middletown.

THOMAS HALL SHASTID.

GILMAN, John Taylor (1806-1884), the founder of the Maine General Hospital, son of Col. Nathaniel and Dorothy Folsom Gilman, was born in Exeter, New Hampshire, May 19, 1806; fitted for college at Phillips' Exeter Academy, was graduated at Bowdoin in the class of 1826, afterwards studying medicine with William Perry of Exeter and taking his M. D. at the Medical School of Maine in 1829. He also took additional instruction in anatomy and clinical medicine in Philadelphia, but began to practice in Portland, Maine, and spent the rest of his life there.

He was president of the Maine Medical Association, but his fame will rest upon the founding of the Maine General Hospital. He was a venerable gentleman, and lived long enough to see the hospital a magnificent success adapted to all classes of suffering people. A remarkable physician, it is difficult not to exaggerate his skill in diagnosis, or his accuracy in therapeutics. Sometimes finding a patient restless, he would walk slowly round the room, looking at the pictures with a critic's eye, setting them straight if misplaced on the wall, and then gradually taking up the thread of conversation when the patient had grown quieter. He was not formal, but dignified. Although high strung and of a quick temper, he had great self-control. It pleased him, when walking in the streets, to have the workmen wave their hats to him. For fifty-two years he practiced in Portland, during which time he was very forcible in his denunciations of the unsanitary conditions of the so-called "dump" and did all he could to get it abolished.

He wrote an excellent paper on "Rupture of the Uterus, Twice in the Same Patient in Two Successive Deliveries, and Recovering after Gastrotomy," 1863. He is said to have done the first Cesarean section in Maine, saving both mother and child.

Doctor Gilman married Helen Williams of Augusta by whom he had a daughter. He died January 16, 1884.

JAMES A. SPALDING.

GILMER, George (1742-——), of Albemarle County, Virginia, was born at Williamsburg in that state, January 10, 1742, the second of the four sons of Dr. George Gilmer, a native of Scotland and for fifty years a successful physician, surgeon and druggist of that town, and Mary Peachy Walker, his second wife. He read medicine with his uncle, Dr. Walker, a physician and early explorer of Kentucky, and afterwards studied at Edinburgh University, taking his M. D. there. He first settled in Williamsburg, but after a time removed to Albermarle County, where he soon built up a practice. As early as 1774 he represented his county in the House of Burgesses, and was the mover of a resolution on the subject of the Crown Lands which was seconded by William Henry. A

good deal of an orator, he harangued his countrymen, when Dunmore seized the power of the colony, to such effect that a company was formed to march to Williamsburg and demand redress. He was chosen lieutenant of this company. In 1775 he was sent by his county to the Convention of that year as the alternate of Thomas Jefferson.

He married his cousin Lucy, the daughter of his preceptor, who was a patriot worthy of her patriotic husband. It is related that in the early days of the Revolution she handed Mr. Jefferson her jewels and begged him to use them in her country's cause.

ROBERT M. SLAUGHTER.

GILMOUR, John Taylor (1855-1918), Canadian prison reformer, was born at Newcastle, Ontario, in 1855, and was educated at Port Hope high school, graduating in medicine from Trinity University as M. D. in 1878. For many years he was in general practice and during this time he took a keen interest in public affairs. He represented West York in the Ontario Legislature from 1886 to 1894. He was also a surgeon for the Canadian Pacific Railway for many years. He retired from the legislature in 1894, and two years later was appointed warden of the Toronto Central Prison, an office he held until 1913, then taking charge of the Prison Farm at Guelph. The reformatory was a new departure in prison life, and under Dr. Gilmour's régime many methods of reform were realized and splendid results obtained. He believed in the remedial effects of kindness, and held the prison should not be a place of punishment, but a means of bringing the offender back to decent citizenship. He was regarded as an authority on the question and advocated his views in many letters and writings. In 1904 he was elected president of the Warden's Association of the National Prison Congress, and in 1908 president of the American Prison Association, being the first Canadian to hold this position. The last twenty years of his life were given to the problem of handling prisoners, and prison reform owes much to his judgment, intelligence, and kindness of heart. He had a most charming manner and was most loyal to his friends.

Dr. Gilmour was twice married and was survived by his second wife, a daughter, and a son, Dr. C. H. Gilmour. His death occurred at Toronto, while strolling in his garden on the morning of July 29, 1918, when he succumbed to an attack of heart disease.

GILPIN, John Bernard (1810-1892), Canadian student of natural history, was born September 4, 1810, at Newport, Rhode Island, where his father, J. Bernard Gilpin, of Vidar's Hill, Hants, England, was for many years British Consul. His general education was received at Trinity College, Providence, Rhode Island, where he took his A. M., and studied medicine at the University of Pennsylvania, graduating thence M. D. in 1834. Immediately afterwards he studied in London, and became M. R. C. S. (London). He first practiced at Annapolis, N. S., removing to Halifax in 1846 and there continuing till 1886, when he returned to Annapolis, to spend the remainder of his days, dying there, March 12, 1892. He was a member of the Medical Society of Nova Scotia and one of the original founders of the Nova Scotian Institute of Natural Science in 1863, of which he became a vice-president in 1864 and president from 1873 to 1878. He was also a member of many scientific and learned societies in the United States and Great Britain.

While highly esteemed both as a medical man and as a citizen, he never acquired a very extensive practice but devoted much of his time and energy to the study of natural history, in which he did much original and useful work. His paper on the "Common Herring" was the first one read before the Nova Scotian Institute of Natural Science after its formation, the first of a series on the food fishes of Nova Scotia, and the first of some thirty-four papers of his read before the institute, which, if collected, would form a very interesting and valuable work on the natural history of the Province. Besides being a clear and graceful writer, he was skilful with pencil and brush in illustrating those subjects of his study, which can be so well served by those arts. He was constantly doing his utmost to assist and encourage the study of natural history in the province, and was frequently consulted by Prof. Baird, of the Smithsonian Institution, as to the determination of new or doubtful species of fish and as to their migrations in these northern waters.

In 1858 Dr. Gilpin published at Halifax a pamphlet of considerable scientific interest on "Sable Island, Its History and Natural History." A portrait of Dr. Gilpin was published as a frontispiece to Part II of vol. x of the "Transactions of the Nova Scotian Institute of Natural Science."

DONALD A. CAMPBELL.

GIRARD, Charles (1822-1895), naturalist of Washington, D. C., was born in Mülhausen, France, March 9, 1822, and was educated in Neuchatel, Switzerland, where he became the pupil and assistant of Agassiz (q. v.), and accompanied him to the United States in 1847, remaining with him until 1850, when Girard removed to Washington, District of Columbia, and became attached to the Smithsonian Institution. In 1852 he was naturalized as an American citizen, and after taking his M. D. in 1856 at Georgetown University, D. C. remained in the Smithsonian Institution until 1859, being for some time engaged with Prof. Baird in the investigation of reptiles. His publications were numerous. Among them may be mentioned: "Mammalia" in the "Iconographic Encyclopedia of Science, Literature and Art," New York, 1851; "Monograph of the Cottoids," Washington, 1851; "Reptiles" (in collaboration with Prof. Spencer F. Baird) in Stansburg's "Exploration and Survey of the Great Lake of Utah," 1853; "Bibliographia American Historico Naturalis," 1852; "Catalogue of North American Reptiles in the Museum of the Smithsonian Institution—Part I, Serpents" (in collaboration with Prof. Baird), 1853; "Embryonic Development of Planocera Elliptica," Philadelphia, 1854; "Life in Its Physical Aspects," Washington, 1855; "Reptiles, Fishes and Crustaceæ" in Gilliss' "United States Naval Astronomical Expedition to Chili," 1856; "Explorations and Surveys for Railroad Routes from the Mississippi River to the Pacific Ocean," 1859; and the "Report upon Fishes" in "Emory's Survey of the United States and Mexican Boundary," 1859.

He died in France January 29, 1895.

DANIEL SMITH LAMB.

GIRDWOOD, Gilbert Prout (1832-1917), Canadian chemist and medical educator. Through the death of Dr. Gilbert Prout Girdwood, which occurred at Montreal on October 2, 1917, a notable and genial figure passed from the ranks of the profession in Canada. Dr. Girdwood was in his eighty-fifth year, and, although blind for the last five years, retained his interest in medicine and chemistry; so much so, indeed, that with the assistance of his wife and daughter he made an investigation into the effect of carbon monoxide in coal gas upon the public health in England, the United States and Canada, the results of which were reported to the Royal Society. He was a large-minded man of great attainment, and cherished to the day of his death the ambition to obtain legislation which would place the profession of chemistry on a footing equal to that of medicine.

Dr. Girdwood was the son of Dr. G. F. Girdwood, and was born in London, England, October 22, 1832; he was educated at a private school, and later at University College and St. George's Hospital. He took the diploma of M. R. C. S. in 1854 and served for a time as house surgeon in the Liverpool Infirmary. He was gazetted assistant surgeon of Her Majesty's Grenadier Guards and accompanied the First Battalion to Canada in 1862, at the time of the Trent affair. When the battalion returned to England, two years later, Dr. Girdwood retired from the army and settled in practice in Montreal, and in the following year took the degrees of M. D., C. M. at McGill University. He was for some years surgeon of the 3rd Victoria Rifles, and saw service with that regiment during the Fenian outbreak. Shortly afterwards he was promoted to be a medical staff officer of the militia of Canada.

In 1869 Dr. Girdwood was appointed lecturer in practical chemistry in the Faculty of Medicine, McGill University; in 1872 he became professor of practical chemistry, and two years later professor of chemistry. When he retired from this chair in 1902 he was named emeritus professor of chemistry. He was surgeon to the Montreal Dispensary and to the General Hospital, and later became consulting surgeon to these institutions, and to the Children's Memorial Hospital. He was also consulting physician in the X-ray department of the Royal Victoria Hospital, Montreal, and chief medical officer of the Canadian Pacific Railway. Dr. Girdwood occupied a number of other important positions, among them the presidency of the Roentgen Society of America, and the vice-presidency of the Canadian Branch of the Society of Chemical Industry. He was a fellow of the Chemical Society and of the Chemical Institute of Great Britain. He was also one of the original fellows of the Royal Society of Canada, which was organized in 1882.

Dr. Girdwood will be remembered as a conspicuous figure among the scientific men of Canada during the last quarter of the nineteenth century—an example of the all-around scientist that will become rarer in this age of specialization; for, though fundamentally a chemist, he had a sound knowledge of medicine, surgery, medical jurisprudence, botany, physics, and microscopical technique, including photomicrography. The Rodgers and

Girdwood method of detecting strychnine was devised by Dr. Girdwood and Dr. Rodgers of London, and it was Dr. Girdwood also who first applied reagents for the detection of forgeries, counterfeits, and the identification of handwriting. He was one of the first to apply the stereoscopic principles to X-ray prints.

He was actively engaged in medical education from the time of his resignation from the Guards and was an interesting teacher both of clinical surgery in the hospital and of chemistry in the university. His name will always be associated with the development of chemical teaching in McGill University. The introduction of practical chemistry as an integral part of a medical student's education in Canada was first carried out by Dr. Girdwood in some classes which he gave to the medical students of McGill University about 1870, the classes being held in his own home.

GLASGOW, William Carr (1845-1907), one of the founders of the American Laryngological Association and its president in 1890, was born in St. Louis on January 16, 1845, and graduated from the St. Louis Medical College and also from the University of Vienna. He held the chairs of clinical medicine and laryngology at Washington University, and was consulting physician to the City Hospital of St. Louis and the Martha Parsons Hospital for Children. He was an original thinker and writer and his essay on "Cellular Infiltration of the Lungs" first described with exactness the physical signs and symptoms of influenza. He called it septic cellular edema. In 1887 he pointed out certain measures for the relief of congestive headache, the condition which came into prominence in the rhinological world as nasal headache. In 1885 he wrote on "rhinitis nervosa." In 1887, in a paper entitled "The Etiology and Mechanism of Asthma," he pointed out the interarytenoid membrane as the starting-point of the asthmatic reflex in some instances. He wrote on laryngological topics, on aneurysm of the aorta, and on other subjects for the medical journals.

Dr. Glasgow married, in 1877, Fanny Englesing of Port Gibson, Mississippi, and died at St. Louis when in his sixty-third year, leaving a widow, four sons and a daughter.

GLEASON, Rachel Brooks (1820-1905), one of the early women physicians, was born in Winhall, Vermont, November 27, 1820, and married a young Vermont doctor who opened an infirmary for chronic invalids in the country, shortly after acquiring his own diploma. In the management of his women patients, the young doctor often found it an advantage to be assisted by his wife as an intermediary—on the one side to obtain symptoms, on the other to prescribe treatment. Thus the wife became gradually associated with the husband's work, while he remained generously alive to her interests. At that time, 1849, the Philadelphia school for women had not yet opened, so Dr. Gleason, in order to secure an opportunity for his wife to obtain some kind of systematic medical education, persuaded the eclectics to open the doors of their new school at Rochester, New York, to women. There she was educated.

Mrs. Gleason died in Buffalo, New York, March 14, 1905. She had two children, one of whom, a daughter, was educated as a physician.

She wrote: "Talks to my Patients, Hints on Getting Well and Keeping Well."

ALFREDA B. WITHINGTON.

Gleaves, Samuel Crockett (1823-1890), of Virginia, physician and surgeon in the Confederate States Army. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 443.

GLEITSMANN, Joseph William (1841-1914), laryngologist, was born at Bamberg, Germany, July 22, 1841, where his father was a prosperous physician. He received his early education at Bamberg and his medical education at Wuertzburg, Munich, Berlin, and Vienna; his M. D. degree was conferred at Wuertzburg in 1865. He entered the Medical Corps of the German Army, and was military surgeon in the war with Austria in 1866, receiving the order of the iron cross. In 1870 he served as surgeon in the Franco-Prussian War, and was given a "medal of honor." At the end of the war Gleitsmann became a ship's surgeon, and made several voyages. He came to the United States in 1871 and practiced in Baltimore until 1875, then went to Asheville, N. C. where he specialized in throat and lung diseases, and established a sanatorium. In 1881 he moved to New York City, While in Asheville he became a fellow of the American Laryngological Association. In 1885 Gleitsmann was elected professor of laryngology and rhinology at the New York Polyclinic Hospital and Medical School. In 1905 he was president of the

American Laryngological Society. He was senior laryngologist and otologist to the German Dispensary and laryngologist and otologist to the German Hospital. As a member of international congresses Gleitsmann was at Berlin, 1890; Moscow, 1897; Buda Pesth, 1911. He was an active member of various American-German societies.

Dr. Gleitsmann contributed many excellent articles to the literature of his specialty. In his earlier days he wrote on pulmonary tuberculosis; later on the tuberculosis of the upper air tract, particularly in its medical and surgical aspects. He made a thorough exposition of the laryngeal paralyses in their relation to general medicine. He was a man of culture, reading widely outside of medicine and deeply interested in nature. A great recreation was mountaineering.

He died of heart disease in New York, July 2, 1914. HOWARD A. KELLY.

GLONINGER, John Washington (1798-1874), of Lebanon, Pennsylvania was born in that town in 1798, and had his early training under a famous local pedagogue, one McMullen, "brisk wielder of the birch and rule," afterwards being sent to a school in Harrisburg and thence to Baltimore, where he completed his education. In 1815 he began studying medicine under a Dr. King, early in 1816 going to Philadelphia and becoming a private pupil of Prof. Dorsey (q. v.), then in the height of his fame, at the same time attending lectures at the University of Pennsylvania and Blockley Hospital. On the death of Dr. Dorsey in 1818, he went to New York and studied under Prof. Hosack (q. v.), attending lectures at the College of Physicians and Surgeons, whence he was graduated April, 1819. Then he is heard of as being in New York pursuing his studies in the hospitals, returning to Lebanon in 1820 and there beginning to practice.

He soon took and maintained for thirty years a leading position as physician and surgeon. As a surgeon he was eminent in diseases of the eye, particularly successful in cataract. Gloninger was an omnivorous reader, especially of medical works, and had a remarkably retentive memory, also he was a frequent contributor to medical literature, many of his articles showing him not only a careful observer, but a close student keeping pace with the progress of medical science. In 1823 he was elected member of the Pittsburg Medical Society and in 1826 fellow of the University of New York, while Jefferson Medical College conferred on him her honorary M. D. In 1838 he was elected honorary member of the New York State Medical Society, and in 1841 the University of Maryland gave him the honorary M. D., the University of Pennsylvania doing the same in 1848. In his intercourse with his professional brethren Dr. Gloninger maintained the most cordial relations. Possessed of abundant means and high social and professional standing, he was particularly kind to some of the older members of the profession, and in several instances through his personal influence secured for them the honorary M. D., a degree they had failed to procure earlier.

In personal appearance he was tall, with a slight stoop and he had a large strong face of a pleasant expression. His dress was the professional black swallow-tailed coat, a black or figured satin waistcoat, dark trousers, low shoes, white stockings and he always wore a black silk hat.

Five children were born to him, two of whom were eminent in their profession—Dr. Cyrus Dorsey, who practiced in Lebanon, and Dr. D. Stanley, of Philadelphia. Dr. Gloninger died March 10, 1874.

JACOB HENRY REDSECKER.

GLOVER, Joseph (1778-1840), pioneer physician of Charleston, South Carolina, son of Joseph Glover, was born December 10, 1778, in Colleton District, and died in Charleston, January 6, 1840. He was graduated in the medical department of the University of Pennsylvania in 1800, and that year became a member of the medical society of South Carolina. He was active in establishing a free dispensary in 1801, and gave his services gratuitously to the poor, receiving a vote of thanks from the trustees in 1805. Among his suggestions which the medical society made to the city council was that of planting trees, the sanitary advantages of which he showed in his report in 1808. Dr. Glover was noted for fearlessness and skill as a surgeon. He successfully performed lithotomy, removed a portion of the spleen and the omentum, and was one of the first in this country to revive the operation of tapping the head for hydrocephalus. A description of the case was published in pamphlet form (1818) and was widely quoted.

He married, first, Elizabeth Yonge; second, Mrs. Maria Fraser, née Boone. There were five children by the first marriage, two of whom were physicians, Joseph (1810———) and Francis Y. (1817———).

GODDARD, Paul Beck (1811-1866), prolific medical editor and author, was born January 26, 1811, in Baltimore, Maryland. He took his A. B. from Washington College in 1828 and from the Medical department of the University of Pennsylvania in 1832, with a thesis on "The Anatomy and Physiology of Mucous Membrane." After settling in Philadelphia to practice, he became well-known through his work as an editor of medical books, including Wilson's "A System of Human Anatomy," 1843; Curling's "A Practical Treatise on the Diseases of the Testis and of the Spermatic Cord and Scrotum," 1843; Moreau's "A Practical Treatise on Midwifery; exhibiting the present Advanced State of Science," 1844; Ashwell's "A Practical Treatise on the Diseases peculiar to Women," 1845; also the iconographic portion of Rayer's "Theoretical and Practical Treatise on the Diseases of the Skin," 1845; Ricord's "Illustrations of Syphlitic Disease," 1851; Wilson's "System of Human Anatomy, General and Special" and "Dissector or Practical and Surgical Anatomy," 1851. He also published "Plates of the Cerebro-spinal Nerves, with References; for the Use of Medical Students," 1837; "Plates of the Arteries, with References; for the Use of Medical Students," 1839; and "The Anatomy, Physiology, and Pathology of the Human Teeth; with the most Approved Methods of Treatment, including Operations and the Method of making and setting Artificial Teeth" (aided in the practical part by Joseph E. Parker), 1844. While demonstrator of anatomy at the University of Pennsylvania, he was the preceptor of Joseph Leidy (q. v.) who lived in his home. Goddard was also a skilful surgeon. He devoted his leisure evenings in his office to microscopic studies and described a new method of making minute anatomical injections adapted for the microscope, using vermilion in oil and sulphuric ether, (Trans. Am. Med. Asso., 1850). He did little teaching in his later days.

He died at his home in Philadelphia, July 3, 1866.

GODDING, William Whitney (1831-1899), alienist, was born May 5, 1831, at Winchendon, Massachusetts, the son of Dr. Alvah and Mary Whitney Godding, his mother's people coming over from Whitney-on-the-Wye, England in 1635 to Watertown, Massachusetts. In 1850 he entered the freshmen class at Dartmouth College, graduating A. B. there in 1854 and reading medicine with his father. His first course of lectures was at the College of Physicians and Surgeons, New York City; the next at the Medical College, Castleton, Vermont, where he took his M. D. in 1857. He then practiced with his father at Winchendon for eighteen months, until appointed assistant physician of the State Hospital for the Insane, at Concord, New Hampshire. To the close of his career he devoted all his time and energies, with the exception of a single year, to his great life work. In 1862 he resigned to enter private practice at Fitchburg, Massachusetts, but in September, 1863, entered St. Elizabeth Hospital for the Insane, at Washington D. C. as second assistant physician, where he proved himself a man of great energy and industry, remaining very closely at the hospital and seldom leaving it to find recreation outside, except in long country walks, of which he was very fond. The history of St. Elizabeth he knew from its beginning. A great reader of books, he accumulated those on general medicine and on his specialty and the best literature of the day. He made close study of cases of special interest and wrote them up.

Two good pamphlets of his are: "Two Hard Cases," Boston, 1882; and "The Rights of the Insane in Hospital," Philadelphia, 1884. In April, 1870, he was appointed superintendent of the State Hospital for the Insane, Taunton, Massachusetts, which he kept up to the highest standard of that time.

He married, December 14, 1860, Ellen Rowena Murdock, daughter of Elisha Murdock, of Winchendon.

On September 23, 1877, Godding returned to St. Elizabeth to take the place of the only superintendent the Government Hospital for the Insane had then known, Dr. Charles H. Nichols (q. v.). He died on May 6, 1899.

DANIEL SMITH LAMB.

GODMAN, John Davidson (1794-1830), pioneer anatomist, teacher and writer. The few early glimpses to be had of John D. Godman the anatomist when he fought ill health and adversity show what wonderful energy can be generated by certain circumstances calculated to drive most men to despair. Born at Annapolis December 20, 1794, the son of one Capt. Samuel Godman, his mother died before he was two, his father a year later and an aunt to whose care he had been intrusted, passed on a little later. He said of himself: "Before I was six I was fatherless and friendless. I have been deprived by fraud of property which was mine.

I have passed the flower of my days in little better than slavery and have arrived at what? manhood, poverty and desolation." At the age of sixteen he was bound apprentice to the printer of a newspaper in Baltimore and in 1814 began the study of chemistry, but during the same years enlisted in the navy as a common sailor. In 1815 he was without employment and without means to prosecute his studies. At that time he received an invitation to live and study with Dr. Luckey of Elizabethtown, Pennsylvania, of which he immediately availed himself, and entered into the work with great zeal. He remained five months with Dr. Luckey, then returned to Baltimore in search of greater facilities, eventually becoming the pupil of Dr. Davidge (q. v.) of the University of Maryland and attending the lectures of 1816-17 and 1817-18, graduating in the latter year. He began practice in the town of New Holland, but the quiet village life was not suited to his ardent temperament. He longed for and expected a professorship in the University of Maryland. Disappointed in this, he removed to Philadelphia, where he was solicited by Dr. Daniel Drake (q. v.) to accept the chair of surgery in the Medical College of Ohio. He reached Cincinnati about November 1, 1821, and following an introductory lecture trouble arose in the faculty and he resigned. Immediately afterwards he established the "Western Quarterly Reporter of Medical, Surgical and Natural Science," the first medical journal west of the Alleghanies which got as far as number three of the second volume. In this brief time Dr. Godman contributed three hundred pages to its contents.

In October, 1822, he arrived in Philadelphia, after one year in the West, just as the students were assembling for the annual course. Installing himself in rooms, Godman began a course of lectures which soon made his talents a theme of remark among medical and scientific men. His elaborate anatomical investigations giving a minute account of the fasciæ of the human body were published in 1824, but his stay on the banks of the Patapsco had given him chances for the study of natural history and in Philadelphia he had an opportunity of extending his investigations as a member of the Academy of Natural Sciences. To write his "magnum opus" meant much labor outside his usual duties. Undertaking the task he produced in 1826 three volumes of "American Natural History," a valuable addition to the scientific literature of the country, and did all this, added to reviews for the "Quarterly" and Latin, French and German translations, also his annotated edition of Sir Astley Cooper's "Dislocations and Fractures." He also co-edited the "American Journal of the Medical Sciences," beginning in 1824, and contributing to it until his death. He wrote a philippic against Dr. Richard W. Harlan, author of "Fauna Americana," in a letter addressed to Dr. Thomas P. Jones, editor of the "Franklin Journal," Philadelphia, 1826.

During this time of constant toil which brought in little remuneration he was offered the chair of anatomy in Rutgers Medical College, New Jersey (1826). It was a post of honor and he accepted and lectured with almost unparalleled popularity the ensuing winter. But by the next winter his health began to give way. It was evidently advanced tuberculosis. A spring at Santa Cruz failed to relieve him and he began to labor with his pen to support his family, continuing to work for the "Encyclopedia Americana," the natural history section being entirely intrusted to him.

He married, in October, 1821, a daughter of Peale, the artist.

On the seventeenth of April, 1830, this young leader in the profession departed this world cheerfully trusting in God, after a life in which he had sought no relaxation save change of occupation.

From "Liberty Hall and Gazette" of June 22, 1822, I copy the following "card."

"A Card

"Dr. John D. Godman respectly informs the public that the apparatus for sulphurous fumigations will shortly be ready for use at his office. The success with which diseases of the skin have been treated by this method is such as to astonish and gratify all who have witnessed its application. In Philadelphia, Baltimore, and other cities it is daily becoming more known and justly esteemed. A printed description of the origin and importance of the remedy, with numerous cases of disease cured by it, will in a few days be ready for delivery." Two weeks later a further announcement appeared as follows: "The apparatus is now established at the office of Dr. J. D. Godman, and will be ready for the reception of patients after the fourth of July (1822). Poor persons afflicted with diseases of the skin, chronic rheumatism, palsy, etc., who are recommended as proper objects of charity by a clergyman, physician, or respectable citizen, will be operated on free of charge." On August 17, 1822, appeared a

card stating that "a number of patients have been benefited and many cured. Charges fifty cents an application."

S. D. Gross, in his "Autobiography" says: "I had heard so much of Godman and saw before me a thin, frail sickly man with a pallid face, black hair and eyes and a clear sonorous voice. Godman was poor all his life. Poverty literally pursued him from the cradle to the grave. Gifted beyond most of his professional contemporaries he failed in almost everything. With great powers as an anatomical teacher he attracted large but unremunerative classes. For eighteen months after he took to literary pursuits he daily performed an astonishing amount of work, breathing as he did, with only one lung. His was a life of true heroism. His 'Rambles of a Naturalist,' 1823, has had many admirers on account of the beauty and fascination of its style."

A. G. Drury.

GOFORTH, William (1766-1817), early physician of Cincinnati, was born in the city of New York, and was the son of Judge Goforth, one of the earliest and most distinguished pioneers of Ohio. Equipped with a good preparatory education he had for medical professor Dr. Joseph Young, a physician of some eminence, who in 1800 published a small volume on "The Universal Diffusion of Electricity, and Its Agency in Astronomy, Physiology and Therapeutics," speculations which his pupil cherished through life. He also enjoyed the more substantial teachings of an anatomist and surgeon, Dr. Charles Knight, but the school was dispersed by a mob which had been raised against anatomists. Goforth went West with his brother-in-law, Gen. John S. Gano, and on the tenth of June, 1788, landed at Maysville, Kentucky, then called Limestone. Settling in Washington, four miles from the Ohio River, he was soon popular, and for eleven years held the principal practice in that neighborhood. In 1799 he went to Columbia, a suburb of Cincinnati, where his father lived and in 1800 removed to the city, occupying the house known as the Peach-Grove House, bringing with him a high reputation; he soon acquired an extensive practice. Dr. Drake (q. v.) says he had the most winning manners of any man he knew. He dressed with precision, and never left his house in the morning until his hair had been powdered, or without his gold-headed cane in his gloved hand.

In 1801 he introduced vaccination into Cincinnati, Dr. Waterhouse of Boston having brought it from Europe in the previous year. In 1803, at great expense, he dug up at Big Bone Springs, in Kentucky, the largest, most diversified, and remarkable collection of fossil bones ever disinterred at one time in the United States. These he entrusted to a Thomas Ashe, or Arville, who sold them in Europe and kept the proceeds. Dr. Goforth was the patron of all who were engaged in searching for precious metals. They brought him their specimens and generally managed to quarter themselves on his family while the necessary analyses were made. In these researches "Blennerism," or the turning of the forked stick, held by its prongs, was regarded as a reliable means of discovering metals, as well as water.

Dr. Goforth was fond of associating with French people, and sympathized with the refugees from France. This led him to go and live in Louisiana, which had been recently purchased from France and was filled with French exiles. Early in 1807 he departed in a flatboat for the lower Mississippi, where he was soon after elected Judge, and subsequently chosen by the Creoles of Attacapas to represent them in forming the first Constitution of the State. Soon after he went to New Orleans, and during the invasion of the city by the British, he acted as surgeon to a company of Louisiana volunteers. By this time his taste for French manners had been satisfied, and he determined to return to the city that he had left in opposition to the wishes of his friends. So he departed from New Orleans, May 1, 1816, and reached Cincinnati on the twenty-eighth of December, after a voyage of eight months, to find his popularity still high. Not long, however, did he enjoy it. During his summer journey from the South he had become ill and died in the following year, 1817, the second physician to die in Cincinnati, Dr. Allison (q. v.) having preceded him but a year.

A. G. Drury.

GOLDSMITH, Alban (1788?-1865?), a native of Danville, Kentucky, became one of the pioneer surgeons of the middle west. When Ephraim McDowell (q. v.) returned from Europe, Goldsmith whose name was changed later from Smith by the legislature of New York, was associated with him and is believed to have been present at the first ovariotomy, in 1809, on Mrs. Crawford. By dint of this association and by marked native ability, Gold-

smith in time acquired that practical education which was all that many of the able physicians of the day got. He was a full-fledged partner of his master, succeeding his nephew, James McDowell. On May 24, 1823, four years after McDowell's last recorded ovariotomy, and two years after Nathan Smith's (q. v.), Goldsmith operated thus becoming the third ovariotomist in the United States. The patient, a negress, had a large dermoid cyst; the incision was from the umbilicus to within an inch of the pubes and the tumor was removed with difficulty, on account of its size even after evacuation. The pedicle was ligated with a stout white silk ligature left long and hanging out of the wound, which was closed with five sutures embracing all the layers, including the peritoneum. Opiates were given freely. There was a considerable serous discharge. On the fifth day the sutures were removed, and on the twenty fifth, the pedicle ligature came away. The patient recovered.

About 1886, Goldsmith went to Paris to study under Civiale, and two years later he was the first in the United States to operate for crushing a stone in the bladder. Settling in Louisville, he secured from the State Legislature of 1833 a charter for the Louisville Medical Institute, opened in 1837 by some of the seceding members of the Transylvania faculty; Goldsmith, himself, not being connected with it. In 1833, he accepted the chair of surgery in the Medical College of Ohio and moved to Cincinnati where he remained until 1837 apparently making no special impression as a surgeon and easily overshadowed by his rival in the other school, the brilliant Willard Parker (q. v.), who was a ready writer and an assiduous attendant at medical meetings. The regents of the College of Physicians and Surgeons of New York next offered Goldsmith the chair of surgery which he took for two sessions, when he resigned to be succeeded by Parker. Goldsmith remained in New York practicing genito-urinary surgery until his death about 1865. He wrote "Lithotripsy; or the Breaking of Stone in the Bladder," 1843, and "Diseases of the Genito-urinary Organs," 1857.

An important episode in his life was a feud engendered by the constant enmity of Daniel Drake (q. v.) who singled him out for relentless antagonism and malediction. An article in the "Western Journal of Medical Science," 1837-38, is especially severe. On the other hand, when Drake opened his medical department of the Cincinnati College in 1835, Goldsmith became the author of a series of bitter defamatory articles in the "Cincinnati Whig and Commercial Intelligencer."

Otto Juettner (q. v.) characterizes him as a poor teacher but a clever resourceful surgeon and estimates his writings on lithotomy and lithotripsy as epochmaking; he also conjectures that Goldsmith was probably the first man in the United States to ligate the subclavian artery.

A son, Middleton (q. v.) was well known in Kentucky and Vermont as an able teacher and surgeon.

HOWARD A. KELLY.

GOLDSMITH, Middleton (1818-1887), surgeon of Vermont and Kentucky, army surgeon, was the son of Dr. Alban (q. v.) and Talia Ferro Middleton Smith of Virginia. His father had his name changed to Goldsmith by the legislature of the state of New York and the son took his father's name although born when it was Smith. Middleton first saw the light at Fort Tobacco, Md., on August 5, 1818. He was educated at Hanover College, Indiana and at the College of Physicians and Surgeons, Columbia, New York, where he took his M. D. in 1840, Hanover College conferring an A. M. on him the following year, his A. B. having been as of 1835. For several years the son acted as assistant to his father, who was lecturer in surgery at the College of Physicians and Surgeons; he went to China as ship's surgeon where he studied ophthalmia; he helped his father to introduce more generally the practice of lithotrity in this country; he acted as coroner's physician and acquired a practical knowledge of pathological anatomy; together with his friends, Dr. Lewis A. Sayre (q. v.) and Dr. John C. Peters (q. v.) he founded the New York Pathological Society. Shortly before his death he presented this society with a fund of $5000. to endow the lectureship which bears his name.

Dr. Goldsmith was called to the chair of surgery in the Castleton (Vermont) Medical College in 1844. There he taught and practiced surgery throughout the state until 1856 when he was offered and accepted the professorship of surgery in the Kentucky School of Medicine at Louisville, a position formerly held by his father. Middleton there became dean of the faculty. While in Vermont he was elected president of the Vermont State Medical Society, in 1851. He entered the Federal Army in 1861 as brigade surgeon, being connected with General Buell's division and par-

ticipating in many engagements, including Shiloh. He was placed in charge of construction and then was medical director of the large general army hospital at Jeffersonville, Indiana, which had as many as four thousand beds. Here he stayed until the close of the war, making exhaustive studies of pyemia and hospital gangrene, then rife in the wards of all hospitals. He developed the bromine treatment of gangrene, thereby reducing the mortality of that disease considerably. He kept in touch with the latest teachings in pathology in Europe and when the war was over he visited Vienna and was cordially received by the great Virchow, who even invited him to lecture to his students. Dr. Goldsmith resumed practice in Louisville in 1866 and acted as president of the then moribund Kentucky School of Medicine for a few months when he returned to Vermont for the rest of his life, maintaining a residence in Rutland. There he became identified with dairy interests in the state and endeavored to introduce scientific methods into the industry. In 1878 he was appointed a special commissioner to examine the state insane asylum, making a critical and able report. In Rutland he established the Rutland Free Dispensary; he was a frequent expert witness in the courts; his medical library was the best in the state; he was an earnest student of the germ theory of disease as it developed, always keeping abreast with the advances in medicine.

Dr. Goldsmith's large frame and commanding presence made him a conspicuous figure in any gathering. His manner was brusque but concealed a kindly and generous disposition. In June, 1843 he was married to Frances Swift, daughter of Henry Swift of Poughkeepsie, N. Y. She died suddenly of heart disease in November, 1887 and the doctor survived her but a few days, passing away November 26, 1887 at the age of 69. Two daughters survived them.

WALTER L. BURRAGE.

Goldsmith, William Benjamin (1854-1888), superintendent of hospitals for the insane at Danvers, Mass. and Providence R. I. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Baltimore 1920, page 448.

GOODALE, George Lincoln (1839-1923), one of the earliest of American botanists to specialize in plant physiology, was born in Saco, Maine, August 3, 1839, the son of Stephen Lincoln and Prudence Aiken Nourse Goodale. In 1860 he was graduated from Amherst College and in 1863 took the medical degree from Harvard and Bowdoin. The honorary degrees later conferred on him were the M. A. from Amherst in 1866 and Bowdoin in 1869, also the LL. D., from Amherst in 1890, from Bowdoin in 1894, and from Princeton in 1896. For three years (1863-66), he practiced medicine in Portland and was instructor of anatomy at the Portland School of Medical Instruction. Meanwhile and later, he was state assayer of Maine. He occupied the Josiah Little chair of natural history and that of mineralogy, botany, and applied chemistry at Bowdoin from 1868 until 1872 when he was called to Harvard and successively appointed instructor of botany and lecturer on vegetable physiology (1872-73), assistant professor (1873-78) and professor of botany (1878-88), and Fisher professor of botany (1888-1909), being made emeritus professor, in the latter year. In 1879, he became director of the Botanic Garden.

In early life, Dr. Goodale was interested in the flora of New England, particularly of Maine. His most important publication and the one by which he became widely known is his volume on plant physiology, 1885, which constitutes a portion of the sixth edition of Gray's text book. Among his other writings are "The Botanical Report" (a brief catalogue of those plants not yet credited to Maine), 1861; "The Vegetation of Aroostook County," 1862; "A Catalogue of the Flowering Plants of Maine," 1862 (reprinted as a pamphlet—"The Portland Catalogue of Maine Plants," in 1868); "Fertilization and Cross-Fertilization," 1877; "Hybridization in Plants," 1878; "List of the writings of Dr. Asa Gray, Chronologically arranged, with an Index," 1888; "Some of the possibilities of Economic Botany," 1891; and "The Ware Collection of Blaschka Glass Models of Plants in Flower," 1915. From 1870 until 1872 he was co-editor of "The Bowdoin Scientific Review".

Dr. Goodale was a member of the National Academy of Sciences, the American Society of Naturalists, the Association of American Anatomists, the American Physiological Society, and president of the American Association for the Advancement of Science in 1890-1891.

On December 4, 1866, he married Henrietta Juel Hobson. A son, Joseph Lincoln Goodale was a prominent laryngologist of Boston.

Dr. Goodale was a very quiet man, not often going far from home especially in his later years. He was an impressive lecturer being much absorbed in his subjects. He died April 12, 1923.

GOODELL, William (1829-1894), pioneer gynecologist of Philadelphia with unusual literary ability, was the son of a missionary, the Rev. William Goodell and was born on the island of Malta, October 27, 1829. He was educated at Williams College, where he received his A. B. in 1851, and at Jefferson Medical College, Philadelphia, being graduated in 1854. He practiced first in Constantinople, finally settling in West Chester, Pennsylvania, in 1861. In 1865 he was placed in charge of the Preston Retreat, a gynecological hospital of Philadelphia, and there his distinguished career gave him an international reputation. He was appointed lecturer on obstetrics and diseases of women in the University of Pennsylvania in 1870 and clinical professor of the diseases of women and children in the same medical college in 1874, teaching gynecology for twenty years and being made honorary professor on his resignation. The University of Pennsylvania conferred the degree of M. D. on him in 1871. He was a founder and president of the Philadelphia Obstetrical Society and of the American Gynecological Society, and honorary fellow of the Edinburgh Obstetrical Society, corresponding fellow of the London Obstetrical Society, honorary fellow of the Imperial Medical Society of Constantinople, fellow of the College of Physicians of Philadelphia. Among his contributions to medical literature there was only one in book form, "Lessons in Gynecology" (1879), which had reached the third edition during his lifetime, each edition having been carefully revised by the author. A bibliography of his writings contains 113 titles.

Dr. Barton Cooke Hirst, his fellow townsman, made the following estimate of Dr. Goodell's character and attainments in his obituary of him in the Transactions of the American Gynecological Society for 1895: "His work of all kinds was of the most painstaking and methodical character * * * *. Dr. Goodell united in his professional career two distinct phases of development, with either one of which an ambitious man might well have been content. His greater distinction and stronger claim for remembrance as long as medicine has a literature will be his achievements as a student and writer * * * *. Some of his happiest hours were spent in the library of the College of Physicians in desultory reading. Here he chanced upon Louyse Bourgeoise's book which he made the basis of Bourgeoise's life and writings in a charming sketch that was read before the Philadelphia County Medical Society in 1876. As a practical gynecologist Dr. Goodell's chief claim to distinction lay in his wide and well-digested experience, his good judgment, and his powers of diagnosis."

He was a man of medium height, inclined to be stout. In his latter years his full beard was tinged with gray. He was an approachable teacher of a genial temperament and with a remarkable gift of expression.

He married Caroline Darlington, daughter of Judge Thomas S. Bell, of West Chester, Pa., in 1857. Failing health obliged him to resign all medical work in 1894 and he died on October 27, of that year on his sixty-fifth birthday.

WALTER L. BURRAGE.

GOODHUE, Josiah (1759-1829), pioneer Vermont surgeon, was born at Dunstable, Mass., January 17, 1759. He was the son of the Rev. Josiah Goodhue, a graduate of Harvard College in the class of 1755. The son entered Harvard just before the Revolution but was forced to go home when the college closed its doors. He had a white swelling of one knee and consulted Dr. Thomas Kittredge of Andover as to its treatment. Kittredge had a great reputation at that time as a bone setter and operator. Goodhue became his pupil and spent two years studying medicine and finally settled in Putney, Vt., where his family were then living. He soon gained a large practice which extended into the neighboring states of New Hampshire and Massachusetts. He was said to have performed his first major operation, the amputation of a leg, without ever having seen it done. Courage and resourcefulness coupled with dexterity were the chief qualifications of a surgeon in those days. In the course of time he received pupils, according to the custom of the times, his most famous one being Nathan Smith (q. v.). It is likely that Smith was instrumental in having the honorary degree of Doctor of Medicine conferred on his old master, Goodhue, by Dartmouth Medical School, which Smith had founded in the year 1798. Goodhue was president of the Windham County Medical Society for a series of years and he served one term in the Vermont state legislature. In 1803 he removed to

Chester, Vt. where he carried on his practice until 1816, when he settled in Hadley, Mass. In 1823 through the influence of Henry Halsey Childs (q. v.) he was appointed president of the Berkshire Medical Institution at Pittsfield, Mass. There he delivered the inaugural address at the first annual commencement. It was published at the request of the trustees by one "Phinehas Allen", of Pittsfield, a pamphlet of fourteen pages. Goodhue continued to serve the medical college until his death six years later. His practice in operative surgery was extensive. He said he had operated for strangulated hernia as many as forty times and that he had trephined the skull as often. He was the first to amputate at the shoulder joint of any man in New England, he asserted. With no anesthesia and only bystanders for assistants a surgeon need have a steady hand, quick motions and a phlegmatic temperament to carry through such major procedures for the saving of life. It is related that the celebrated Nathan Smith volunteered to hold a leg for Goodhue during an amputation, thus acquiring an interest in surgery, to which he was to be such an ornament in later life.

Dr. Goodhue did not write much. He published an account of his method of reducing a fractured thigh and holding the fragments of bone in position, in the "Medical Recorder," Phila. 1829, vol. xvi, pp. 139-142; also in the same journal, he reported the case of a fractured skull in a child in which a portion of the brain substance had escaped. In his later years he bought the best books and kept abreast of the times. He was punctual in his appointments, always reaching his consultations on time. He married early in life and had a family of eight children, his eldest daughter, Elizabeth marrying Dr. Amos Twitchell (q. v.) of Keene, N. H. A son, Josiah Cosmore Goodhue, was one of the founders of Rush Medical College in Chicago, a graduate of the medical department of Yale University in 1829. Dr. Goodhue died at the home of his daughter in Keene, of prostatic disease, September 9, 1829, at the age of 70.

WALTER L. BURRAGE.

GOODMAN, Henry Ernest (1836-1896), a founder of the Philadelphia Orthopedic Hospital, was born at Speedwell, Philadelphia, at one time a suburb of that city, near the Lime Kiln Pike, April 12, 1836. His father was Henry and his mother, Maria Ernest Goodman. Henry was graduated from the medical department of the University of Pennsylvania in 1859 and was appointed an interne at the Philadelphia General Hospital (Blockley); on completing his term he received an appointment as interne at the Wills Eye Hospital, where he became interested in the specialty to which he devoted the greater part of his time, in after life. His civil war record was :"July 23, 1861, major and surgeon of the 28th Pennsylvania Infantry; discharged for appointment in U. S. Volunteers, April 19, 1864; first lieutenant and assistant surgeon, U. S. Volunteers, February 26, 1863; major and surgeon, May 18, 1864; lieutenant-colonel and medical director, U. S. Volunteers (by assignment), February 25, 1865, to April 1, 1865; breveted lieutenant-colonel and colonel U. S. Vols., March 13, 1865, for "faithful and meritorious service during the war;" resigned honorably discharged November 3, 1865. In 1866 he was made U. S. examining surgeon for pensions; from 1866 to 1873 he was the port physician at Philadelphia. The year 1868 was spent in visiting the European hospitals and in attending the international ophthalmological congress at Heidelberg.

Dr. Goodman's chief merit is that of having been one of the founders of the Philadelphia Orthopedic Hospital, and he was one of the surgeons and the secretary of the medical staff, a position he held until his death. He was also one of the founders of the Pennsylvania State Hospital for Women. In 1872 he was appointed an attending surgeon at the Wills Eye Hospital; surgeon to the outpatient department of the Pennsylvania Hospital; attending surgeon to the Presbyterian Hospital. From 1881 to 1882 he was professor of surgery at the Medico-Chirurgical College; from 1885 to 1891 professor of the principles and practice of surgery, orthopedic and clinical surgery, Medico-Chirurgical College; 1891 emeritus professor of surgery, Medico-Chirurgical College.

In 1874 he married the widow of John White Geary, a former governor of the State of Pennsylvania, and on February 3, 1896, while running for a train, at Tioga station, Dr. Goodman fell dead.

JOHN WELSH CROSKEY.

GOODMAN, John (1837-1912), obstetrician of Louisville, Kentucky, was born in Frankfort, that state, July 22, 1837, the son of John and Jane Goodman. His preliminary education was received at Georgetown College, Kentucky, graduating in 1856, and his

medical education at Tulane University, New Orleans, where he took his M. D. in 1859. In that year he married Carrie D. Miller of Louisville. He practiced all his life in Louisville. The year after graduation he was demonstrator of anatomy in the Kentucky School of Medicine and in 1868 he was appointed professor of obstetrics in the Louisville Medical College, after 1875 filling the same chair in the first-named institution. He was an organizer and an original member of the Louisville board of health; for a quarter of a century he was physician to the Louisville Industrial Home for Reform.

His titles include: "A New Method of Conducting the After-Treatment in the Operation for Vesico-vaginal Fistula;" "Treatment of Chronic Cystitis in the Female;" "Menstruation and the Law of Monthly Periodicity."

He died at his home in Louisville, February 19, 1912, of arteriosclerosis at the age of 74.

GOODWIN, James Scammon (1793-1884), pioneer physician of Maine, was born at Old Fields, at the old Goodwin homestead, in South Berwick, Maine, November 11, 1793, the youngest of eleven children of a family widely known in that part of the country for their public services as well as for personal worth; his father was the then famous Maj.-Gen. Ichabod Goodwin, of Revolutionary renown, and his mother, Mollie Wallingford, of Berwick. James Goodwin fitted for college at the Berwick Academy under the charge of Maj. Josiah Seaver, and entered Dartmouth College when fourteen. He was sent there thus early in order to be under the observation of an elder brother, Dominicus, who graduated with him in the class of 1811. James then studied medicine at the Dartmouth Medical School and took his degree in 1814, when twenty-one.

He obtained a surgeon's appointment at the latter end of the war of 1812-15 but did not actually serve. His life was spent in the practice of medicine, first in Saco, then in South Berwick, and finally at Saco, where he returned at the urgent and repeated demands of his friends and former patients, and remained in practice until he retired at the age of sixty-five. Then he moved to Portland to spend the rest of his life with his children.

He made his name known throughout the state of Maine, at the age of thirty-two, by an amputation high up in the thigh upon a young girl on whom every doctor in the neighborhood had positively refused to operate, declaring her condition hopeless, an operation, as they said, nothing short of murder. The operation, decided upon with the patient's consent, was begun with prayer, a proceeding not at all unusual in those days of genuine religion. As no physician could be found to assist, Mr. Ether Shepley, a young lawyer of Saco, stood by and assisted Dr. Goodwin to the best of his ability. The operation was a complete success, the patient living as long as her skilful surgeon.

Goodwin was a member of the Maine Medical Association but does not seem to have left any medical papers. He lived to be ninety-one, dying at last from sheer old age, March 14, 1884.

JAMES A. SPALDING.

GORGAS, William Crawford (1854-1920), sanitary expert and surgeon-general of the United States Army, was born October 3, 1854, on the old Gayle place at Toulminville, near Mobile, the son of Josiah Gorgas and Amelia, daughter of John Gale, former governor of Alabama. His father's stories of West Point life quickened a love of combat in the lad, and he early set his heart upon a military career; during his impressionable years, the elder Gorgas flung off a Pennsylvania upbringing to enlist in the Confederacy, was commissioned brigadier general and made chief of ordnance, and through ability to keep the army supplied with munitions promoted the continuance of hostilities for another year. After graduating in 1875 from the University of the South at Sewanee, Tennessee, where his father was president, William applied for entrance at West Point, but having lost his residence in Tennessee by moving to New Orleans, he was unsuccessful before reaching the age limit. His way into army life now lay through the medical corps, and in 1876 he entered Bellevue Medical College, New York City, to graduate in 1879 with the discovery that he had in reality stumbled upon his forte. After a brief internship at his alma mater, he entered the Medical Corps, U. S. A. in June, 1880. During the next two decades, Gorgas was army doctor at various posts in Texas, North Dakota, and Florida, and on several occasions assumed charge of yellow fever camps, finding time to meditate, like so many others, upon the origin of the great plague.

It was yellow fever that was destined to play the important role in his life, for while he and Marie Cook Doughty of Cincinnati

convalesced from the epidemic at Fort Brown, Texas, in 1882, their romance blossomed, terminating in marriage September 15, 1885. In 1898, Gorgas became chief sanitary officer of Havana and peacefully conquered the city, first by his clean-up campaign and then by his persistent successful efforts to rid the city of the Stegomyia mosquito, following Walter Reed's (q. v.) discovery of its necessary relationship to yellow fever. In 1902, his rank was raised to colonel. During the following two years, he familiarized himself with the health problems on the Isthmus of Panama and then made a trip to Egypt to study sanitation and to Paris to review the failure of the French in Panama. With a small band he settled on the Isthmus in June, 1904, and he alone with his trusty aides made possible the construction of the Canal by his memorable historic campaign against the mosquito. "Sanitation in Panama," 1915, is a lucid, thrilling exposition of his work. In 1913, he journeyed to South Africa to cope with disease among the negro workers in the Rand and shortly reduced to a minimum the alarming death rate from pneumonia and other diseases; while there he learned of his promotion to the rank of general. Returning home in 1914, according to Sir William Osler, he was given the greatest ovation England had ever extended to a medical man; Oxford conferred her D. Sc. upon him. Once more in Washington, he became major-general, a rare honor in the medical corps of the army. When the International Health Board of the Rockfeller Foundation took up the question of world-wide control of yellow fever, Gorgas was selected to visit suspected countries to find the hidden foci. In June, 1916 he began a tour of the south and central Americas and Mexico. On his return he was made director of this work which was postponed by the World War to which he gave his services without stint. Three days after the Armistice, he was relieved of his duties as surgeon general and was left free to devote his life to the extermination of yellow fever. With the work already organized in the Americas, and anxious to determine its status in other continents, he set out for Africa by way of London and Brussels where he was awarded the Harbin gold medal.

Following a slight paralytic stroke in London, General Gorgas died, July 4, 1920. His funeral in St. Paul's Cathedral was the highest honor Great Britian could pay; he was laid to rest in the National Cemetery at Arlington.

In recognition of his invaluable service, the Sc. D. was conferred by the University of Pennsylvania in 1903, by the University of the South in 1904, by Harvard in 1908, by Brown and by Jefferson Medical College in 1909, and he received the LL. D. of the University of Alabama in 1910 and of Tulane in 1911. He was also awarded the Mary Kingsley Medal of the Liverpool School of Tropical Medicine in 1907 and the Distinguished Service Medal in 1918. He became Grand Officer, Order of the Crown of Italy, in 1918, and Commander of the Legion of Honor in 1919; and was knighted by King George during his last illness. He was president of the American Medical Association in 1908-09 and of the American Society of Tropical Medicine in 1910. A more significant title than those conferred by many countries is that by which he is affectionately remembered, "Physician to the World." Two complementary institutions will be his memorial: The Gorgas School of Sanitation at Tuscaloosa, Alabama, for the training of country health workers, sanitary engineers and public health nurses, who deal with problems peculiar to the southern states, and The Gorgas Institute of Tropical Diseases and Preventive Medicine at Panama City, providing laboratories and materials for research in tropical diseases.

GORHAM, John (1783-1829), early professor of chemistry in Harvard Medical School, was the son of Stephen Gorham, a merchant of Boston, Massachusetts, and was born there February 29, 1783. He was graduated from Harvard College in 1801 and began the study of medicine with John Warren (q. v.). In 1804 he took his M. B. from Harvard College and his M. D. there in 1811. Afterwards he went abroad and studied for about two years in London, Edinburgh and Paris. On returning to Boston he married the daughter of Dr. John Warren and began to practice. Through Warren's introduction he had become acquainted with Dr. Aaron Dexter (q. v.), professor of chemistry at Harvard, and shortly (1809) Gorham was appointed adjunct professor of chemistry and materia medica in Harvard College. He held this position until 1816, when he was made Erving professor of chemistry to succeed Dr. Dexter. After 1824 Dr. Gorham's labors were confined to teaching in the Medical School in Boston, the corporation having decided that the Erving professors ought to live in Cambridge, and Dr. Gorham, being unwilling to

move because it interfered with private practice, resigned his position in 1827.

During his professorship he published a system of chemistry in two volumes, 1819 and 1820, a book that had a large circulation and was considered a complete digest of the knowledge of the time. He wrote many papers for the "New England Journal of Medicine and Surgery," of which he was joint editor for about fifteen years. When this periodical was succeeded in 1828 by the "Boston Medical and Surgical Journal" he contributed to the latter. For many years after 1810 he gave private courses of instruction in chemistry in Boston.

He died of pneumonia March 27, 1829. Dr. James Jackson said of him: "During twenty years and more I know not that he has made an enemy." He was a popular and successful teacher and practitioner. A lithograph portrait of him taken from a painting in the possession of his descendants is now in the Boston Medical Library.

WALTER L. BURRAGE.

GORRIE, John (1803-1855), among those things for which the fever-stricken have to be grateful is artificial refrigeration, invented by John Gorrie of Charleston and Apalachicola, Florida, who, like most inventors, met with ridicule and neglect. He was born in Charleston, South Carolina, on October 3, 1803; educated in a northern college and went to Apalachicola in 1833, practicing medicine there very successfully until his death in 1855.

In 1847-8, while preparing a series of papers for the London "Lancet" on the subject of "Equilibrium of Temperature as a Cure for Pulmonary Consumption," one of his chemical experiments on air cooling resulted in the making of artificial ice. He immediately set about perfecting this idea with the result that the first ice machine ever made and operated was patented in 1851 with a treatise on an apparatus for the artificial production of ice in tropical climates. This was published in N. Y. in 1854, a pamphlet of 15 pages and one plate. Twelve years before the work of M. Carré in Paris, Dr. Gorrie's claims for air cooling in hospitals were definitely established. It was never his intention to perfect a process for ice making or to exploit his discovery, but rather, in a town where the extreme heat meant torture to fever patients, to cool the air. During his lifetime no one gave him the encouragement he needed or advanced the necessary funds. He died at Apalachicola on June 18, 1855, after a short illness. After he was dead it was discovered by his fellow citizens that he merited a monument and he had one. This was a discovery which hardly helped Gorrie, but the monument acknowledges the debt of Apalachicola to a good physician and scientist.

DAVINA WATERSON.

GOTTHEIL, William Samuel (1859-1920), New York dermatologist, was born April 5, 1859, in Berlin, Germany, the son of Rabbi Gustav and Rosalia G. Gottheil. After graduating in arts from Cornell in 1879, he studied medicine at the College of Physicians and Surgeons, New York, where he was graduated in 1881. For the next two years, he was an interne at the City (Charity) Hospital. During 1885-88, he was lecturer in dermatology in the New York School of Clinical Medicine and during 1907-12, adjunct professor of the same subject in the Post Graduate Hospital Medical School. In 1912, he accepted the professorship of dermatology in Fordham University while he was dermatologist to the City and Lebanon hospitals and consulting dermatologist to Beth Israel, Washington Heights, Jewish Maternity, and Rockaway Beach hospitals and the Hospital for Deformities and Joint Diseases. Gottheil's name is conspicious for the use of solid Co^2 in dermatology; he was the first to use insoluble mercuric salts and brought mercuric salicylate to the fore. In 1898, he was one of the founders of the Manhattan Dermatological Society and in 1899, its president. He was a fellow of the Academy of Medicine of New York.

Gottheil was the editor of the "New York Clinical Recorder" in 1896-97, the author of a "Manual of General Histology," 1894; "Illustrated Skin Diseases; an Atlas and Textbook with Special Reference to Modern Diagnosis and the Most Approved Methods of Treatment," 1897; "The Treatment of Skin Cancers," 1898; "Syphilis," 1899, and briefer papers. He was an artist and made for himself an extraordinary collection of moulds of the dermatoses.

He married Viola Sheppard, August 11, 1896. He died from heart disease January 7, 1920.

GOULD, Augustus Addison (1805-1866), Boston physician, author and conchologist, was born at New Ipswich, New Hampshire, April 23, 1805. His father's family name

was Duren, which was changed to that of Gould by act of the legislature. Receiving an A. B. at Harvard in 1825 he entered the Harvard Medical School and taking his M. D. in 1830, began practice in Boston, where he lived the rest of his life. He studied natural history in college and for two years after graduation gave instruction in botany and zoology at Harvard College.

With A. L. Pierson, J. B. Flint and Elisha Bartlett (q. v. to all three) he edited the "Medical Magazine" in Boston from 1832 to 1835, when this publication ended its brief life. Dr. Gould should be given credit for befriending W. T. G. Morton (q. v.) when he was introducing surgical anesthesia in the fall of 1846. Morton lived across the street from Gould, and the latter was instrumental in getting opportunities for Morton to anesthetize when the popular and professional prejudice against etherization was strong.

He became treasurer of the Massachusetts Medical Society in 1845 and held the position, with the exception of one year, until 1863, also he was president of that society from 1864 to 1866, the year of his death. In 1855 he delivered the annual discourse with the title, "Search out the Secrets of Nature." The following year he became a visiting physician to the Massachusetts General Hospital, serving until his death, at the age of sixty-one, September 15, 1866.

His writings gave him membership in several learned societies, among them being the American Academy of Arts and Sciences, American Philosophical Society, the natural history societies of Rhode Island and Connecticut and Quebec, the Imperial Mineralogical Society, St. Petersburg; Natural History Society, Athens, and Royal Society of Natural History, Copenhagen. His chief works were: Translation of Lamarck's "Genera of Shells," 1833; "System of Natural History," 1833; translation of Gall's works; the "Invertebrate Animals of Massachusetts," 1841; "Principles of Zoology" with Professor Louis Agassiz, 1848; "Mollusca and Shells of the U. S. Exploring Expedition under Captain Wilkes, 1852, quarto with plates;" "Land Mollusks of the United States," 3 vols., 4to, 1851-5; "A History of New Ipswich, N. H.," with F. Kidder, 1852.

WALTER L. BURRAGE.

GOULD, George Milbry (1848-1922), maker of medical dictionaries, editor, writer, was born in Auburn, Maine, November 8, 1848, the son of George Thomas and Eliza Lapham Gould, and a descendant of the Robert Goold who came from Somersetshire, England, settled in Hull, Massachusetts, about 1633, and collected genealogical data of about one thousand of Robert's descendants, some still living in Hull. When George was about two years old, his mother died and he went with his father to Ohio. Only thirteen at the outbreak of the Civil War, he marched to the front as a drummer boy with the 63rd Regiment of Ohio Volunteers; a year and a half later, he was discharged for disability. In 1865, he enlisted in the 141st Ohio Volunteer Infantry and served until mustered out at the close of the War. After getting an A. B. from Ohio Wesleyan University in 1873, he graduated from the Harvard Divinity School in 1874 and became a minister. Later he spent two years in Europe and in 1885 began to study medicine, graduating at Jefferson Medical College in 1888. The following year he received the A. M. of Ohio Wesleyan. Gould settled in Philadelphia and specialized in ophthalmology, rapidly acquiring a wide reputation; his practice was limited principally to the correction of refraction. Within the year he devised his cemented bifocal lenses, ever since used all over the world. During 1892-94, he was ophthalmologist to the Philadelphia Hospital. In 1917, he received the first Doyne Medal of the Ophthalmological Congress at Oxford, England. After twenty years of practice in Philadelphia, he spent three years in Ithaca, New York, and then moved to Atlantic City, New Jersey.

He was a prolific medical writer and his energy seemed boundless. While still a student, he collaborated with L. Webster Fox in the preparation of "A Quiz Compend of Diseases of the Eye" (1886-88); in 1890, appeared the "Students Medical Dictionary" (11th ed., 1900); in 1891, the "New Medical Dictionary" (10th ed., 1900), in 1892, the "Pocket Medical Dictionary" (last republished in 1913), and "Eleven Thousand Medical Words Pronounced and Defined" (enlarged to thirty thousand in 1899); in 1894, the "Illustrated Dictionary of Medicine, Biology, and Allied Sciences" (with supplement in 1905, last ed., 1913); in 1900, "The Encyclopedia of Medicine and Surgery" (last ed., 1913); in 1906, "The Practitioners' Medical Dictionary" (last ed., 1917). He was also the author of the "American Year Book of Medicine and Surgery," 1896-1905, "The Meaning and the Method of Life," 1893; "Borderland Studies" (2 vols.), 1896-05; "An Autumn Singer," 1897; "Suggestions to

Medical Writers," 1900; "Biographic Clinics" (6 vols.), 1903-09; "History of Jefferson Medical College" (2 vols.), 1904; "Right Handedness and Left Handedness," 1908; "Concerning Lafcadio Hearn," 1908; "The Infinite Presence," 1910; "Personal Bibliography," 1910; "Genius and Other Essays by E. C. Stedman," 1911, and, in collaboration with W. L. Pyle (q. v.), "A Compend of Diseases of the Eye and Refraction," 1897, and "Annomalies and Curiosities of Medicine," 1901. He served as editor of the "Medical News" from 1891 until 1895, of the "Philadelphia Medical Journal" from 1898 until 1900, and of "American Medicine" from 1901 until 1906. He was president of the American Academy of Medicine in 1893-94. At the Congress of Arts and Sciences held in St. Louis in 1904, he spoke on ophthalmology.

Dr. Gould was married twice: first to Harriet Fletcher Cartwright of Pomeroy, Ohio, October 15, 1876, and second to Laura Stedman, October 3, 1917. He died of heart disease at Atlantic City, August 8, 1922, at the age of seventy-three.

Gould was a man of large frame and of impressive appearance. His books, especially those of collected data, attest his extensive reading and were of great assistance to medical men who wanted to learn how to express themselves. In starting the "Philadelphia Medical Journal," and "American Medicine" in which the medical profession subscribed to the capital stock, the controlling idea was to found a school of medical journalism. His command of the English tongue made him an important member of the medical profession.

GOULEY, John Williams Severin (1832-1920), genito-urinary specialist, was born March 11, 1832, in New Orleans, of French parentage. After a classical education under private tutors he took his M. D. at the New York College of Physicians and Surgeons in 1853 and when he had served a year in Bellevue Hospital began to practice in New York, specializing in genito-urinary work. He was professor of anatomy in the Vermont Medical College at Woodstock in 1856; visiting surgeon to Bellevue Hospital from 1859 to 1861 also 1864 to 1866, and to St. Vincents Hospital 1866-1867; and successively occupied in the University of the City of New York the post of demonstrator of anatomy, instructor in histology and operative surgery, professor of clinical surgery and genito-urinary diseases (1866-71), and professor of diseases of the genito-urinary system (1876 to date of retirement). During the Civil War Dr. Gouley was assistant surgeon in the U. S. army, seeing service at the front.

Among his numerous and valuable contributions to the literature are: "External Perineal Urethrotomy," 1869, "Diseases of the Urinary Organs," 1873, "Diseases of Man; Data of their Nomenclature, Classification, and Genesis," 1888, "Diseases of the Urinary Apparatus. Phlegmasic Affections," 1892. In 1875 a paper appeared on "Perityphlitic Abscess due to Perforation of the Vermiform Appendix."

In July, 1869, he married Isabelle Mary Caulfield of Lexington, Kentucky. He died at the home of his daughter from old age, April 26, 1920.

GRADLE, Henry (1855-1911), an ophthalmologist of Chicago, author of the first work in English on the "Germ Theory," was born at Frankfort-on-the-Main, Germany, August 17, 1855. His medical degree was received at the Chicago Medical College in 1874. After an interneship at Mercy Hospital, Chicago, he studied in Vienna, Heidelberg, Leipsic, Paris and London. He was professor of physiology in the Chicago Medical College from 1881 till 1895, and professor of ophthalmology and otolaryngology in the same institution from 1895 to 1906. He was a member of the Chicago Medical Society, the Chicago Ophthalmological Society (of which he was once president), the American Medical Association, and the Heidelberger Ophthalmological Society. He wrote, as stated, the first work in English on the "Germ Theory," and also a "Textbook on the Nose, Pharynx and Ear." He also contributed numerous articles to American and German periodicals. As an operator, he was unexcelled.

Dr. Gradle was a man of unique personality. "The Little Giant," Dr. G. Frank Lydston (q. v.) called him. He was five feet one inch high, stockily built, and with a very large head. In early life his hair was black, curly, and abundant, but, as his years advanced, he became almost totally bald. His reddish mustache was never tamed, but wandered at will. His eyes were brown and usually very serious, though any incident that appealed to him aroused in them a merry twinkle. He was a man of rugged constitution, and daily for over thirty years walked to and from his office—nearly two miles. His manner with patients was brusque, and

he did not attempt to ingratiate himself. But his worth soon revealed itself to them, and seldom if ever did his patients seek other sources of aid. He was a counsellor, and they came to him with their woes as well as with their ocular pathology.

His recreations were very few and simple. Chief of all was scientific reading, and this he indulged in nightly from 9:30 to 12:00, propped up in bed and smoking a cigar. Not alone ophthalmology, but general medicine, bacteriology, neurology and especially physiology and physiologic optics were among his favorite subjects. Helmholtz was his divinity, and he discovered passages in the great man's writings that had been entirely overlooked by even trained physicists.

He married August 31, 1881, Miss Fanny Searls. Dr. Harry S. Gradle, ophthalmologist of Chicago, was their son.

Dr. Henry Gradle died at Santa Barbara, California, April 4, 1911, of carcinoma of the bladder, aged 55. His large collection of medical books was left to the John Crerar Library, at Chicago. He also left to the Crerar Library a fund the yearly increment of which was devoted to the purchase of journals relating to the eye, ear, nose and throat.

THOMAS HALL SHASTID.

GRAHAM, James (1819-1879), clinical teacher, of Cincinnati, was born in New Lisbon, Ohio, May 28, 1819, the third son of George and Eliza Nelson Graham, his father coming from County Down, Ireland. As a boy and young man he worked with an engineer in making surveys and laying out work for contractors on the Sandy and Beevus Canals. With the money thus earned and saved he studied medicine with Dr. McCosh, after a year beginning practice with Dr. George Fries, his brother-in-law. Graham was a graduate of Jefferson College, Washington County, Pennsylvania. In 1849 he moved to Cincinnati, Dr. Fries having preceded him; there they practiced together until the Civil War. The year he began practice in Cincinnati the cholera epidemic was raging, and Dr. Graham was appointed physician to the quarantine station. Soon thereafter he had charge of the County Infirmary and in 1851, when the Cincinnati College of Medicine and Surgery was founded, he was made professor of materia medica and lectured on materia medica and therapeutics in the Miami Medical College during the session of 1853-54. In the latter year he was elected professor of physiology and clinical medicine in the Medical College of Ohio. Among other positions held were those of professor of materia medica and therapeutics, 1855; professor of clinical medicine, 1859; professor of theory and practice, 1864; professor emeritus, 1874. For many years he was dean of the faculty. For a period of twenty-five years he was clinical lecturer in the Commercial (later City) Hospital, and in the Good Samaritan Hospital, and president of the Academy of Medicine of Cincinnati in 1872. He was odd and witty, as attested by the anecdotes that are to be found in "Daniel Drake and His Followers."

Dr. J. S. Billings said of Graham that he was "slender, graceful, of light complexion, a shrewd and rapid reasoner, a marvelous diagnostician, a most eloquent lecturer, a man who would have made a great lawyer or politician."

Dr. Graham never married. He died October 6, 1879, of Bright's disease.

A. G. DRURY.

GRAHAM, James Elliott (1847-1899), Canadian dermatologist, was born in Brampton, County of Peel, Ontario, Canada, in May, 1847, the son of Joseph G. Brampton. He received his early education in the Weston Grammar School and the Upper Canada College, and during this period showed that combination of qualities which made him distinguished in later years. He graduated from the Toronto Medical School in 1869 at the head of his class, receiving both the university and the Starr gold medals. The following year he was appointed resident physician of the Brooklyn City Hospital. After this he became surgeon without rank in the Prussian Army, a position he held throughout the Franco-Prussian War. He then engaged in post-graduate work in Vienna, after which he went to London, where he soon obtained the diploma of L. R. C. P.

On July 15, 1873, he married Mary Jane, daughter of the Hon. J. C. Aikens, and settled down to regular practice in Toronto, where he was at once recognized as a capable physician. In 1875 he was appointed a member of the visiting staff of the Toronto General Hospital, an office he held at the time of his death. After he had been in Toronto about three years he was attached to the staff of the Toronto School of Medicine, where he did work as demonstrator of anatomy and demonstrator of microscopy. He was for two years lecturer on chemistry, but gave this up, preferring to devote himself to

clinical teaching in the General Hospital. On the reorganization of the medical faculty of the University of Toronto in 1887 he was appointed professor of clinical medicine and lecturer in dermatology, and in 1892 professor of medicine and clinical medicine.

Soon after beginning the practice of medicine he began to pay especial attention to internal medicine and to dermatology, and was the first physician in Ontario to give up general practice and become a consulting physican. He was an active member of many medical societies: in 1887 president of the Dominion Medical Association, in 1889 president of the American Dermatological Association. He was one of the original members of the American Association of Physicians. In 1893 he left Toronto for a time, made his home in London, and took his M. R. C. P. (London). He was thoroughly interested in all of his medical associations, both in Canada and the United States, and was past president of nearly every association that he belonged to, including the Toronto medical and the Toronto pathological societies. At the time of his death he was president of the Ontario Medical Association.

A frequent contributor to medical literature, he also took a deep interest in matters pertaining to medical education, especially in its practical aspects, and exercised a wide influence as a clinical teacher, being one of the first to give systematic bedside instruction in the General Hospital. For many years he was a member of the Senate, first as representative of the Toronto School of Medicine, and afterwards of the Graduates in Medicine.

Strict integrity, unvarying courtesy and kindness, steadfastness of purpose, and charity towards all men were his marked characteristics. In 1899 he went south for his health. While in Baltimore he was taken with influenza, followed by a slight pulmonary tuberculosis, which, engrafted on a system weakened by diabetes, proved rapidly fatal. He died in Muskoka, Canada, July 6, 1899, in the fifty-third year of his age, leaving a widow and four children, and was buried at Mount Pleasant Cemetery.

PRINCE A. MORROW.

GRAM, Hans Burch (1786-1840), known as a pioneer of homeopathy in America, was born in Boston in 1786. His father, a wealthy sea captain of Copenhagen, was, when a young man, secretary to the Danish West India governor and came to the United States soon after the Revolution. He was disinherited by his father for marrying a Miss Burdick, the daughter of a hotel keeper in Boston, so he remained in that city until his death in 1807. His eldest son, Hans, had been carefully educated and was already studying medicine when the death of his father compelled him to return to Denmark to look after family affairs. He obtained a portion of his father's heritage and through the favor of Prof. Fenger, his uncle and physician-in-ordinary to the king, he was placed in the Royal Medical and Surgical Institution. Within a year the king appointed him assistant-surgeon to a large military hospital. In 1814 he resigned and settled in general practice in Copenhagen with the highest grade of merit in the Royal Academy of Surgery. During 1823 and 1824 Gram had become acquainted with and thoroughly tested the principles of homeopathy, and it is probable that he was induced to stay in America, when he returned to see his family, in the hope of disseminating the doctrines of homeopathy.

It is thought he must have been an homeopathist about twelve years previous to leaving Copenhagen. After staying a while in Mount Desert, Maine, to help a brother, Neils B. Gram, who was in financial difficulties and eventually got nearly all Han's money, he began practice in New York and a few months later translated Hahnemann's "Geist der homeopathischen Heil-lehre" and published it in a pamphlet of twenty-four pages under the title "The Character of Homeopathy." The work was dedicated to Dr. David Hosack and distributed in the leading medical colleges, but Gram had nearly forgotten English and the book was difficult to understand. Hosack said he had not read it. Fifteen years later it was put into good English by a Dr. Scott, of Glasgow, Scotland. Its cold reception was a great disappointment to Gram, but he lived to see the system firmly planted not only in New York but in many other cities. He failed in health just as this came to pass. Broken in heart by the misfortunes, insanity, and death of his only brother he was attacked by apoplexy in 1838 and after many months of suffering passed away in February, 1840. He was of the Swedenborgian faith and a man of scrupulously pure and charitable life.

GRAY, Asa (1810-1888). The parents of this celebrated botanist were Moses and Roxana Gray, the father hailing from Londonderry,

Ireland, and the mother from Kent, England. Born in Paris, Oneida County, New York, on November 18, 1810, one of Asa's earliest occupations was to feed the bark mill and drive the horse at his father's tannery. He was a reader almost from childhood. Though he graduated M. D. at the College of Medicine and Surgery, Fairfield, New York, in 1831, he never practiced medicine. Two years before this his interest in botany was aroused by an article in "Brewster's Edinburgh Encyclopedia" and he watched eagerly for the first spring flower which he found to be the little Claytonia Virginica, named after Dr. John Clayton (q. v.), the botanist. The correspondence he had with Dr. Lewis C. Beck (q. v.) in regard to specimens led to a lasting friendship with Dr. John Torrey (q. v.), and in 1833 he became his assistant professor of chemistry and botany in the New York College of Physicians and Surgeons and issued the first century of the "North American Gramineæ and Cyperaceæ." A second century followed but the work was never finished. Gray's next post was the curatorship of the New York Lyceum of Natural History and his "Elements of Botany," 1836, prepared the way for his larger work, the "Botanical Text-Book." He declined two valuable appointments and continued working with Dr. Torrey on parts one and two of the "Flora of North America." Then followed visits to all the leading European botanists and after that a single-handed grappling for a time with the other numbers.

In 1842 he accepted an invitation from President Quincy to become Fisher Professor of Natural History at Harvard and under him grew the vast herbarium, library and garden which at the time of his going to Cambridge were still in their infancy. The library contains over 8,000 books and pamphlets. Always at work, 1848 saw the "Americae Boreali-Orientalis Illustrata," beautifully illustrated by Isaac Sprague. The two volumes had 186 plates, but unfortunately the work was not continued. Perhaps the memory of his own pleasures and difficulties with botany when a boy made him write two charming little books—"How Plants Grow," 1858, and "How Plants Behave," 1872. "Field, Forest and Garden," 1868, proved a wonderful help to plant lovers. "His First Lesson in Botany," 1857, reappeared, revised, in 1887 under "Elements of Botany," the two volumes being the alpha and omega of an overcrowded but fiery burning life. How much he did in the way of collecting and writing can only be estimated by those who knew how he kept in constant correspondence with old pupils and scientific friends. Those who are curious relative to the friendship between Gray and Darwin will find it all in "Darwiniana," 1876, and will note that Gray, while accepting Darwin's theory, was a firm theist. He wrote many biographical sketches, among them being lives of Jacob Bigelow, John Torrey and Jeffries Wyman. For many years he was one of the editors of the "American Journal of Science." Gray was relieved from active duties in the college in 1872 and gave more time to literary work. When he was seventy-five the botanists of North America gave him a silver vase and a silver salver in token of their universal esteem.

Jane L. Loring, daughter of the Hon. Charles G. Loring of Boston, was the name of Gray's wife, a devoted companion and assistant. They made five trips to Europe, working with De Candolle, Sir William Hooker, and with European botanists. Once they went up the Nile as far as Wady-Halfa, but "a land," said Gray, "which had been cultivated five thousand years is a poor land to botanize in." He made three trips to California with congenial friends, taking in Mexico; the last trip being in 1879 when they visited Roan Mountain and the place where grows the Shortia Galacifolia, whose romantic history and connection with Gray and Dr. C. W. Short (q. v.) should be read. There was scarcely a society of note which did not claim Gray as active, honorary or corresponding member or give him honors. He held the Edinburgh LL. D. and the Oxford D. C. L., the Harvard A. M. and LL. D.

On the twenty-eighth of November, 1887, while working on "The Grapevines of North America," he had an attack of paralysis and for nine weeks lingered between life and death, and on the thirtieth of January, 1888, he quietly passed away. His influence on the science of American botany can hardly be overestimated, and hundreds regretted sorely that death closed the book before the "Synoptical Flora" was all written.

HOWARD A. KELLY.

GRAY, John Perdue (1825-1886), New York alienist, was born of American parents on August 6, 1825. He went to the common school in Half Moon, Center County, Pennsylvania, his birthplace, and to Dickinson College, leaving before graduation but receiving an honorary A. M. in 1852. His M. D. was obtained from the University of Pennsylvania

in 1849 and the same year he became a resident physician in the Blockley Hospital, Philadelphia, and three years later third assistant physician to the New York State Lunatic Asylum in Utica, finally becoming superintendent when only twenty-eight. While editor of the first journal in America devoted to insanity—"The American Journal of Insanity"—he raised it to an enviable position both in this country and abroad by his ability and by his own writings.

The high standard reached in New York in the care of the insane was largely due to his influence. As a medical witness in cases of interest he was widely known, notably in the trial of Lincoln's assassin and Guiteau, who shot McKinley. In 1882 a madman in Utica fired at him,the bullet entering over the left malar bone and coming out in the right cheek. He never quite recovered from the shock. His health from other causes became seriously impaired, so he made a trip to Europe and came home better, but died from kidney disease at Utica, November 29, 1886.

"Dr. Gray," writes a biographer, "was uncompromising, unyielding and in a certain sense coercive in his views of psychiatry. He did not recognize certain forms of insanity discerned by American and foreign alienists. With him moral insanity, dipsomania, kleptomania were psychiatric myths and misnomers invented to shield depravity and crime. He fought out his convictions on this line throughout a vigorous life, and, carrying these triumphantly into the forum often won there popular acquiescence, as in the case of Guiteau." To him belongs the credit of establishing in this country a microscopic study of the brain; that which made the Utica asylum a great school of instruction. His lectures attracted not only the students of his own college but others, as well. His appointments numbered among others: professor of psychological medicine, Bellevue Hospital Medical College, 1874, and the same appointment in the Albany Medical College in 1876; president of the New York State Medical Society, of the New York State Medical Association, of the Association of Superintendents of Asylums, and honorary member of the British, French and Italian Medico-Psychological Associations. He was LL. D., Hamilton College. His writings included: "Thoughts on the Causation of Insanity," 1872; "Responsibility of the Insane," 1875; "An Abstract of the Laws of New York—Comparisons of the Same with Those of England," 1879; "On the Sanity of Guiteau," 1882; "Insanity: Preventable Causes," 1885.

He married, in 1854, Mary B. Wetmore, daughter of Edmund A. Wetmore of Utica, who, with three children, Dr. John P. Gray, Jr., William and Cornelia survived him.

GRANT, James Alexander, (1830-1920), prominent physician and member of Parliament of Canada, was born in Inverness-shire, Scotland, August 11, 1830, the son of James Grant, a graduate of Edinburgh, who emigrated to Canada in 1830, practiced in Glengarry, Ontario, for over forty years, and moved thence to Ottawa, and of Jane Ord Grant of Aberdeenshire; his grandfather, James Grant, an advocate of Corrinmony, was well-known as the "Father of the Scottish Bar." Sandy, as the lad was called, was tutored by the Rev. Thomas S. Russel of Edinburgh and entered Queen's College, Kingston. In 1849, he matriculated at McGill University as a private student of William Wright, professor of materia medica, and received his M. D. in 1854. He established practice in Ottawa. During 1864, he studied abroad, receiving the F. R. C. S. at the University of Edinburgh.

Dr. Grant was president of the College of Physicians and Surgeons of Ontario, Toronto, in 1868-69, and became chairman and consultant of the General Protestant Hospital, Ottawa, in 1884, and president and consultant of the Ottawa General Hospital in 1885. Among his contributions to the literature are: "Gymnastics of the Brain," 1880, "The Epidemic Zymotic Diseases of Animals and how they are communicated to Man," 1885, and "Rare Forms of Gout and Rheumatism," 1893. He was a member of many professional societies. Among them he was president of the Canadian Medical Association in 1874, of the Dominion Medical Association in 1883, and of the Royal Society of Canada in 1903, also he was honorary vice-president of the International Medical Congress of 1887. In 1887, Grant was made Knight Commander of the order of St. Michael and St. George by Queen Victoria. He became a Conservative in politics and was elected a member of Parliament in 1869 from the county of Russell and later, from Ottawa City. While a student at McGill, he lived with Angus McDonald, the chief factor of the Great Hudson Bay Company, from whom he acquired valuable knowledge of the northern country. This stimulated his activity to gain the admission of the northwest territories and British Columbia into the Dominion and led to his bill in 1873

to construct the Transcontinental Pacific Railroad. During later life, the study of geology attracted him in an effort to ascertain the relationship of diseases to the physical structure of the earth.

On January 22, 1856, he married Maria, the daughter of Edward Malloch, M. P. Of their twelve children, two followed medicine: Henry Y. Grant (McGill University, 1896), Niagara Falls, Ontario, and James Alexander C. Grant (Victoria University—now the University of Toronto, 1892,) Licentiate of the Royal College of Physicians. Edinburgh, 1894, Gravenhurst, Ontario.

Dr. Grant died at his home in Ottawa February 6, 1920.

GREEN, Horace (1802-1866), pioneer laryngologist, was born in Chittenden, Vt., December 24, 1802, of Revolutionary ancestry. Two uncles fell at Bunker Hill, one at Monmouth. The father of Horace fought through the entire war and brought up four sons. An older brother, Joel, of Rutland, Vt., practiced medicine in that town. Horace studied with him and took his M. D. at Castleton Medical College, at Middlebury, Vt. in 1824, then entered into partnership with his brother for a period of five years. Finally he went to Philadelphia and attended lectures in the medical department of the University of Pennsylvania. Returning to Rutland in 1831 he practiced until 1835, removing in that year to New York city. In 1838 Dr. Green spent several months in Europe, and on his return began investigations into the pathology and treatment of diseases of the throat. From 1840 to 1843 he was president and professor of medicine at Castleton Medical College, his alma mater. It was in the former year that he startled the medical profession with the statement that he was able to pass a sponge-tipped probang through the larynx, even to the trachea, and thus apply medication directly to the mucosa of those air passages. This excited an acrimonious discussion during which Green's veracity was impugned, a discussion which lasted some nineteen years and spread even to Europe. One must remember that this was in a time before any sort of anesthesia and before Garcia had demonstrated that it was possible to look into the larynx by means of a mirror placed in the throat and a light reflected from a head-mirror. Now bronchoscopy, is practiced with comparative ease by those who are expert in this department of medicine. There seems to be no doubt that Green did pass his probang into the larynx, first by accustoming that passage to instrumentation by repeated treatments and later, by the use of a curved metal tube through which the probang was carried.

His "Treatise on Diseases of the Air Passages" appeared in 1846. It was claimed by the skeptics that Green's probang entered the esophagus and not the larynx; his book was reviewed adversely and he was accused of plagiarism, Trousseau and Belloc having published a work on laryngeal phthisis in 1837 that was translated into English and brought out in Philadelphia in 1839. Green having been in Europe in 1838 was supposed to have helped himself to the ideas in that book. This he denied. His claims were investigated by a committee of the New York Academy of Medicine, which like many investigating committees today, failed to come to any conclusion. The controversy, however, gave an impetus to the study of diseases of the larynx in this country.

In the year 1850 Green helped to found the New York Medical College, being elected president of the board of trustees, president of the faculty and professor of the theory and practice of medicine. He retired in 1860 and was made professor emeritus. With the aid of several colleagues, he had established the "American Medical Monthly" in 1854, a short lived journal. Union College gave him an honorary A. M. and the University of Vermont an LL. D. and he held membership in the Phi Beta Kappa Society and in the Society of the Cincinnati.

In spite of the opposition Dr. Green encountered he built up a large practice, likewise a lucrative one, confining himself to the diagnosis and treatment of diseases of the throat and thus becoming the first specialist in this department in this country. In physical appearance he was described (in 1850) as "tall and rather spare; very black hair, now a little gray; a sharp black eye, rather a brunette, and gentle and kind in his address. His manners are quiet and dignified, those of a gentleman accustomed to good society." He died at his home in Sing Sing, now Ossining, N. Y. November 29, 1866, aged 63.

WALTER L. BURRAGE.

GREEN, Jacob (1790-1841), Philadelphia physician and scientist, was born in Philadelphia, July 26, 1790, son of Ashbel Green, D. D., LL. D., president of the College of New Jersey (Princeton College), and later a trustee of Jefferson Medical College in Phila-

delphia. Jacob from boyhood was interested in science, his first work being in botany. He made a large collection of plants, and when twenty-four years of age published "An Address on the Botany of the United States . . . to which is added a Catalogue of Plants Indigenous to the State of New York." Later he extended his studies to mineralogy, conchology, chemistry, electricity and galvanism, and zoology in general. In 1807 he was graduated A. B. from the University of Pennsylvania and soon after, in connection with a friend, wrote a "Treatise on Electricity" which gave him a reputation, although yet a boy. In 1812 he took another A. B. from Rutgers College; Rutgers and Princeton gave him an A. M. in 1815 and Jefferson an M. D. and LL. D. in 1835. He studied law and practiced in Philadelphia, but in 1818 he accepted a professorship in chemistry, experimental philosophy and natural history in Princeton. Four years later he resigned, moved to Philadelphia and was given the chair of chemistry when the Jefferson Medical College was established, holding this position until his death.

He wrote a "Text-book of Chemical Philosophy on the Basis of Dr. Turner's Elements of Chemistry," 616 pp., Philadelphia, 1829. He was a frequent contributor to "Silliman's Journal". Yale University gave Dr. Green an honorary A. M. in 1827.

Green died on February 1, 1841.

GREEN, John (1736-1799), patriotic physician of Worcester, Mass., was the son of the Rev. Thomas Green, Baptist elder and physician, one of the earliest settlers of Leicester (Greenville), Massachusetts, where John was born August 14, 1836. Instructed in medicine by his father, he came to Worcester and built his house on the eminence now known as Green Hill, which although relatively nearer town at that time, when many persons lived north of Lincoln Square and there were but seven houses on Main Street between that point and the Old South Church on the common, seems yet to have been at a distance that might well make prospective patients hesitate before storming the steeps in the dead of night or in bad weather. Patients came, however; medical students also from Worcester and surrounding towns; Green Lane became a county road and, although during the latter part of his life, Dr. Green's office was in a little wooden affair on the present site of the Five Cents Savings Bank, the doctor always lived in the Green Hill house, and there he died forty-two years later (October 29, 1799), aged sixty-three.

An earnest patriot, he was, in 1733, a member (and the only medical member) of the American Political Society, which was formed on account of the grievous burdens of the times and did much to bring about that change of public sentiment which expelled the adherent of the crown. He took a prominent part in all the Revolutionary proceedings, and in 1777 was sent as representative to the General Court. In 1778 and 1779 he was town treasurer, and in 1780 one of the selectmen, the only physician who ever held that office.

His first wife, Mary Osgood, died in 1761. His second wife, daughter of Gen. Timothy Ruggles, of Hardwick, survived him, dying in 1814 at the age of eighty-four. A son, Dr. Elijah Dix Green, born July 4, 1769, A. B. (Brown), 1793, was a physician in Charleston, South Carolina.

LEMUEL F. WOODWARD.

GREEN, John (1835-1913), ophthalmologist, of St. Louis, was born at Worcester, Massachusetts, April 2, 1835; son of James and Elizabeth Sweet Green. He was third in descent from Dr. John Green (q. v.) who was a member of the Massachusetts General Court in 1777; eighth in descent from Thomas Dudley, second Governor of Massachusetts Bay Colony; seventh in descent from Jonathan Sprague, who served in King Philip's War and fourth in descent from Judge Brigadier General Timothy Ruggles, President of the Stamp Congress. "He was a nephew, grandson and great-grandson of Dr. John Green, and represented the fifth generation of physicians bearing the name of Green, completing, with the other members of his family an unbroken medical service of 135 years in the County of Worcester, in which he was born."

Educated in the public schools of Worcester, he was A. B. Harvard 1855; S. B. 1856; A. M. 1859 and M. D. 1866 from the same University, also LL. D. Washington University and University of Missouri. A Fellow of the Massachusetts Medical Society by examination 1858, the years 1859 and 1860 were spent in professional studies in London, Paris, Berlin and Vienna. He began the practice of medicine in Boston in 1861, where he filled the position of physician and attending surgeon to the Boston Dispensary and of secretary to the Suffolk District Medical Society. He was a member of the Boston Society of Natural History and of its Council and a

member of the Boston Society for Medical Observation (later merged with the Boston Society for Medical Improvement). During the Civil War he served as acting assistant surgeon, U. S. A., at Frederick City, Maryland, after the Battle of Antietam and in the armies of the Tennessee after the Battle of Pittsburg Landing. In 1865 he again visited Europe for special study in ophthalmology in London, Paris and Utrecht and in 1866 he established himself in the practice of ophthalmology and otology in St. Louis, Missouri.

He was professor of ophthalmology and otology in the St. Louis College of Physicans and Surgeons, 1866-1871; lecturer on ophthalmology in St. Louis Medical College in 1871; surgeon to the St. Louis Eye and Ear Infirmary 1872; consulting ophthalmic surgeon to St. Louis City Hospital 1872; ophthalmic surgeon to St. Luke's Hospital 1874, professor of ophthalmology in St. Louis Medical College (Washington University) from 1886 to 1891 and emeritus professor until his death. In 1894 he became consulting surgeon to the Barnard Free Skin and Cancer Hospital. He held membership in the following: American Ophthalmological Society 1866; International Ophthalmological Congress 1872; delegate to the International Medical Congress 1876, and secretary in that Congress to the section on ophthalmology; member St. Louis Academy of Science; University Club; St. Louis Club; Harvard Club,—for several years president of the Harvard Club and of the Academy of Science; leading charter member and chairman of the St. Louis Ophthalmological Society until his death; charter member of the American Otological Society; member and founder of the Society of the Sons of the Revolution in the State of Missouri; member and founder of, and deputy governor of the Society of Colonial Wars in the State of Missouri. For many years he was charter member of the St. Louis Archeological Society and director of the Missouri Botanical Garden.

Dr. Greene was the originator of one of the best entropion operations, also of the second set of test type published in the United States; of especially flexible laden styles for lachrymal duct treatment; of a set of stereoscopic charts; of charts for the correction of astigmatism; of an operation for exenteration of the orbit; of thin flanged mountings for trial lenses by which cylinders and sphericals could be closely approximated; of a stable method of dissolving atropia in castor oil; of the two best geometrical ratios for the intervals in the construction of test type; and the first to grade test type singly in series.

In 1868 he married Harriet Louisa Jones, eldest daughter of George Washington and Caroline Partridge Jones of Templeton, Worcester County, Massachusetts, and they had two children, John and Elizabeth, the home life being noted for its genuine cordiality and hospitality.

He died at his residence in St. Louis, December 7, 1913, of pneumonia, following one week's illness.

By nature gentle, refined and retiring, possessing a clear logical mind, great learning and ability, an exceptionally cultured diction, and an absolute honesty of purpose, Dr. Green's presence commanded the respect of those who opposed him. Those who knew him best held him in the highest esteem. Endowed with a keen vein of humor, he was a genial companion and his wit was often employed to the discomfiture of those who through wealth or influential standing imagined they had some special claim on his time and his ability. Professionally always kind and considerate, he manifested little patience with those who in any way showed neglect in caring for themselves. As an operator he was exceptionally skilful, possessing a steady hand and a clear anatomical knowledge of the tissues with which he dealt. It was a maxim with him to accomplish the result with as little injury as possible. As a practitioner he was wise and careful in the management of those who trusted themselves to him, his care being the same regardless of financial considerations. The result was that his waiting rooms were always crowded with the afflicted. He was broad minded, liberal and honest in opinion to which he adhered with unwavering fidelity.

A. E. Ewing.

GREEN, John Orne (1799-1885). In the old parsonage at Lowell, Massachusetts, where his ancestors had lived since the early settlement of this country, John Orne Green first saw the light on May 14, 1799. His father, Aaron, was minister there and his mother, Eunice Orne, the daughter of John and Bridget Parker Orne, came from England probably in the fleet with Winthrop. As a child John attended the district school of his native town and in September, 1813, received his "admittatur" to Harvard and joined the class of 1817 with which he was graduated with honor. Immediately after he accepted

the position of teacher in a private Latin school in Castine, Maine, where he remained a year, and in September, 1818, he began to study medicine with Dr. Ephraim Buck of Malden and attended lectures in the Harvard Medical School, but in October, 1821, went to Boston to pass the remainder of his pupilage with Dr. Edward Reynolds (q. v.), at that time city physician and in charge of the alms house on Leverett Street where he found abundant opportunity for clinical study and practice, in February 1822, receiving his M. D. from Harvard. Learning that mills were about to be erected at East Chelmsford (now Lowell) and thinking the future estimated population of one thousand might afford a field for a young physician, he moved to that place in April, 1822, and began a practice which continued with scarcely any interruption for sixty-four years. He saw the field of his labors grow from a village of a few hundred to a city of more than seventy thousand and it may truly be said he grew with it. In 1868 he was senior physician to St. John's Hospital.

He married Jane, daughter of Dr. Calvin Thomas, of Tyngsboro, Massachusetts, who died June 28, 1828; then Minerva Bucklin, daughter of John Slater, of Smithfield, Rhode Island, who died December 31, 1834; and afterwards Jane, daughter of William McBurney, of Newtownards, Ireland. Two sons only survived birth and these were of the last marriage, John Orne, clinical professor of otology in Harvard University, (q. v.) and George Thomas.

He died at Lowell on December 23, 1885, after a short illness, probably from a malignant disease of the chest. Two excellent portraits by Lawson and an admirable bust are extant; one portrait in the Green School in Lowell, the other portrait and the bust in the possession of the writer, his son.

Among his writings were: "History of the Small-pox in Lowell," 1837; "The Factory System in its Hygienic Relations," 1846, being the Annual Discourse before the Massachusetts Medical Society.

JOHN ORNE GREEN.

GREEN, John Orne (1841-1922), Boston otologist, the son of Dr. John Orne (q. v.) and Jane McBurney Green, was born in Lowell, Mass., June 7, 1841. His father was senior physician to St. John's Hospital and a leading practitioner of Lowell; his mother was the daughter of William McBurney of Newtownards, Ireland, Dr. Green's third wife. Young John was educated in the public schools, at Phillips Exeter Academy and at Harvard College where he was graduated with the class of 1863. His M. D. was from the same university in 1866. After serving as house officer at the Massachusetts General Hospital and studying otology in Berlin, Vienna and Wurtzburg, he settled in Boston as an otologist, soon joining the American Otological Society and becoming University Lecturer in diseases of the ear at Harvard in the year 1869. In 1876 he was advanced to the position of instructor and two years later to be clinical professor of otology, a chair he filled until 1904. He held the clinical positions of visiting aural surgeon at the great Boston City Hospital, with its thousand patients, until 1901; aural surgeon to the Massachusetts Charitable Eye and Ear Infirmary until 1904; aural surgeon to the Massachusetts General Hospital until 1896. On retiring from active duty he was advisory and consulting surgeon to both the City and to the Eye and Ear Infirmary for the rest of his life. Green may be described as a man with a matchless clinical experience which was utilized to the utmost by him, a conscientious hard working consultant both to the staffs of these hospitals and to his private practice. In his early career Dr. Green translated Schwartze's "Pathological Anatomy of the Ear". In 1897 he published: "General Principles Governing Operations for Otitic Brain Disease"; in 1899, "Bacteriology of Mastoiditis", and "Abscess of the Cerebellum from Infection Through the Labyrinth". The next year he wrote the section on diseases of the ear for Warren and Gould's "International Text Book of Surgery", and a chapter on the same subject for DeSchweinitz and Randall's "American Text Book of Diseases of the Eye, Ear, Nose and Throat". In addition he made many contributions to periodical medical literature in his specialty. At one time he was president of the American Otological Society. A quiet self-effacing man he was known as a skilful, dextrous operator and a valuable consultant. He devoted the later years of his life, when he had given up practice, to reading and research and was often seen on the streets of Boston, of short stature and shy mien, with an armful of books on his way to or from a library. He was never married. The end came to him at his home in Boston at the age of eighty, on January 5, 1922.

WALTER L. BURRAGE.

GREEN, Samuel Abbott (1830-1918), army surgeon, historian, of Boston, was born in Groton, Massachusetts, March 16, 1830, the son of Dr. Joshua Green and Eliza Lawrence Green. He prepared for college at Lawrence Academy, Groton, and graduated from Harvard University in 1851. Having decided on a medical career, he became a pupil in the office of Dr. J. Mason Warren (q.v.), in 1851 and 1852, attended a course of lectures at Jefferson Medical College, Philadelphia, and then came back to Boston for study at the Harvard Medical School, from which he was graduated in 1854. Dr. Green then went to Paris to continue his medical study, and in 1854-55 returned to Boston to practice. It was on May 19, 1858, that he was commissioned surgeon of the Second Massachusetts Militia Regiment by Governor Banks. On the breaking out of the Civil War he entered the service as assistant surgeon of the First Massachusetts Regiment, and bore the distinction of being the first medical officer of the State to be mustered into the three years' service. He was surgeon of the Twenty-fourth Massachusetts Regiment from September 2, 1861, to November 2, 1864, and had charge of the hospital ship "Recruit" in General Burnside's expedition to North Carolina, and later of the hospital steamer "Cosmopolitan" on the coast of South Carolina. He was chief medical officer at Morris Island during the siege of Fort Wagner in the summer of 1863, and was post surgeon at St. Augustine, Fla., in October, 1863, and at Jacksonville in March, 1864. He was with the army at the capture of Bermuda Hundred in May, 1864, and was acting staff surgeon in Richmond for three months following the surrender of that city in April, 1865. In 1864 he was breveted lieutenant colonel for "gallant and distinguished services in the field." Dr. Green organized a cemetery on Roanoke Island, one of the first regular burial places for Union soldiers during the war. For six years after the war he held the position of superintendent of the Boston Dispensary. He was then appointed city physician, and during eleven years the performance of these duties endeared him to thousands by his tender devotion to the poor and the unfortunate. Dr. Green's interest in city affairs led to his election as mayor in 1882. He served one term only during which he had the satisfaction of turning out of office three police commissioners.

During his life Dr. Green held many positions of trust and was a member of numerous societies. He served as a member of the School Board in 1860-62 and in 1866-72, as trustee of the Boston Public Library in 1868-78, and as acting librarian in 1877. He was a fellow of the Massachusetts Medical Society, delivering the centennial address in 1881 on the History of Medicine in Massachusetts, a useful historical work of reference. Other positions he held were: Member of the Boston Society for Medical Odservation, of the Boston Society for the Medical Improvement, of the American Philosophical Society of Philadelphia, of the State Board of Health, Lunacy and Charity; president of the Channing Home for Consumptives, overseer of Harvard University; trustee, secretary and general agent of the Peabody Education Fund; a member of the Board of Commissioners to investigate the condition of the records, files, papers and documents in the State Department of Massachusetts, editor of the "American Journal of Numismatics," and president of the American Numismatic Society. In 1896 the honorary degree of LL. D. was conferred upon him by the University of Nashville, Tennessee.

In his later life most of his time was spent at the building of the Massachusetts Historical Society, where he was librarian from 1868 until his death. He was a large and portly man, suffered with chronic dyspepsia and his temper was uncertain; several years before his death he had the misfortune to break his thigh by a fall on the street so that the latter part of his life was passed in a wheel-chair. He died in Boston, December 5, 1918, at the age of 88, and was buried in his native town, Groton.

Among his writings are the following publications: "My Campaign in America," a journal kept by Count William de Deux-Ponts, 1780-81, translated from the French Ms., with an introduction and notes; "The Story of a Famous Book," an account of Dr. Benjamin Franklin,s autobiography; "School Histories and Some Errors in Them"; "Epitaphs from the Old Burying Ground in Groton"; "Early Records of Groton, 1662-1678"; "History of Medicine in Massachusetts"; "Groton During the Indian Wars"; "Groton During the Witchcraft Times"; "Boundary Lines of Old Groton"; "The Geography of Groton"; prepared for the use of the Appalachian Mountain Club; "Groton Historical Series," three volumes; "An Account of the Physicians and Dentists of Groton"; "The Career of Benjamin Franklin," a paper read before the American Philosophical Society, Philadelphia, May 25, 1893, on the 150th anni-

versary of its foundation, "An Address Before the Old Residents' Historical Association of Lowell," also an account of the library of the Massachusetts Historical Society, and a "List of the Early American Imprints" in the library of that society.

Dr. Green's reputation rests on his record as librarian of the Massachusetts Historical Society, where during his incumbency he saw the library grow from 8,000 volumes and 13,000 pamphlets to 50,000 volumes and 115,000 pamphlets; he was both a notable collector of books and a generous distributor of them. He was historian of his native town and wrote of the early history of Massachusetts. He was eccentric; lived for most of his life on Harrison Avenue, Boston, in a region long since deserted by fashion, where he won the love and confidence of his foreign-born neighbors. He was never married. Lindsay Swift, himself a librarian, who knew Dr. Greene well,—in his later years, it may be said—says of him: "The Doctor was indeed a charming companion, a good friend, a marvellous teller of stories and choice recollections. Life of a sort seems to have stolen in on him in the close retirement of his alcoves and cabinets. But of that wider life, which implies building more wisely on the structure of the past, he had not a glimmering. He was born into rather agreeable conditions, and they suited his temperament and his mentality. Some go too fast in the chariot of time; others are willing to jog along easily, advancing a little each day; but the Doctor was willing to stay exactly where he was, never idle, but never pressing forward. Verily it is hard not to say of him as Isaiah said of the Egyptians, "their strength is to sit still."

WALTER L. BURRAGE.

GREEN, Thomas Fitzgerald (1804-1879), pioneer alienist of the South, was born in Beaufort, South Carolina, December 25, 1804. He died in Midway, Georgia, February 13, 1879, of apoplexy, while superintendent of the Georgia Lunatic Asylum. His parents were of the best class of Irish people. His father, a warm-hearted, highly-educated, enthusiastic young Irish patriot, joining in the ill-fated rebellion of 1798, was forced to flee the country; his wife, who was a Fitzgerald of noble blood, came with him to America. He had no fortune save his talents; no friends save those whom he won by his virtues. He came to Beaufort, South Carolina, as a teacher. Here his eldest son, Thomas Fitzgerald, was born. He removed to Savannah, Georgia, later, where he taught in a high school, and then to Athens, where he was elected a professor in Georgia University. He finally removed to Milledgeville, then the capital of Georgia, and here Thomas S. Green was educated. The latter was past his majority when he studied medicine and began to practice in Milledgeville, and was prospering as a physician when the current of his life was changed. A northern philanthropist interested in the welfare of the insane visited Milledgeville to suggest and advocate the establishment of an asylum for them. He called a meeting of a few gentlemen of broad views and generous hearts, and laid his plans before them. Green became much interested in the project and gave it hearty support. He was connected with the successful effort to secure an appropriation from the Legislature for its establishment. In 1846 he succeeded Dr. Cooper as superintendent of the asylum and continued in office for 33 years. The hospital was small when he assumed charge of it, but it grew to be one of the largest in the Southern States before his death.

In person he was short, stout, of broad and humane countenance; in his youth, handsome; and in his old age, venerable. He was full of life, cheerful, merry, courteous, considerate. He was a sincere Christian, in his home life, a model; one of the most benevolent and unselfish of men. He was devoted to the institution, and his success in the management of it was great. He was a delightful companion, a true and sympathizing friend, a man to be loved and honored.

GREEN, Traill (1813-1897), professor of chemistry, botany and astronomy, in Lafayette College, was born at Easton, Pennsylvania on May 25, 1813, the son of Benjamin and Elizabeth Traill Green. From boyhood he was devoted to nature study and afterwards, thinking medicine would afford him special advantages, he studied under Dr. J. K. Mitchell (q. v.) and graduated M. D. from the University of Pennsylvania in 1835. Then, returning to Easton, he began practice there. But chemistry, his favorite study, was not given up and in his consulting-room at night he would give lectures on this and allied subjects to a class of young people. To the botany class came Harriet Moore of Morristown, New Jersey, who in 1844 married her professor and shared his scientific labors. In 1837 he was made professor of chemistry at Lafayette College and in 1865 professor of natural

science. He received the A. M. degree from Rutgers in 1841 and was later called to the chair of natural sciences at Marshall College, Pennsylvania, and in 1866 Washington and Jefferson College conferred upon him the LL. D.

Noticing with regret the incomplete training of many medical students he, with others, launched the American Academy of Medicine and was its first president. But Lafayette College was his special interest. The observatory was his gift and to it he bequeathed his books and minerals. Every good cause had an advocate in him. By voice and pen, money and enthusiasm he helped forward medical reform, temperance, the higher education of women. A full list of his writings and a portrait may be seen in The Proceedings of the Medical Society of Northampton County, June 18, 1897, the chief one being "Zoological and Floral Distribution of the United States," 1861.

He died in his birthplace, Easton, on the twenty-ninth of April, 1897.

GREENE, Duff Warren (1851-1913), opthalmologist of Dayton, Ohio, was born at Fairfield, Greene County, Ohio, May 17, 1851. The son of Dr. John W. Greene, a general practitioner of that place, he attended the Ohio Wesleyan University, at Delaware, Ohio, for two or three years, but did not graduate. His medical degree was received at the Ohio Medical College, Cincinnati, in 1876. For a time he practiced general medicine at Fairfield in partnership with his father. Then pursuing the study of ophthalmology for several months in New York City, he removed from Fairfield to Dayton, where he practiced as an ophthalmologist, until the very day, almost hour, of his death—more than thirty-one years later.

In 1888 he studied ophthalmology in Vienna, for six months. In 1909 he went to Jalandhar, India, where he made a special study of the intracapsular method of cataract extraction as practiced by Colonel Smith. In 1912 he proceeded again to Europe, where he studied the eye in various hospitals in all the medical centres. In 1884 he was appointed oculist and aurist to the National Military Home, Ohio—a position which he held for twenty-nine years, until his death. He belonged to numerous medical societies, general and special, and in 1912 was made a member of the Oxford Ophthalmological Congress. For the last ten years of his life he was associated in practice with Dr. Horace Bonner. Dr. Greene was a voluminous and excellent contributor to ophthalmic literature. Aside from numerous journal articles, he wrote both of the valuable chapters on the intracapsular operation for cataract, in the second volume of C. A. Wood's System of Ophthalmic Operations, and in the American Encyclopedia of Ophthalmology.

Dr. Greene was a man of great enthusiasm and almost limitless capacity for work, nevertheless he was not what is termed "a slave to his profession." He went on long vacations in Summer, in the Northern portions of the United States and Canada, hunting and fishing, and numerous trophies of his outdoor skill adorned his home. He was for a time, a member of the Ohio State Fish and Game Commission. He was a member of Mystic Lodge A. F. and A. M.; Unity Chapter, R. A. M.; the Reed Commandery of the Knights Templars and of the Antioch Temple of Shriners. He was long a member of the Grace M. E. Church and shortly before his death was elected a member of the official board.

In 1887 Dr. Greene married Miss Belle Norton, of Delaware, Ohio. Of the union were born two children, who died in infancy.

Dr. Greene died on August 16, 1913, having attended his office and performed an important surgical operation on the very day of his death, which was caused by heart disease.

THOMAS HALL SHASTID.

GREENE, William Houston (1853-1918), physician, chemist and educator, was born in Columbia, Pennsylvania, December 30, 1853, the son of Stephen Greene and Martha Mifflin. His parents moved to Philadelphia, where he received his education, and after completing the grammar school course entered the Boys' Central High School, from which he was graduated in 1870. He matriculated in Jefferson Medical College and a decided scientific bent led him to specialize in chemistry. After receiving the degree of Doctor of Medicine in 1873 from Jefferson he became assistant to B. Howard Rand (q. v.), the professor of chemistry. Two years later he was advanced to the position of demonstrator. In 1877 he went to Paris where he engaged in research work under Adolph Wurtz. Returning to Philadelphia in 1879 he was appointed demonstrator in the University of Pennsylvania (1879-1880) and a year later was elected professor of chemistry in the Central High School. He resigned the chair in 1892 to associate himself with his father in the printing

business. It was during the twelve years that he taught in the high school that Dr. Greene achieved his greatest successes as a chemist and educator, originating and developing methods of instruction which proved most successful especially as regards lecture demonstration and laboratory practice. His original researches include the "Syntheses of Organic Compounds by the aid of Metallic Chlorides," a "New Process for the Manufacture of Manganese on the Commercial Scale" (with Dr. William H. Wahl), and the extended investigation on "Lapachic Acid and Its Derivatives" (with Dr. Samuel C. Hooker). He prepared a large number of organic compounds now in the possession of Central High School. His literary productions include an excellent translation of Wurtz's "Elementary Lessons in Modern Chemistry," and his own text-book, "Lessons in Chemistry," both of which have passed through many editions, the more recent being edited by H. F. Keller. Dr. Greene was well known as a consulting chemist and his experience extended over a wide range of subjects in Medical and Industrial Chemistry.

He was a member of the American Philosophical Society; the American Association for the Advancement of Science; Société Chimique of Paris; Fellow of the Chemical Society of London. In recent years he played an active part in the musical and the art life of Philadelphia.

He was married twice, first at Paris, France, on May 28, 1881, to Sarah Menager, who died without leaving issue, and again at Philadelphia on April 7, 1902, to Sara Cavanaugh, and of this marriage one child, Stephen, was born. The widow and the son lived in Philadelphia. Dr. Greene died from heart disease at his summer home, Wenonah, New Jersey, August 8, 1918. He made many notable bequests to scientific institutions and charities. A memoral tablet and his portrait were presented to the Central High School.

HARRY F. KELLER.

GREENE, William Warren (1831-1881), Maine surgeon, was born in South Waterford, Maine, March 1, 1831, his father, Jacob Holt Greene being an intellectual, independent, inventive and, above all, a very just man. He was fierce in his antislavery defiance at a time when it needed a brave man to express any such opinions at all. From his father young Greene must have inherited most of the qualities which he exhibited during his medical career. His mother, Sarah Walker Frye, was an excellent housewife and a genial woman. Young William had the ordinary school education of those days, but, added to this, the mental guidance of his relative, the Rev. William Warren. At sixteen he began to teach school, then took up medicine with Dr. Seth Chellis Hunkins, and later attended lectures at the Berkshire Medical Institution and at Ann Arbor, Michigan, where he obtained his M. D. in 1855. A short time after, he was offered a demonstratorship of anatomy at Ann Arbor, which he regretfully declined, for he was then doing well in his practice of medicine in Gray, Maine. For a while during the Civil War he was a surgeon in the army. His former teachers at the Berkshire Medical Institution had kept track of this promising young man, and a vacancy occurring in the chair of theory and practice of medicine, he was offered it and accepted, beginning his lectures in November, 1862. This position he held until 1868, also that of professor of surgery in the Medical School of Maine, giving his first series of clinical lectures in that branch of medicine in 1866. From that time until 1880 he lectured constantly. Simultaneously he was professor of surgery in the University of Michigan, but resigned after one term. It should have been said that when he accepted the professorship at Pittsfield he settled there to practice, but abandoned that town for Portland, Maine, in 1868, remaining there thirteen years.

He dominated surgery in Maine for years by his boldness and audacity at a time when surgery was extremely conservative.

In 1872 he was professor of surgery in the Long Island College Hospital Medical School, in all the positions occupied winning ample renown as a clear, forcible lecturer, and a clinical teacher of extraordinary proficiency. In 1880 he was president of the Maine Medical Association and in 1873 he gave a most attractive oration on the "Scientific Spirit." In 1867 he printed four surgical papers in the "Boston Medical and Surgical Journal," and one on a Cesarean operation in 1868. In 1867 he reported in the "Medical Record" the successful removal of a large bronchocele.

He operated with grace, was rapid, yet safe, his bearing equal to his dexterity, and at the age of thirty-four he removed successfully a large bronchocele declared by the most noted surgeons to be inoperable, and he was equally successful in goitre operations. Greene drained his ovariotomy cases by bringing the ligatures, by which the stumps of the tumors had been tied, through an opening in the cul-de-sac into the vagina. His remark-

able case of resuscitation of a woman declared to be dead and already coffined, by the ingenious use of the hypodermic injection of phosphoric acid, so that the patient survived him for thirty years, will long remain apparently miraculous in the annals of medicine in Maine.

Dr. Greene was twice married; in 1855 to Lizzie Carleton, of Waterville, and at her death in 1861 to Elizabeth Lawrence, of Pownal, who died in 1876. Two children survived him; one, who married Dr. Addison Thayer, of Portland, the other, Dr. Charles Lyman Greene, of St. Paul, Minnesota, who inherited much of his father's talent.

In July, 1881, William Warren Greene went to England to attend the International Medical Congress, and while returning home died from uremic convulsions and was buried at sea, September 10, 1881.

JAMES A. SPALDING.

GREENLEAF, Charles Ravenscroft (1838-1911), of the Medical Corps, U. S. Army, was born January 1, 1838, at Carlisle, Pennsylvania, and died September 2, 1911, at San José, California. He was the son of Patrick Henry and Margaret Johnson Greenleaf, and a grandson of Professor Simon Greenleaf, of Harvard University. He received his early education in Boston and Cincinnati, and his medical degree from the Ohio State Medical College in 1860. On the outbreak of the Civil War he became assistant surgeon of the 5th Ohio Infantry, and was the first medical officer to receive a commission from that State. On August 5, 1861, he was appointed an assistant surgeon in the United States Army. During the Civil War he early was appointed assistant to Medical Director Charles Tripler, of the Army of the Potomac, and served in this capacity during the Peninsular Campaign, organizing and later taking charge, May, 1862, of a hospital at Yorktown for 2,000 sick. The following year he prepared plans for the Mower Hospital at Philadelphia, and afterwards became its executive officer. The last two years of the war he served in the office of the medical director at Harrisburg and Baltimore, his duties being to arrange for the care of the sick and wounded from the battlefields of Virginia.

Following the Civil War he served for 20 years in the South and West and in 1887 was transferred to Washington as assistant to the Surgeon General. He was the originator of the personal identification system long used in the Army, and was conspicuous for his close identity with the general advancement of the Medical Department. Col. Greenleaf was even more conspicuous during the Spanish-American War and the Philippine Insurrection. On May 3, 1898, he was appointed chief surgeon of all the troops in the field; organized the medical service of the Porto-Rican Campaign; he was in charge of the large Hospital Camp at Montauk Point; and later, December 2, 1898, was appointed Medical Inspector of the Army, in which position he rendered splendid service. In December, 1899, he was appointed Chief Surgeon of the Army in the Philippines, and here, notwithstanding a lack of sympathy on the part of higher authority, he was able to properly carry on, in spite of the great difficulties of personnel and supplies, the establishment of 650 military posts in a country, for the greater part, hostile to American occupation.

General Greenleaf was retired, with the rank of Colonel, January 1, 1902, at 64 years of age, and after more than 40 years service. He was later promoted to the grade of Brigadier General, retired, as provided for officers who served during the civil war, by the Act of Congress of 1904. He was a man of much culture and of a delightful manner, both of which combined to make him an excellent administrative officer.

He left a wife and three children, one son a member of the Medical Corps of the Army.

DOUGLAS F. DUVAL.

GREENOUGH, Francis Boott (1837-1904), Boston syphilologist, was born in that city, December 24, 1837. He was the son of Henry and Frances Boott Greenough, his mother being a niece of Kirk Boott, one of the first cotton manufacturers of Lowell, Massachusetts. Graduating from Harvard College in 1859 and from Harvard Medical School in 1866, the University gave him her A. M. in 1870. Previous to graduating in medicine he spent a year in the Lawrence Scientific School connected with Harvard, and went abroad for two years studying architecture and medicine at Pisa and Florence. Greenough was acting assistant surgeon in the United States Army during the summer and autumn of 1864 and returning to Boston was house physician in the Massachusetts General Hospital. In 1865 and 1866 after graduating from the medical school he spent a year in Vienna, and in October, 1867, began to practice medicine in Boston. He gave his greatest attention to skin diseases and syphilis from the first and in the later years of his practice was regard-

ed as an authority on genito-urinary diseases and syphilis. He held the position of clinical instructor in syphilis in Harvard Medical School from 1875 to 1895, while he was in charge of the department of skin and venereal diseases of the Boston Dispensary from 1873 to 1900. At one time he was surgeon to the Carney Hospital (1868-1876), also to St. Joseph's Home, and a physician to the Children's Hospital. He was a member of the Massachusetts Medical Society, the Boston Society for Medical Improvement, and other societies. His tall, commanding presence was a familiar figure on the streets of Boston for thirty years.

Dr. Greenough never married and retired from active practice several years before his death, which occurred in Brookline, Massachusetts, October 16, 1904.

Among his writings are: "Treatment of Permanent Urethral Stricture," "Boston Medical and Surgical Journal, vol. lxxvii, 164; "Pediculi Vestamentorum," "ibid," vol. lxxvii, 221; "Gonorrheal Rheumatism," "ibid.," vol. lxxvii, 411.

WALTER L. BURRAGE.

GREGORY, Elisha Hall (1824-1906), of St. Louis, was born near Russellville, Kentucky, September 10, 1824, and died of heart disease at Ormond, Florida, February 11, 1906. He was president of the St. Louis Medical Society in 1863 and of the American Medical Association in 1886 and was a medical educator and surgeon of note. Trained in the common schools of Hopkinsville, Kentucky, and Booneville, Missouri, he studied medicine with Dr. F. W. G. Thomas, practiced several years, entered the medical department of St. Louis University, and graduated in 1849. After two more years of practice he became demonstrator of anatomy to his alma mater and in 1852 professor of anatomy, holding the position until 1867 when he became professor of surgery. When the medical department of Washington University was created he had a large share in bringing about the merger of the Missouri Medical College and the St. Louis Medical College that went to form the new medical department. As a teacher of both anatomy and surgery he was preeminent, in the opinion of his pupils. He was at one time president of the Missouri state board of health and was president of the state medical society. For fifty years he was surgeon in chief to the Sisters, and Mullanphy hospitals, there controlling a large amount of surgical material. His personality endeared him to all. A manly man, he knew and maintained his rights while at the same time regardful of the rights of others.

GRIFFIN, Corbin (17—-1813), pioneer Virginia physician, was the son of Leroy Griffin of Lancaster County, Virginia, and his wife, Mary, daughter of Joseph Bertrand, a French refugee. He was born in Lancaster, the year of his birth not being known. He received a good classical education, and was graduated from the University of Edinburgh. A copy of his thesis, which was published, is in the Toner collection of biographies in the Surgeon-General's Library. Afterwards he settled and practiced in Yorktown, Virginia. In the Revolution, or at least in the first years of the war, he served as state surgeon, being first in the navy and later in the hospital at Yorktown. In May, 1779, he was a member of the Virginia Senate, having been elected for three years. After the war he continued to practice at Yorktown until his death.

Dr. Griffin married Elizabeth Berkeley and had one son who married his cousin, Mary, daughter of the Hon. Cyrus Griffin, last president of the Continental Congress.

Dr. Griffin died September 1, 1813.

ROBERT M. SLAUGHTER.

GRIFFIN, Ezra Leonard (1821-1892), promoter of medical education in Wisconsin, the son of Eben and Susannah Lewis Griffin, was born in Hillsboro, New Hampshire, September 21, 1821, his mother a Bostonian, his father a native of Gloucester, Mass. He received his academic education at Kimball Union Academy and entered Dartmouth College in 1844. While there his health failed and forced him to abandon his preparation for the ministry, which had been his choice. He left Dartmouth at the close of his sophomore year and entered the Berkshire Medical Institution, where he received an M. D. in 1849. In the same year Dr. Griffin married Abby M., daughter of the Rev. Samuel Mason, of Newburyport, Massachusetts, and began professional life in Nashua, New Hampshire, and after moving to Derry, in the same state, removed, in the autumn of 1855, to Fond du Lac, Wisconsin.

Griffin was prominently identified with the medical history of Wisconsin for thirty years, being warmly interested in all that related to the practice of medicine, an active supporter of state and local medical societies, deeply interested in the subject of vaccination and

was one of the first to establish in the northwest a depot for the propagation of animal vaccine.

He was a clear and forcible writer and a prime mover in the organization of the State Board of Health, of which he was for many years an honored president. He wrote memoirs of Dr. M. C. Darling, Dr. H. M. Lilly and Dr. Moses Barrett and was the author of a report on "Vaccination" and a paper on "Small-pox."

He died in January, 1892.

CHARLES S. SHELDON.

GRIFFITH, Robert Eglesfeld (1798-1850), physician, botanist, educator, was born in Philadelphia, February 13, 1798. His father was Robert Eglesfeld Griffith, and his mother was Maria Thong, daughter of John Patterson and Catharine Livingston, his wife. In 1820 he took his M. D. from the University of Pennsylvania with a thesis on the "Stomach and Its Functions." He practiced in Philadelphia and from 1833-1836 was physician to the Board of Health. In 1835 he was elected professor of materia medica in the Philadelphia College of Pharmacy; he gave but one course, leaving the next year to become professor of materia medica, therapeutics, hygiene and medical jurisprudence in the University of Maryland, remaining there until 1838 when he was appointed professor of practice, obstetrics and medical jurisprudence at the University of Virginia. In 1839 he resigned because of ill-health and returned to Philadelphia. He was a member of the Academy of Natural Sciences, vice-president in 1849, succeeding Samuel George Morton (q. v)., who became president; of the Franklin Institute, and the American Philosophical Society. He won four prizes from the "United Bowmen," an old association of Philadelphia.

Griffith was the author of "Chemistry of the Four Seasons" (1846); "Medical Botany" (1847); "Universal Formulary" (1850), and editor of "Ballard and Gerrod's Elements of Materia Medica and Therapeutics" (1846); Christison's "Dispensatory or Commentary on the Pharmacopoeias of Great Britain" (1848); Taylor's "Medical Jurisprudence" (1845). He was editor of the "Journal of the Philadelphia College of Pharmacy" 1831-1835; "American Journal of Pharmacy" 1835-1836.

Dr. Griffith became noted as a botanist and conchologist and gave a large collection of shells to the Philadelphia Academy of Natural Sciences, when he was vice-president in 1849-50. At the time of his death he had begun an extensive work on conchology, and had planned one on "The Botany of the Bible," which he was urged to write by Prof. Asa Gray (q. v.) and other noted botanists.

In 1829 he married Mary, daughter of Manuel Eyre, of Philadelphia, and had three children; Robert Eglesfeld, Anne Louisa, and Manuel Eyre. A nephew, Robert Eglesfeld Griffith, graduated in medicine at the University of Pennsylvania in 1855.

Griffith died in Philadelphia, June 26, 1850.

GRIFFITTS, Samuel Powel (1759-1826), founder of the Philadelphia Dispensary, was born in Philadelphia, July 21, 1759, the son of William and Abigail Powel Griffits. His father died when he was an infant and he was brought up by his mother in an atmosphere of religion which made an indelible impression upon his youthful mind. Every morning he read from the New Testament in Greek or Latin and he later joined the Society of Friends, becoming one of their most valued and influential members. After graduating from his mother's tuition he went to the College of Philadelphia, where he became an excellent classical scholar, acquiring unusual facility in speaking Latin and a high degree of proficiency in French. After college he began the study of medicine, under Dr. Adam Kuhn (q. v.) (a well-known pupil of Linnaeus), then professor to a class of materia medica and botany in Philadelphia, and worked with him until 1781, when he received an M. D. from the University of Pennsylvania. Then he traveled abroad for three years, in order to complete his medical education. He took a course at Montpellier, made a tour of Southern France, studied for several months in London and spent some time in Edinburgh, where he studied with the celebrated Dr. Cullen. In 1784 he returned to Philadelphia and practiced medicine until his death. Dr. Griffitts was interested in all public matters pertaining to his profession as well as in his private practice. He was the first person to actively engage in the establishment of a dispensary and it was largely owing to his efforts that the Pennsylvania Dispensary was founded in 1786, he serving as manager and attending physician and for forty years a daily visitor. He was a member of the Pennsylvania Abolition Society, the Society for Alleviating the Miseries of Public Prisons, an active member of the Humane Society, a member of the American Philo-

sophical Society and in 1787 became one of the original members of the College of Physicians, a body which in 1817 made him its vice-president. He was a member of the committee that made a pharmacopoeia for the College. In 1795 he issued a revised edition of "Buchan's Domestic Medicine," a book which had a wide popularity.

The University of Pennsylvania made him professor of materia medica in 1792, a position which he held for four years and filled with distinction. His last public effort of any importance was furnishing assistance in the making of the United States Pharmacopoeia, in which he was much interested. He read a paper on this subject June 1, 1820, before the Pharmacopoeial Convention. In 1787 he married Mary Fishbourne, daughter of William Fishbourne, a merchant of Philadelphia. He died after a brief illness from pneumonia, May 12, 1826.

GRINNELL, Ashbell Parmalee (1845-1907), professor of the theory and practice of medicine in the medical department of the University of Vermont, was born at Massena, New York, December 26, 1845, the son of Josiah Hemen Grinnell, a successful country practitioner of St. Lawrence County, New York. His early years were spent in study and teaching in the district schools of his own county and his medical degree was taken at the Bellevue Hospital Medical College in 1869. For a time he practiced at Ogdensburg, New York. In 1870, however, he removed to Burlington, Vermont. He was professor of physiology and of the theory and practice of medicine at the Medical Department of the University of Vermont, situated at Burlington. Of the same institution he was dean from 1874 to 1877, and again from 1884 to 1898, and professor of practice in the Long Island College Hospital from 1885 till 1887. In November, 1904, he removed from Burlington to New York City. There he engaged in medico-legal practice until his death, and was remarkably successful.

He was of medium height, of rather heavy build, his hair red, his eyes large and deep blue. His face was always kindly, yet ever changing its expression. A quick and active man, full of nervous force and magnetism; a hard student and exceedingly fond of his profession. He loved all children and, though extremely busy, he somehow managed to spare the time in which to talk with and to play with them. He was also extremely friendly and helpful to his students.

He married, in 1873, Miss Elizabeth D. Guest, of Ogdensburg, New York, and had one son, and two daughters.

Dr. Grinnell died in New York City, April 8, 1907, of malignant endocarditis, following a long attack of grippe.

GRISCOM, John Haskins (1809-1874), early sanitarian of New York City and one of the first to fight determinedly the battle of civic righteousness over the health of the city against politicians, of low type, hired voters, and moneyed influence. He was born in New York City, August 14, 1809, the son of John Griscom (1774-1852) of the Society of Friends, the distinguished educator who occupied the chair of chemistry in Rutgers Medical College from its establishment in 1812 until 1828. He was the leading teacher of chemistry in New York, contributed abstracts of chemical papers from the foreign journals to Silliman's "Journal of Science," and wrote "A Year in Europe" (1823) and "Monitorial Instruction" (1825). John Haskins was educated in the Collegiate School of Friends and began to study medicine under John D. Godman (q. v.) and Valentine Mott (q. v.). After attending two courses of lectures at Rutgers Medical College, the Legislature decreed that the college could issue no diplomas unless its faculty conform to certain political statutory regulations and it virtually was closed. He then migrated to the University of Pennsylvania and graduated in 1832, with a thesis on "Apocynum Cannabinum" much used in cases of dropsy for its dieuretic and hydragogue cathartic action. He was appointed assistant physician to the New York Dispensary in 1833 and physician in 1834. After waiting three years for patients, he purchased the good-will of a retiring physician and thereby acquired practice and remuneration.

From 1836 to 1838, Dr. Griscom was professor of chemistry in the College of Pharmacy, New York. In 1842, he was made city inspector and was the head of the Health Department, but politics displaced him after one year. However, in reversal of the previous custom of issuing blank burial permits, signed, without the physician's certificate, to be dispensed at the discretion of sextons, he succeeded in passing an ordinance over the veto of the mayor, forbidding the removal of dead from the city without permission of the City Inspector; this law was rigidly enforced and thus mortality statistics became more reliable. When his report summarizing

those sanitary principles which should govern the control of the public was returned to him by the Board of Aldermen, he made it the occasion of a public address, which was immediately printed under the title, "The Sanitary Condition of the Laboring Population of New York, with Suggestions for its Improvement". For many years, he issued an annual pamphlet, detailing the difficulties encountered by sanitarians and suggesting remedies, but, although many sympathized, political influence remained steadily opposed. As successor to John B. Beck (q. v.), Dr. Griscom was physician to the New York Hospital from 1843 until within a few years of his death. During the three years he was general agent of the Commissioners of Emigration, 1848-51, he supervised over 20,000 cases of ship fever often in its worst forms, 7,000 coming under his personal inspection; finally he himself succumbed to the disease and was prostrated for nearly three months. Upon recovery the experiences of a trip to Europe were published in a South Carolina newspaper under the title "The Surgeon's Log." On his return, he prepared a report exposing the hardships of immigrants on shipboard and suggesting prevention and relief; many improvements in the law resulted. He was appointed president of the third National Quarantine Convention in 1859, and was chairman of the committee on public health and legal medicine and an active member of the New York Sanitary Association. In 1865, troubled by a double carbuncle at the nape of the neck, he underwent two operations: the first under nitrous oxide anesthesia was far more agreeable than the subsequent one under ether. Griscom also was identified with the management of the New York Prison Association and the Juvenile Reformatory, and many of the state laws regulating the physical welfare of prisoners were amended through his zeal. He also maintained an active interest in the Home for the Friendless, the New York Sanitary Association, the Social Science Association, and the New York Association for the Advancement of Science and Art of which he was a founder and first president. In this great era of interest in hygiene he invented and patented a method of ventilating houses.

Among his medical, hygienic, and scientific contributions are, "Animal Mechanism and Physiology," 1840; "Uses and Abuses of Air for the Ventilation of Buildings," 1850; "A History of the Visitations of Yellow Fever in New York," 1858; "Memoir of John Griscom, with an Account of the New York High School"; "Society for the Prevention of Pauperism, the House of Refuge, and other Institutions," 1859; "Prison Hygiene," 1868; "The Use of Tobacco and Evils resulting from it," 1868; and "Physical Indications of Longevity," 1869. In 1885 he married a daughter of Rembrant Peale, the artist. They had eight children.

Dr. Griscom died on April 28, 1874: a steadfast member of the Society of Friends, whose tenets he judged were most in accordance with Scriptural teachings.

HOWARD A. KELLY.

GRISSOM, Eugene (1831-1902), North Carolina alienist and medico-legal expert, was a descendant of Oliver Wolcott, one of the signers of the Declaration of Independence. He was born in Granville County, North Carolina, May 8, 1831. His mother, a person of great vitality, lived to a most extraordinary age and bore seventeen children, of whom Eugene was the sixteenth. In his youth Eugene studied law; later he taught in the public schools, and at the age of twenty-two was elected clerk of the superior court by a large majority. In spite, however, of his flattering prospects in the direction of law, he soon began to turn his attention to natural science and finally to medicine, taking his medical degree from the University of Pennsylvania in 1858; then settling in his native county, he soon had an extensive practice. Dr. Grissom took a fighting part in the war of the Rebellion. In 1861 he was elected captain of Company D, thirtieth North Carolina Troops. In the "Seven Days Fight" around Richmond he was terribly wounded in the right shoulder. Before he left the hospital, however, he was elected a member of the House of Commons of the State of North Carolina. In 1864 he was re-elected. During the time of his service in this capacity he was appointed by Gov. Vance assistant surgeon-general of North Carolina. In 1868 he became superintendent of the Raleigh Insane Asylum—a position held till 1889. He was a member of numerous medical and other learned societies and was once vice-president of the Medico-Legal Society of New York. The degree of LL. D. was given him by Rutherford College in 1877.

He wrote much and well on insanity and other medico-legal subjects; perhaps among the most important of his papers is "Mechanical Protection from the Violent Insane" and "True and False Experts"—a controversy

with William A. Hammond (q. v.), surgeon-general, United States Army.

Dr. Grissom married, January, 1866, Maria Anna Bryan, of Brunswick, North Carolina, and had two sons and three daughters.

Dr. Grissom was a heavy man, of fine physique, tall and well-proportioned, extremely strong and active. His complexion was dark; his hair, jet black; his eyes, steel-gray, clear, and penetrating. His manner was quick and animated, except when deciding important questions. Then he became extremely slow, thoughtful, and methodical. He was a noted entertainer and converser, and made many friends. He was a man of varied interests, and widely read in history, philosophy, poetry, fiction, and in general as well as medical science and an incessant student of the Bible. He was one of those who "toil terribly," and mental breakdown was the inevitable result. The wonder was that this came to him so late. Not long before the close of his life he presented, at times, certain symptoms of paresis. In this enfeebled mental condition he betook himself to cocaine, morphine, and various other drugs. On a Sunday morning (July 27, 1902) when the church-bells, which he had always very much loved to hear, were ringing, he died as the result of his own act. At the time he was sitting on the front porch at the house of his namesake son, in Washington, District of Columbia. Before the unsuspecting relatives could intervene the doctor had drawn a pistol, placed it to his head a little above the right ear, and fired. He was hurried to the Casualty Hospital, but died inside of an hour.

THOMAS HALL SHASTID.

GROSS, Samuel David (1805-1884). In the Woodlands Cemetery, Philadelphia, is an urn containing the ashes of Samuel D. Gross with this inscription in part: "A master in surgery. He filled chairs in four medical colleges, in as many states of the union, and added lustre to them all. He recast surgical science as taught in North America, formulated anew its principles, enlarged its domain, added to its art, and imparted fresh impetus to its study. He composed many books and among them "A System of Surgery," which is read in different tongues, wherever the healing art is practiced."

Samuel David Gross was born near Easton, Pennsylvania, July 8, 1805, and died in Philadelphia, May 6, 1884, having nearly completed his seventy-ninth year. He was the son of Philip and Johanna Juliana Gross, being the fifth of six children—two girls and four boys. His early years under the wise training of a good mother, to whose memory he rightly pays a just tribute, were spent amid the rustic labors and healthful pleasures of a Pennsylvania farm. This gave him a strong and vigorous body, without which he never could have performed a tithe of the labor which pre-eminently distinguished his long life. Before he was six years old he determined to be a surgeon, and early in his professional studies to be a teacher. Yet when he was fifteen he knew scarcely any English. Brought up among the sturdy, honest, laborious Pennsylvania Dutch, he could speak that curious English-German. But his English, of which he became so fluent a master, and even pure German, which he began to study at the same time, were learned almost as foreign tongues and as a result of his appreciation at that early age of his need for a better and wider education.

At seventeen he began the study of medicine as the private pupil of a country practitioner, but after learning some osteology with the aid of that tuppenny little compend, Fyfe's "Anatomy" and a skeleton, he gave up in despair, for again he found his intellectual tools unequal to his work. The little Latin he had was insufficient, and to understand the technicalities of medicine Greek was a "sine qua non." "This," he says, "was the turning-point of my life . . . . I had made a great discovery—a knowledge of my ignorance, and with it came a solemn determination to remedy it." Accordingly he stopped at once in his medical career and went to an academy at Wilkes-Barre. He studied especially Latin and Greek, the latter by the use of Schrevelius' lexicon, in which all the definitions were in Latin, and Ross's grammar, constructed on the same principle. But to a master will such as his even such obstacles were not insuperable. To Greek and Latin, English and German, later years added also a knowledge of French and Italian. At nineteen he began the study of medicine again—a study in which for sixty years his labors never for a moment ceased or even relaxed. In 1828, at the age of twenty-three, he took his degree in the third class which was graduated from the Jefferson Medical College. He opened an office first in Philadelphia, but soon removed to Easton. Nothing is more characteristic of the man than that, while waiting for practice, he spent hours daily in dissecting in a building he erected at the back of his garden, and provided himself with a subject by driv-

ing in a buggy all the way from Easton to Philadelphia and back with a gruesome companion; he wrote a work on descriptive anatomy, which, however, he never published, and in eighteen months after graduation had translated and published Bayle and Hollard's General Anatomy; Hatin's Obstetrics; Hildebrand on Typhus, and Tavernier's Operative Surgery—works aggregating over eleven hundred pages. His motto was indeed "Nulla dies sine linea." His "stimulus," he himself says, "was his ambition and his poverty."

In 1833, five years after his graduation, he entered upon his career as a teacher—a career which continued for forty-nine years, till within two years of his death. This took him first to Cincinnati as demonstrator of anatomy in the Medical College of Ohio. In 1835 he became professor of pathological anatomy in the Cincinnati Medical College, where he was a colleague of Daniel Drake (q. v.), Willard Parker (q. v.), and James B. Rogers (q. v.), the last being one of the famous four brothers, with a second of whom—Robert E.—he was later a colleague in the Jefferson.

His book on the "Diseases and Injuries of the Bones and Joints" had appeared in 1830, and next, as a result of four years' study and teaching, his "Elements of Pathological Anatomy," two volumes, was published in 1839. It is strange to think that in a then small western town in America a young teacher in a new medical school should have published the first book in the English language on pathological anatomy. No wonder, then, that it brought him fame and practice; that its second edition made him a member of the Imperial Royal Society in Vienna; and that thirty years afterwards, Virchow, at a dinner he gave to its then distinguished author, should show it as one of the prizes of his library.

In 1840 he went to the University of Louisville as professor of surgery, and excepting one year when he was professor of surgery in the University of the City of New York, he remained there for sixteen years, happy in his family, his students, his flowers, and his generous hospitality. He and his colleagues—Drake and Austin Flint (q. v.)—soon made it the most important medical centre in the West, and he was in surgery the reigning sovereign. While there he published, in 1851, his work on "Diseases, Injuries and Malformations of the Urinary Organs," and in 1854 another pioneer work, that on "Foreign Bodies in the Air Passages." His fame had become so great that he was invited to the University of Virginia, the University of Louisiana, the University of Pennsylvania, and other schools. But he was steadfast to Louisville until his beloved Alma Mater called him to the chair just vacated by Mütter (q. v.). From 1856, when in his Introductory he said, "Whatever of life and of health and of strength remain to me, I hereby, in the presence of Almighty God and of this large assemblage dedicate to the cause of my Alma Mater, to the interest of medical science, and to the good of my fellow-creatures," until he resigned his chair in 1882—nay, to his death in 1884—this was absolutely true. Even when the shadows of death were thickening he corrected the proof-sheets of two papers on "Wounds of the Intestines" and "Lacerations Consequent upon Parturition," his last labors in the service of science and humanity.

Three years after he entered upon his duties at the Jefferson he published his splendid "System of Surgery,—a work which, though in many respects now obsolete as to its pathology and its practice, is a mine of information, a monument of untiring labor, a textbook worthy of its author. It has been the companion and guide of many generations of students. It was translated into several foreign tongues and passed through six editions, the last appearing only seventeen months before his death. That even when verging toward fourscore he should have been willing to throw aside all his strong prejudices and accept the then struggling principles and practice of Listerism shows the progressive character of his mind and his remarkable willingness to welcome new truths.

From his removal to Philadelphia till his death, twenty-eight years later, his life can be summed up in a few sentences: daily labor in his profession, editorial labor without cessation; for some years in managing the "North American Medico-Chirurgical Review," the successor of the "Louisville Medical Review," of which he had also been the editor; article after article in journals; address after address; twenty-six annual courses of lectures on surgery to thousands of students; labors without ceasing till he wrapped the drapery of his couch around him and calmly passed away.

He married a lady of English descent of many accomplishments, who proved indeed a helpmate—one who, with hopeful courage, lightened the burden of care during the struggles of his early life, and enriched the glories of his triumphs in the meridian of his

manhood. The best of fathers, he had in his later years of retirement the constant companionship and care of the most devoted of children. His son, Dr. Samuel Weissell Gross (q. v.), followed in the professional footsteps of his father.

As a surgeon Gross was painstaking, thorough and careful in his investigation of a case, skilful as an operator, and, having so vast an experience and equally extensive acquaintance with the wide literature of his profession, he was scarcely ever perplexed by the most difficult case and rarely at a loss as to the proper course to pursue in the most unexpected emergencies. His influence on the profession was marked and wholesome. For many years he was almost always at the annual meetings of the American Medical Association and the American Surgical Association, was looked up to in both as the Nestor of the profession, and his papers and his wise words of counsel molded both the thought and the action of his brethren to a notable degree. He founded two medical journals, was the founder of the Pathological Society of Philadelphia and of the Philadelphia Academy of Surgery, the founder and first president of the American Surgical Association, and the first president of the Alumni Association of the Jefferson Medical College. It was peculiarly fitting, therefore, that these last two associations should unite in erecting and unveiling a bronze statue of one who did so much for them and whom they rightly delighted to honor. All who knew his tall, manly figure and his fine face will agree that the likeness is remarkable, both in pose and feature. Could I only get a glimpse of the right hand which holds his familiar scalpel I would recognize the man. "Ex pede Herculem!" "Ex manu Gross!"

As an author, his chief characteristics were untiring industry, comprehensiveness, methodical treatment of his subject, and a singular felicity of style, especially for one who acquired English so late and with difficulty. In fact, through life his speech, by a slight, though not unpleasant accent, always betrayed his German descent. He blazed more than one new trail in the forests of surgical ignorance. In the early part, and even in the middle of the nineteenth century, it was rare for Americans to write medical books. The most they did was either to translate a French or a German work or to annotate an English one. He was one of the earliest to create an American medical literature of importance, and his works on the urinary organs, on foreign bodies in the air passages, and his textbook on surgery gave a position to American surgery abroad which we can now hardly appreciate, while, as already related, his pathological anatomy was the very first work in the English language on that most important branch. In 1861 he edited "American Medical Biography," and in 1887 his autobiography, with sketches of his contemporaries, was published.

His experiments and monograph on "Wounds of the Intestines" (1843) laid the foundation for the later studies of Parkes, Senn, and other American surgeons, and have led to the modern rational and successful treatment of these then so uniformly fatal injuries. He first advocated abdominal section in rupture of the bladder, the use of adhesive plaster in fractures of the legs, amputation in senile gangrene, and the immediate uniting of tendon to tendon when they were divided in an incised wound. Had he lived but a year or two longer, bacteriology would have shown him that scrofula was of tuberculosis origin, and not, as he so firmly believed and vigorously taught, a manifestation of hereditary syphilis.

That his eminence as an author should have met with recognition from scientific organizations and institutions of learning is no cause of surprise. It made him the president of the International Medical Congress of 1876, a member of many of the scientific societies of Europe as well as of America, and won for him the LL. D. of the University of Pennsylvania, and I believe the unique honor in America of having had conferred upon him the highest degree of all three of the leading universities of Great Britain—Oxford, Cambridge, and Edinburgh. Indeed, it is both significant and pathetic to note that he laid down his pen just after recording in his autobiography the announcement of the honor which the University of Edinburgh intended to bestow upon him at its tercentenary celebration.

Dr. Gross first established the fact that Ephraim McDowell was the father of ovariotomy and published his findings in the "Transactions of the Kentucky State Medical Society" in 1852. As a teacher, I can speak both with personal knowledge and enthusiasm. I can see his tall, stately form, his handsome face, his glowing features, his impressive gestures. He was earnestness itself. Filled to overflowing with his subject, his one desire was to impart to us as much of the knowledge he possessed as our young

heads could hold. Repetition did not blunt the novelty nor time lessen the attraction of his theme. It always seemed as if he was telling us for the first time the new story of the beneficent work that surgery could do for the injured and the suffering. His whole heart was in his work. Especially did he inculcate the principles of surgery, for he was convinced, and rightly, that one who was thoroughly imbued with these could not go far wrong in his practice.

WILLIAM W. KEEN.

GROSS, Samuel Weissell (1837-1889). It is rare to find genius burning as brightly in son as in father; more frequently its rays are brightest in nephew or grandson, but great learning with regard to surgery and an acute power of diagnosis descended to Samuel Weissell, eldest son of the famous Samuel D. Gross, (q. v.). He was born in Cincinnati, February 4, 1837. As a boy he went to school at Shelby College, Kentucky; studied medicine at Louisville University and at Jefferson Medical College, graduating March, 1857; then settled in practice in Philadelphia, being associated with his father in the work of editing the "North American Medico-Chirurgical Review". He served nearly four years in the army during the civil war as brigade surgeon with the rank of major, doing duty most of the time as medical director. In 1859 he reported in the November "American Medico-Chirurgical Review" "Aneurysm of the Right Femoral Artery cured by Digital Compression with Remarks on Twenty-two Other Cases so Treated." In the October number of the "American Journal of the Medical Sciences," 1867, he had a review of sixty pages on eleven French and German works on "Military Surgery" and gave statistics of over thirteen—afterwards enlarged by 20,933 amputations for gunshot injuries. His predilection for studying tumors and malignant growths may be seen in his paper on "Sarcoma of the Long Bones" ("American Journal of the Medical Sciences," 1879), his monograph on "Tumors of the Mammary Gland," 1880, and his "Tumors of the Breast," written for the "American System of Gynecology," edited by M. D. Mann (q. v.). He wrote also a "Practical Treatise on Impotency, Sterility and Allied Disorders of the Male Sexual Organs," 1887. Gross struck a note of hopefulness in 1880, at a time when there was widespread pessimism over operations on tumors of the breast. He wrote "Surgeons are beginning to know that cancer can be cured through operations if it is attacked before it has disseminated itself extensively locally, or has tainted the general system." His writings were distinguished by their exactness of observation and induction, clearness of expression and practical application. His somewhat early death, April 16, 1889, prevented his adding valuable writings, and even on his desk when he died there was a manuscript on "Stone in Children," which he was preparing for a cyclopedia on "Diseases of Children." Dr. Gross was one of the founders of the Academy of Surgery of Philadelphia and was vice-president in 1884.

He was a member of the Philadelphia College of Physicians, the Philadelphia Pathological Society, the State Medical Society of Pennsylvania; surgeon to the Howard Hospital, to the Philadelphia Hospital, the Jefferson Medical College Hospital, and lecturer to the Jefferson College on diseases of the genito-urinary organs. On the resignation of his father in 1882 the chair of surgery at Jefferson was divided between S. W. Gross and J. H. Brinton. Gross held the position until his death when he was succeeded by W. W. Keen. In December, 1876 Dr. Gross married Miss Grace Linsee Revere of Boston, who survived him and became the wife of William Osler.

GRUENING, Emil (1842-1914), an ophthalmologist of New York City, the first to call attention to the dangers of blindness from wood-alcohol poisoning, was born in Hohensalza, near Thorn, East Prussia, October 2, 1842, finished the work of the Thorn Gymnasium, and came to America when twenty years of age. Being skilled in languages, he taught for a time Latin, French and German in various New York families. He next (in 1862) began to study medicine at the College of Physicians and Surgeons in the City of New York, but, when the Civil War broke out, enlisted in the 7th New Jersey Volunteer Infantry, and served till the close of the strife. He was present at the battle of Hatcher's Run, the siege of Petersburg, and the surrender of General Lee at Appomattox. Returning to New York, he continued his medical studies, receiving his M. D. degree in 1867.

Deciding to become an ophthalmologist, he spent three years in London, Paris and Berlin, working especially with Albrecht von Graefe. In 1870 he settled as ophthalmologist in New York. For a number of years he assisted Dr. Hermann Knapp (q. v.) at the New York Ophthalmic and Aural Institute.

In 1878 he became ophthalmic surgeon at the New York Eye and Ear Infirmary, and, in 1912, consultant; in 1879 attending ophthalmologist to the German Hospital, in 1903 consultant; in 1884 ophthalmic surgeon to Mount Sinai Hospital, in 1899 consultant. He was also consulting surgeon to the New York Infirmary for Women and Children. From 1881 to 1894 he was professor of ophthalmology at the New York Polyclinic. He was a member, or fellow of a very large number of medical societies. In 1886 he was president of the New York Ophthalmological Society, and in 1910 of the American Ophthalmological Society.

Dr. Gruening was a short, stout man, with a florid complexion, white hair and blue eyes. He wore, as a rule, a full, square beard. He was very deliberate in manner, kindly, courteous, with a twinkle always in the eye, and a humorous answer on the tongue. A salient characteristic was his frequent story-telling: he always had some story, brief but very apt, with which to illustrate a point. He was a great admirer of the ancient classic writers, many of whom he had read in the original tongues.

Dr. Gruening was twice married. Of the unions were born five children: four daughters and a son. The son, Ernest Henry, graduated from Harvard College in 1907, and then from Harvard Medical School in 1912, and his father had intended that he should become an ophthalmologist. The son, however, inclined to journalism, stepped into this profession, being successful as editor of the well-known evening paper, "The Boston Traveler."

Dr. Gruening died May 30, 1914, of endarteritis obliterans, the result of arteriosclerosis. He was survived by his widow and five children. He wrote a large number of ophthalmic articles, the most important being "Methyl Alcohol Amblyopia" (Arch. f. Augenheilkunde, vol. lxix) and "Wounds and Injuries of the Eyeball and its Appendages" (Norris and Oliver's System of Diseases of the Eye, 1898, vol. iii, p. 685).

THOMAS HALL SHASTID.

GUITERAS, Juan (1852-1925), sanitarian, pathologist, of Havana, Cuba, was born at Matanzas, Cuba, January 4, 1852, the son of Eusebio and Josefa Gener Guiteras. He was educated at La Empresa, Matanzas and at the University of Pennsylvania, where he took both a Ph. D. and an M. D. in 1873 and then served as resident and as visiting physician to the Pennsylvania Hospital until 1879 when he entered the United States Marine Hospital service. Following the year 1881 Dr. Guiteras was an expert in all yellow fever epidemics; he was professor of medicine at the Charleston, (S. C.) Medical School from 1884 to 1888 and professor of pathology at the University of Pennsylvania from 1889 to 1899. During the Spanish war he was on General Shafter's staff in the Santiago campaign as a yellow fever expert, and after that war he settled in Havana and became professor of general pathology and tropical diseases in the University of Havana, a position he filled for twenty-one years, retiring in 1921. Other offices he held in Cuba were: Director of public health, 1909-1921; secretary of public health and charities, 1921-1922; director Las Animas Hospital, where he established an inoculation station and promoted zealously the work of Walter Reed (q. v.) Dr. Guiteras was editor of "La Revista de Medicina Tropical", president of the second National Medical Congress of Cuba, vice-president of the Association of Health Officers of North America and a member of the chief society of internists in the United States, the Association of American Physicians, besides several other societies. In 1916 he became a member of the Yellow Fever Commission of the International Health Board of the Rockefeller Foundation. He was credited with the discovery of the "Uncinaria" in Cuba and the "Filaria Bancrofti" in the United States while establishing the importance of infantile yellow fever in the epidemicity of the disease. He made frequent contributions to medical literature.

Dr. Guiteras married Mrs. Dolores Guiteras, née Gener, of Matanzas, May 5, 1883. He died at his home at Benavides, Cuba, October 28, 1925, at the age of 73.

GUITERAS, Ramon Benjamin (1859-1917), of New York, urologist, athlete and great game hunter, was born in Bristol, Rhode Island, August 17, 1859, son of Ramon Benjamin Guiteras and Eliza Wardwell. He was fitted for college at the private school of Joshua Kendall in Cambridge and was admitted to Harvard College in July, 1878, leaving in April, 1879, to spend a year and a half traveling in Europe and Africa. While in college he dropped his middle name. In 1880 he entered the Harvard Medical School and received his M. D. in 1883. His classmates emphasize his prowess as an athlete, and he was one of the best heavy-weight boxers of

the time. After receiving the degree he studied medicine in Vienna for a year or more, then traveled, remaining some time in Russia and Finland. He was a man of striking appearance, a lover of sport and hunted big game in Africa and other parts of the world, was a great swimmer and especially loved long swims in the ocean. Returning to New York in October, 1885, he was appointed surgeon at the Charity Hospital on Blackwell's Island, where he remained eighteen months, beginning practice in New York in 1887. Three months later an illness from diphtheria caught from a patient, incapacitated him for six weeks, after which he went to Cuba for his health, making a trip across the Island on horseback. In 1888 he resumed practice in New York. In 1893 he became professor of anatomy and operative surgery and later was professor of genito-urinary surgery in the New York Post-Graduate Medical School. He was visiting surgeon to the Post-Graduate and Columbus Hospitals and consulting surgeon to the French and City Hospitals.

His life's work was dedicated to the study of urology and he was an active member of the American Urological Association and of the New York Urological Society. For many years he was secretary to the Pan-American Medical Congress, and served on Government Advisory Boards; in 1916 President Wilson commissioned him to report on the sentiment of the people of Cuba in regard to the European War, and his investigation was published. He was a good teacher and gave special attention to instructing post-graduate students by a graduated course leading straight from the simpler and fundamental methods of urological asepsis and examination up to the operative procedures.

In 1912 he published a comprehensive treatise on urology in two volumes, including the urinary diseases of both men and women, an exposition of his teaching of twenty years. He was author of another book, and was at work on a third at the time of his death, which occurred from meningitis, at the French Hospital, New York, December 13, 1917.

He was unmarried, and made an interesting disposal of his property by will: To the town of Bristol his residuary estate was left for the erection of a public school building in memory of his mother, with the suggestion that it be designed after the residence of "Mrs. Mudge at Papoosequan, and be all in white." The Post-Graduate Hospital, Columbus Hospital and the Academy of Medicine received bequests, and $5,000 was left to the Bristol Yacht Club "to buy catboats and rowboats for the use of guests."

Dr. Juan Guiteras, Havana, Cuba, (q. v.), sanitarian, who did notable work in yellow fever, was a cousin of Ramon Guiteras.

HOWARD A. KELLY.

GULICK, Luther Halsey (1865-1918), physical educator, was born at Honolulu, Hawaiian Islands, December 4, 1865, son of Luther Halsey and Louisa Lewis Gulick. He was a student at Oberlin College 1880-82 and 1883-86; a student at Sargent Normal School of Physical Training, Harvard, 1885; he took an M.D. from New York University medical school in 1889. Gulick had served a term of seven years as superintendent of the physical training department of the Young Men's Christian Association Training School at Springfield, Massachusetts, 1886-1903 when he was appointed director of physical training in the public schools of New York City, remaining in this position until 1908. He was director of the department of child hygiene, Russell Sage Foundation, 1907-13; president of Camp Fire Girls from January, 1913, to the time of his death. Other positions he held were: editor of the "Physical Education Review," 1901-3, "Association Outlook," 1897-1900, and "Gulick Hygiene Series"; president of the American Physical Education Association, 1903; vice-president of the Young Men's Christian Association Athletic League of North America, 1903-6; president of the Public School Physical Training Society, 1905-8; and president of the Playground Association of America, 1906-9; also secretary of the Public Schools Athletic League of New York, 1903-8. Dr. Gulick lectured on school hygiene and personal hygiene, physical training and play, at New York University in 1906; was a member of the Olympic Games Committee, Athens, 1906, London, 1908; United States delegate to the second International Congress on School Hygiene, London, 1907. He received from the Young Men's Christian Association Training School, Springfield, Mass., the degree of Master of Physical Education; was consultant of the New York Hospital for Deformities and Joint Diseases, 1907, and a member of the Permanent Committee of the International Congress of School Hygiene.

He wrote books on the subject of physical culture, among which are: "The Efficient Life," 1907; "Physical Education by Muscu-

lar Exercise," 1904; and "Mind and Work," 1908.

He married Charlotte Vetter, of Hanover, New Hampshire, in 1887.

Dr. Guilck had recently returned from a trip to France, in the interest of the Young Men's Christian Association, for the purpose of making a survey of the moral environments of the American Expeditionary Forces, when his death took place. He died at South Casco, Maine, August 13, 1918.

GUNDRY, Richard (1830-1891), alienist of Ohio and Maryland, was born in Hampstead, London, England, October 14, 1830. His father, the Rev. Jonathan Gundry, was a Baptist clergyman who early imbued his son with a love of learning and was able to send him to a private school in the neighborhood, where he gained his first knowledge of the classics. At fifteen he came with his parents to Simcoe, Canada, where after a brief period of study in a Latin school he was thrown largely upon his own resources. He obtained the means for pursuing his professional education by writing in the office of an attorney and began to study medicine under Dr. Coverton, Toronto, graduating in 1851 at Harvard Medical School. At Harvard he had the advantage of instruction from and personal contact with such men as Oliver Wendell Holmes, Jacob Bigelow and J. B. S. Jackson (q. v. to all), taking an excellent stand in his class and graduating with honor. He settled in Rochester, New York, but before he had been long engaged in practice he was able by a fortunate legacy to realize his desire to travel abroad. Returning in 1853, he settled in Rochester, New York, again, but during the year, in company with Dr. E. M. Moore (q. v.), an eminent surgeon of Western New York, removed to Columbus, Ohio, where soon after he was appointed demonstrator of anatomy in Starling Medical College. In 1855 he received a provisional appointment as second assistant physician in the Central Insane Asylum at Columbus, Ohio. His fitness for the work was so apparent, the temporary appointment soon became a permanent one. From 1855 to 1857 he was one of the associate editors of the "Ohio Medical and Surgical Journal." In 1857 he was transferred to the Southern Ohio Asylum at Dayton as assistant physician, of which asylum he became medical superintendent in 1861. This position he filled with signal ability until 1872, when he was transferred to the Southeastern Asylum at Athens, Ohio, then in process of erection, to complete and prepare the buildings for occupation. Subsequently, on the completion of the asylum in 1874, he was appointed its first medical superintendent and retained the position until 1877, when he was transferred to Columbus, Ohio, to complete and make ready for occupation the very extensive buildings of that asylum.

After twenty-three years of most faithful, devoted and self-sacrificing service to the insane of Ohio in three of the asylums, he was forced to resign because his political affinities did not correspond with those of the newly elected governor. To a sensitive, high-minded physician like Dr. Gundry the blow was a severe one, and he felt the injustice of this treatment to the day of his death. He was immediately appointed medical superintendent of the Maryland Hospital for the Insane at Catonsville, and held the position until he died. In 1880 he received the appointment of professor of mental and nervous diseases in the College of Physicians and Surgeons of Baltimore, and in the following year, upon the sudden death of Prof. E. L. Howard (q. v.), was appointed professor of materia medica in the same college, and there lectured with great acceptance during the remainder of his life. Dr. Gundry was married in 1858 to Miss Martha M. Fitzharris of Dayton, Ohio, who, with eight children—four sons and four daughters—survived him. In January, 1890, he suffered severely from influenza, and for a time was very seriously ill; but he subsequently rallied and apparently gained his usual health. Although he lectured as usual, his duties cost him much effort. In March, 1891, the trustees of the Maryland Hospital, perceiving his condition, voted to give him a long leave of absence, with the hope that his health would be restored. He went to Atlantic City and for a time seemed to improve. Subsequently, however, severe symptoms of Bright's disease developed, and it was evident that his days were numbered. In accordance with his earnest desire he was brought home where, four days later, he passed away, surrounded by his family and devoted friends.

Dr. Gundry was an omnivorous reader, a ready writer, and a clear and pleasant speaker, with rare gifts of expression and vast stores of knowledge at instant command. His memory for names, dates, facts, incidents, and of verbal quotations was phenomenal. He had great intellectual grasp, and in debate could marshal his forces most effectually.

He wrote with equal facility, and the list of titles of his articles and addresses is a long one. It is to be regretted that no full record of them seems attainable. Among the number were "Observations upon Puerperal Insanity," 1860; "The Psychical Manifestations of Disease," 1881; "The Care of the Insane," 1881; "Separate Institutions for Certain Classes of the Insane," 1881; "The Relations of the Powers of the State to the Rights of the Individual in Matters Concerning Public Health," 1883; "Valedictory Address to the Graduating Class, College of Physicians and Surgeons," 1883; "Some Problems of Mental Action," 1888; "The Care of the Insane," 1890. He was a born letter writer, and his letters sparkled with wit, historical allusions and apt quotations.

HENRY M. HURD.

GUNN, Moses (1822-1887), pioneer lecturer on anatomy in Michigan, was born in East Bloomfield, Ontario County, New York, on April 20, 1822, and after a general education in the common schools and in Bloomfield Academy, he was attacked by a serious illness which kept him from study for two years and compelled him to take a sea voyage. On returning he began medical study with Dr. Edson Carr of Canandaigua, New York, and in October, 1844, entered Geneva Medical College and was graduated M. D. in 1846. As the college closed, a body arrived too late for dissection and was given to young Gunn for teaching purposes. At once he placed it in a large trunk, transported it to Ann Arbor, collected a class, and within two weeks after graduating was demonstrating anatomy to his eager listeners. It is believed that this was the first course of lectures on anatomy delivered in Michigan. These courses were regularly repeated by Dr. Gunn in connection with his private practice, till the opening of the Medical Department of the University. In July, 1849, he held the chair of anatomy in the University of Michigan and in 1850 that of surgery was added. In 1854 anatomy was transferred to Dr. Corydon L. Ford (q. v.). In 1853 Gunn settled in Detroit, visiting Ann Arbor twice weekly to deliver his lectures and hold clinics, adding to his work in 1857 the co-editorship of the "Medical Independent," a Detroit monthly medical journal, merging in 1858 with the "Peninsular Medical Journal" under the name of the "Peninsular and Independent Medical Journal" (1858-1860), Gunn continuing on the editorial staff. His main purpose in this was the removal of the medical department of the university to Detroit. In September, 1861, Moses Gunn joined the Army of the Potomac as surgeon of the fifth Michigan Infantry, remaining in the army till ill health compelled him to resign in July, 1862. In 1856 Geneva Medical College gave him her honorary A. M., and in 1877 Chicago University her LL. D. Among other memberships and appointments he was a member of the Michigan State Medical Society during its second epoch, the Detroit Medical Society, the Illinois State Medical Society, Chicago Medical Society, the American Surgical Association, the American Association of Genito-urinary Surgeons. He was surgeon to the Cook County Hospital, St. Joseph's and St. Luke's Hospitals, and the Presbyterian Hospital—all in Chicago—and in 1867 he accepted the chair of surgery in Rush Medical College, proving a potent factor in its larger evolution. During the winters of 1851-52-53 he made many dissections which proved that the untorn portion of the capsule in dislocation of the shoulder and hip caused the characteristic attitude assumed by the limbs and was the true obstacle to reduction. He also demonstrated that the return of the dislocated bone into its socket can easily be effected by putting the limb in such a position as will effectually approximate the two points of attachment of the untorn portion of the ligament ("Peninsular Journal of Medicine," Detroit, vol. i, p. 95).

Gunn was over six feet, well proportioned, with erect military carriage, long side whiskers, heavy drooping mustache, curly hair that rested on his coat collar, and clear blue eyes. His lectures were prepared with the greatest care, and so had an effect far beyond the modern medical lecture. It is said that the great Chicago fire destroyed the manuscript of a work on surgery he had nearly completed. Gunn was a rare conversationalist and loved the art of talking well. Children ranked with his warmest friends; to these he added animals, flowers and all forms of natural beauty.

In 1848 he married Jane Augusta Terry, only daughter of Dr. J. M. Terry, and three of their four children survived him. He died November 4, 1887, after a long illness, from malignant disease of the stomach.

His writings, largely on fractures, may be found in the Surgeon-General's Library at Washington, D. C.

LEARTUS CONNOR.

GUTHRIE, Samuel (1782-1848), the discoverer of chloroform, was the son of Dr. Samuel Guthrie, of Brimfield, Massachusetts, whose home is still standing very much as he left it. In this house, in the year 1782, the younger Samuel was born, and here he doubtless received his first inclination to medicine and love of science. Of his early life we know nothing, except that he studied medicine with his father, but began to practice for himself in Sherburne, New York, where his grandfather, James G. Guthrie, resided. Shortly after (1804) he married Sybil Sexton, of Smyrna, New York, and later, his diary—still preserved—shows that he attended medical lectures at King's College, New York (1810-11), and at the University of Pennsylvania, Philadelphia (1815). When thirty-five (1817) he removed to Sacketts Harbor, New York, at that time a military post, established in 1812. Here Dr. Guthrie established a vinegar and alcohol factory and began experimenting in the manufacture of priming powder in which he was very successful. "S. Guthrie's Waterproof Percussion Priming" was for many years widely known and extensively used throughout the United States and Canada. There are in the museum of Yale College specimens of chlorate of potassium, glucose syrup and pure oil of turpentine manufactured by him in the diminutive laboratory at the edge of the woods in Jewettville, a little hamlet about a mile from the town of Sacketts Harbor. Here it was that he first thought out or stumbled upon the method of manufacture of chloroform, now generally adopted the world round, viz.: the distillation of alcohol with chloride of lime. This fact he communicated to Professor Silliman, editor of "The American Journal of Arts and Science", under the caption of "New Mode of Preparing a Spirituous Solution of Chloric Ether, by Samuel Guthrie, of Sacketts Harbor, New York." (Art. VI, vol. xxi, October, 1831.)

As early as May, 1831, and probably earlier, his attention was turned to the "medical value of chloric ether," as set forth in Silliman's Chemistry. Chloric ether of to-day is generally understood to mean an alcoholic solution of chloroform (1:19), and this is exactly what Dr. Guthrie unintentionally produced, although he was endeavoring to "find a more convenient method of making "a very different substance, the chloric ether of Silliman's Chemistry, viz.: "Dutch Liquid." This is proved by the note sent by Dr. Guthrie with his specimen of "chloric ether" which reads as follows: "My attention was called to the subject by the suggestion in volume ii, page 20, of "Yale College Elements of Chemistry," that the alcoholic solution of chloric ether is a grateful diffusive stimulant, and that, as it admits of any degree of dilution, it probably may be introduced into medicine." It is evident from this quotation that Dr. Guthrie had no idea that he had discovered a new compound. His statement is that he had invented a new method of preparing the "chloric ether" described on page 20 of Silliman's Chemistry. There can be no doubt that this was Prof. Silliman's idea, as proved by his notes on the subject, which may be found on page 405, second volume, of volume xxi, "American Journal of Arts and Science", wherein Prof. Silliman expressly says: "Mr. Guthrie's method of preparing it is ingenious, economical and original, and the etherized spirit which he has forwarded as a sample is exactly analogous in sensible properties to the solution made in the manner described in the above work."

The exact date upon which this article was sent to Prof. Silliman unfortunately cannot be definitely determined. The magazine in which it was published bears date of October, 1831, and the notice to contributors desires that "communications be in hand six weeks, or when long, or with drawings, two months before the publication day." If this rule was observed in the case of Dr. Guthrie, his paper must have reached Prof. Silliman at least as early as August, 1831, and the discovery was several months previous as Guthrie states, in his communication, that "during the last six months a great number of persons have drunk of the solution of chloric ether in my laboratory, not only freely, but frequently, to the point of intoxication." This effectively and conclusively disposes of the claims of Liebig and Soubeiran to priority of discovery of chloroform, since Liebig's discovery, viz.: the production of chloroform by the action of potassium hydroxide on chloral, was first published in November, 1831, a month later than the date of Guthrie's paper ("Liebig's Annalen", vol. clxii, p. 161). Soubeiran, whose method was identical with that of Guthrie and apparently closely contemporaneous, claims to have published his paper on "Ether Bichlorique" in October, 1831. Fortunately for Dr. Guthrie, the desire of Liebig to establish his own claim led to his careful investigation of the date of publication of the October number of the "Annals de Chemie et de Physique" for 1831. That it could not

have been printed in October, 1831, is definitely proved by the fact that the meteorological report for the entire month of October is printed in the October number, which Liebig discovered did not appear until January, 1832.

Dr. Guthrie was a rather quiet man, making frequent use of the words yes and no. Though taciturn with strangers he was free with his friends. That he was liberal, at least with his family, his letters show. In most of them he mentions enclosing ten, twenty or more dollars. He had a large library for those days, though books on chemistry and encyclopedias were said to predominate. Still, works of fiction were present. He considered that the library was for the use of the family, and there were no restrictions, even on the children, as to what they should read. His granddaughter says that the only rule she remembers the Doctor was particular about was that no one should turn down the leaves of the books.

The Doctor gradually gave up the practice of medicine, and during the latter years of his life practiced very little, though he would take a case now and then. He had to face adversity. Sacketts depended for its prosperity upon its importance as a lake port as well as its proximity to the garrison. The railroad was now pushing its way into the north country, and commerce turned from the lake route to the new channel. This of course affected Sacketts adversely, and undoubtedly contributed to the decline of the fortunes of the Doctor and his sons. The son who died in Mexico left his affairs in bad shape, and the other one failed for $50,000, a large sum for those days. The Doctor evidently faced the situation philosophically, for in his letters there is no complaining. Instead he took a hopeful view of life, and made plans for his future activities.

It was in this frame of mind that he died, October 19, 1848.

Haines, Job (1791-1860), early practitioner, of Dayton, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920. p. 479.

HAINES, Walter Stanley (1850-1923), professor of chemistry and materia medica in Rush Medical College, was born in Chicago September 27, 1850, the son of John G. Haines, who was mayor for two terms. After graduating from the Chicago High School, Walter entered the Massachusetts Institute of Technology but an attack of pleurisy forced him to give up his work there. In 1873 he was graduated from the Chicago Medical College. While still a student, in 1872, he filled the chair of chemistry in his alma mater and held it for four years. During this time, he spent several months studying in Paris and London. In 1876, he succeeded Henry M. Lyman (q. v.) in the chair of chemistry in Rush Medical College, where he subsequently was made professor of chemistry, pharmacy, and toxicology (1885), pharmacy changing to materia medica in 1905. Dr. Haines served on the committee of revision of the United States Pharmacopeia from 1900 to 1920, the Illinois State Food Standard Commission, and the Illinois State Commission on Occupational Diseases. He was a member of the American Chemical Society and of the Chemical Society of London.

He wrote chapters on alkaloidal poison in Hamilton's "System of Legal Medicine" (1894), revised Purdy's "Practical Urinalysis and Urinary Diagnosis" (1901), and with Peterson of New York prepared a widely used textbook of legal medicine and toxicology (1903). As an expert witness in important legal cases, he was especially noted, and his dignity, incisiveness, and broad information commanded great admiration.

In 1916 the alumni joined in presenting a portrait of Dr. Haines to the College; in 1922, in recognition of his fifty years of medical teaching, the graduating class placed a tablet in his honor in the college amphitheater, and the Walter S. Haines Library Fund was established for the college library.

On January 27, 1923, he died at the Presbyterian Hospital from bronchiectasis complicated with chronic nephritis, greatly lamented. He had never married, and his reverence for women was expressed in his tender devotion to his mother who lived to be over eighty. Dr. Haines had a striking personality and was greatly loved for the beauty of his character, not only in the College but by all his associates.

HALE, Enoch (1790-1848), writer, of Boston was born in West Hampton, Massachusetts, January 19, 1790, his father, of the same name, being the first minister of the town. In early life the son's health was poor, he having a cough with hemoptysis. He went to New Haven, Connecticut, where he attended Prof. Silliman's (q. v.) lectures and devoted himself to the study of chemistry, later studying medicine with Dr. Hooker of

his native town and then removing to Boston to continue these studies with Jacob Bigelow (q. v.) and John Warren (q. v.). He was graduated from Harvard Medical School in 1813, with an inaugural dissertation on "Experiments on the Production of Animal Heat by Respiration." It was published and called forth a rejoinder from Sir Benjamin Brodie, in the columns of the "London Medical and Physical Journal."

Hale settled in Gardiner, Maine, where he had a friend, Dr. Benjamin Vaughan (q. v.), a learned English gentleman and recent settler in Gardiner, who had a large acquaintance among scientific men abroad, and was the possessor of a large library. Hale studied meteorological problems and wrote the "History and Description of an Epidemic Fever, commonly called Spotted Fever, which prevailed at Gardiner, Maine, in the spring of 1814." Removing to Boston he was appointed district physician to the Boston Dispensary in 1819. In this year he published a dissertation which received the Boylston prize in Harvard University, and another in 1821, also gaining a Boylston prize. He was one of the early visiting physicians to the Massachusetts General Hospital and in 1839 published a work entitled, "Observations on the Typhoid Fever of New England," the oration at the annual meeting of the Massachusetts Medical Society. This with the papers of George C. Shattuck (1836), Gerhard of Philadelphia (1836) and Elisha Bartlett (1842) served to draw a clear distinction between typhus and typhoid fever. Hale was an excellent secretary of the Massachusetts Medical Society from 1832 to 1835 and was instrumental in revising the by-laws.

In the latter years of his life he suffered with Bright's disease and worked handicapped with great pain. He was honest, frank and somewhat intolerant of unfairness in others.

He died November 12, 1848.

WALTER L. BURRAGE.

HALL, Herbert James (1870-1923), of Marblehead, Massachusetts, who became a genius at treating neurasthenics and the handicapped, was born in Manchester, New Hampshire, March 12, 1870, the son of Marshall Parker and Susan Maria James Hall. A graduate of Harvard Medical School in 1895 he served as house officer at both the Children's and Massachusetts General hospitals and went into general practice at Marblehead. Soon he was interested in the problems presented by patients who were handicapped either physically or in their mental outlook in the struggle of life. He was convinced that by fitting the task to the worker and the worker to the task much profit might accrue to the world from lives that would be wasted otherwise. Many men and women of nervous temperament and weak physique, yet having good intellects, artistic tastes and manual skill were a loss because no one was adjusting them to their jobs in life; they were unable to take full part in industry or the world's work; someone should take them in hand. In the midst of a busy practice, Dr. Hall gathered a group of such patients about him, started a pottery, a blacksmith's shop, a carpenter shop, a weaving room and facilities for other industries and set them to work. He met with so much success and his interests became so centered in this undertaking that in 1912 he gave up general practice and opened the Devereux Mansion Sanatorium in the outskirts of Marblehead, remodeling an old estate which was well situated near the sea. Here with facilities for 40 patients, ample medical workshops, he had the surroundings he loved and ideal conditions for the people he treated.

Dr. Hall's personality was an unusual one. He was sympathetic and devoted to his patients, he had a keen and active intelligence, he gave his patients new courage to face the world when he had instilled previously untried methods of occupation and of thought that made life worth while to them. He had a passionate love of nature as was attested by his two volumes of poems: "Moonrise" and "The Sea World Waits". Music and architecture made strong appeal to him. These were a compensation for increasing deafness which afflicted him in his later years. He contributed to medical literature: "The Untroubled Mind", 1915; "The Work of Our Hands," 1915; "Handicrafts for the Handicapped", 1916, and "War Time Nerves", 1918. He was president of the American Occupational Therapy Association in 1900-1921 and editor of the section of occupational therapy and rehabilitation of "The Modern Hospital."

Dr. Hall married Miss Eliza Pitman Goldthwait of Marblehead, a sister of the Boston orthopedist, Joel E. Goldthwait, December 29, 1897. They had a daughter and a son. Dr. Hall died following a painful illness of many months, at his home in Marblehead, February 19, 1923.

WALTER L. BURRAGE.

HALL-BROWN, Lucy (1843-1907), pioneer physician of Massachusetts and New York, was born in Holland, Vermont, in November, 1843, a descendant of Gov. Thomas Dudley of Massachusetts. She passed her early life in the Northwest, and in 1876 entered the University of Michigan for a medical course. Upon graduation in 1878 she served for six months as assistant physician under Dr. Eliza M. Mosher at the Massachusetts Reformatory Prison for Women. She then pursued post-graduate work in New York and London, being the first woman admitted to clinics in St. Thomas's Hospital, London. Later she became interne at the Royal Lying-in and Gynecological Hospital of Prof. Winckel in Dresden. Upon her arrival in Dresden, she knew scarcely any German, but after a month's study she had acquired sufficient knowledge to warrant Dr. Winckel in admitting her to his hospital. On the completion of study and service abroad, in 1879 and while still in Dresden she was appointed by Gov. Talbot, on Dr. Mosher's recommendation, resident-physician to the Massachusetts Reformatory and returned at once to take up the work; later she received but declined the appointment as superintendent. In 1883 Dr. Eliza M. Mosher, being appointed professor of physiology, hygiene and resident physician to Vassar College, asked to have Dr. Hall appointed to share the work, the two at this time starting a partnership, beginning their private work in Brooklyn and serving alternately at the college. At the end of three years she gave her entire time to practice in Brooklyn and continued so working until three years before her death. Dr. Hall was a fellow of the New York Academy of Medicine, member of Kings County Medical Society, and member of the Brooklyn Pathological Society. Her standing in medical jurisprudence was recognized by the courts of justice in New York and she was often, called as an expert by the Supreme Court to take charge of examinations instituted by that tribunal.

In 1891 Lucy Hall married R. G. Brown, electrical engineer. In 1904, her health impaired by an increasing heart weakness, they removed to Los Angeles and afterwards made a visit to Japan, where characteristically she visited hospitals, schools, missions, prisons and police courts. So highly was her interest valued that on leaving she was urged by the officials of medical and public education in that empire to return and lecture on physiology and hygiene. The invitation was a great compliment, and she returned for several months, lecturing in leading institutions in the great cities.

She died in Los Angeles, August 1, 1907, of valvular disease of the heart. She kept always in touch with scientific progress and possessed the courage to readjust opinions, and into her life came honors and responsibilities well earned and vindicated by the use she made of them to humanity.

Some of her most important articles are: "Unsanitary Conditions of Country Houses" "Journal of Social Science, December, 1888; "Inebriety in Women" "Quarterly Journal for Inebriety," October, 1883; "Prison Experiences" "Medico Legal Journal," March, 1888; "Physical Training for Girls" "Popular Science Monthly," February, 1885; "Wherewithal Shall We Be Clothed" "American Woman's Journal," May, 1895.

ALFREDA B. WITHINGTON.

HALL, Lyman (1731-1790), of Georgia, one of the signers of the Declaration of Independence, was born in Connecticut, in 1731, graduated A. B. from Yale in 1747 and studied medicine with a local physician. He married in 1752 and accompanied by several families, removed to South Carolina. After a brief agricultural experiment with uncertain results, the families with which he came from the North, moved with him to Sunbury, a small village near the coast of Georgia, south of Savannah. He made a good living as a country practitioner and with the beginning of the Revolution espoused its cause. Being blessed with the art of oratory to an unusual degree, he spoke far and wide and succeeded in persuading his neighbors to elect him a delegate to the Continental Congress in 1775. This early patriotic action of St. John's Parish at a time when there was opposition in Georgia to the articles and declaration of the General Congress led later to an act of the legislature, creating St. John, St. Andrew and St. James parishes into "Liberty County." Until Georgia was fully represented in the Congress Dr. Hall declined to vote upon questions which were to be decided by vote of the colonies, but he participated in the debates and recorded his opinions. When it came to the signing of the Declaration on the part of the State, Dr. Hall presented credentials, May 20, 1776, and early in June signed for the State of Georgia, with two others. He was elected a member of Congress for three successive terms and then declined another nomination.

When the British captured the forts in Savannah, the property of Dr. Hall was confiscated and he spent a year in the North with his relatives in Connecticut. On his return he settled in another part of Georgia, in Burke County, and practiced there until he was elected Governor in 1783, and died while still in practice, October 19, 1790. Hall County in northern Georgia was subsequently named for him. An olden-time biographer says of him: "He was six feet high, with easy and polite manners and deportment." There is a picture of him in Appleton's Cyclopedia of American Biography.

Hall, Moses Smith (1824-1905), army surgeon of West Virginia. See American Medical Biographies. H. A. Kelly and W. L. Burrage. Baltimore, 1920, page 481.

HALL, Richard Wilmot (1785-1847), professor of obstetrics in the University of Maryland, was born in Harford County, Maryland, in 1785. He was graduated from the University of Pennsylvania in 1806, with a thesis on the "Use of Electricity in Medicine." In 1811 he went to Baltimore and in 1812-13 was adjunct professor of obstetrics in the College of Medicine of Maryland, becoming professor in the latter year, when the name was changed to the University of Maryland, a position he held until 1847, part of the time being also professor of hygiene; in 1819 and in 1837-38 he was dean of the University.

He translated Larrey's "Memoirs of Military Surgery" . . . . 2 vols.: 415 pp., 3 pl.; 434 pp., 11 pl., Baltimore, 1814.

Dr. Hall died at Baltimore, Sept. 14, 1847.

HALL, William Whitty (1810-1876), popular medical writer and editor of "Hall's Journal of Health," was born in Paris, Kentucky, in 1810. He was a graduate of Centre College in 1830, and M. D. of Transylvania College (1836). After practicing medicine for fifteen years in the South, he moved to New York and in 1854 began publishing his journal, which reached a wide circulation. He was editor of "Hall's Medical Adviser" (1875), and wrote much on hygiene and kindred subjects. Among his books are "Treatise on Cholera," New York, 1852; "Bronchitis and Kindred Diseases," 1852; "Consumption," 1857; "Health and Disease," 1860; "Sleep; or, The Hygiene of the Night," 352 pp. 4th Ed., 1864, New Ed. 1870; "Coughs and Colds. . . . . ," 362 pp. (1870).

He fell in a fit on a street in New York, May 10, 1876, and died immediately.

HALLIBURTON, John (1740(?)-1808), of Rhode Island and Halifax, N. S., son of a Presbyterian clergyman of Haddington, Scotland, was born in that town about 1740 and died in Halifax, Nova Scotia, in 1808. In 1760, or a little later, he was surgeon on board a British frigate, commanded by Lord Colville. On her arrival at Newport, Rhode Island, he became acquainted with the Hon. Jaheel Brenton and deeply attached to one of his daughters. Having completed a required term of service on the ship, he returned to Newport and married Miss Susanna Brenton in the year 1767, and settled down to practice in Newport. Here he seems to have been very successful and accumulated a good deal of property. But little good did it bring him, for as he adhered to the side of the Motherland in the dispute with the Colonies, he was compelled during the Revolutionary War to abandon his practice and property and make his escape from Rhode Island. On the pretext of visiting patients on the mainland, Dr. Halliburton secretly left Newport in a barge and landed safely at Long Island, where the British Army was stationed. On his arrival at headquarters he presented himself to Sir Henry Clinton, who (as some recognition of his services) offered him the headship of the Naval Medical Department at Halifax. Having accepted this he soon afterwards sailed from New York and reached Halifax in 1782, his wife and family coming a year later. In addition to his official duties, Dr. Halliburton entered into general practice and became a leader in his profession. In 1787 he was appointed a member of His Majesty's Council. Sir Brenton Halliburton, for a long time Chief Justice of Nova Scotia, was his son. The inscription on his tombstone in St. Paul's cemetery happily summarizes his characteristics:

"If unshaken loyalty to his king, steady attachment to his friends, active benevolence to the destitute, and humble confidence in God can perpetuate his memory, he will not be forgotten."

DONALD A. CAMPBELL.

HALLOWELL, Edward (1809-1860), a leading pioneer naturalist in the forties and fifties of the nineteenth century, was the son of Edward Hallowell, owner of coal lands in Schuylkill County, Pennsylvania. In 1827 he got his bachelor's degree with highest honors

from the University of Pennsylvania, and then, being a fellow student with Joseph Carson (q. v.) he studied under Dr. Cyd Huston in the medical department of the University. In 1830, he took his A. M. and also was graduated in medicine with a dissertation on "The Pathology of Local Inflammation." Dr. Hallowell labored with zeal as a practitioner and made important contributions to pathology; a paper on cholera infantum was looked upon as authoritative. As a member of the Academy of Sciences of Philadelphia, he worked assiduously in the department of herpetology; his articles in the Journal and Proceedings, on this subject alone, numbering fifty. Probably all the work on the reptiles of the North Pacific Exploring Expedition under Captain John Rodgers, U. S. N., was by Hallowell, edited posthumously by E. D. Cope, an inexperienced youth of twenty, in the fall following Hallowell's death (Proc. Acad. Nat. Sc., Phila., xii, 1860). He described some fifty-five new species of lizards, snakes, and batrachians, and wrote on the anatomy of the Harpy Eagle, on the gorilla, and on the bat.

He died February 20, 1860, from "consumption" after an invalidism of several years.

HOWARD A. KELLY.

HALSTED, William Stewart (1852-1922), eminent surgeon and a founder of the Johns Hopkins Medical School, was born September 23, 1852 in New York City where his family was prominent in business, philanthropic, and social life; he was the son of William Mills, Jr., and Mary Louisa Haines Halsted. After preparation at Andover Academy, he entered Yale and graduated in arts in 1874, while in college being captain of his football team. Then followed a medical course in the College of Physicians and Surgeons, New York, from which, as leader of his class in scholarship, he received his M. D. in 1877. An internship at Bellevue over, he studied during the next two years in Vienna, Leipsic, and Würtzburg, specializing in anatomy and embryology, and returned to his birthplace to become a private instructor in surgery and demonstrator of anatomy at the College of Physicians and Surgeons and to serve on the staff of the Charity, Bellevue, Presbyterian, Roosevelt, and Emigrant hospitals. It was here, too, in 1885, that he undertook the investigation of cocain then little known and was the first to demonstrate the principle of nerve blocking,—of inestimable value in rendering minor operations, painless. In this period, he successfully experimented with spinal anesthesia by introducing the drug into the meninges. Having made tests upon himself, he became addicted to the drug and he broke away from it with difficulty. A few months prior to death, he was recognized formally as the creator of the modern method in neuro-regional anesthesia, according to William H. Welch the "most important original contribution to surgery ever made by an American." In the late eighties, working in pathology under Prof. Welch, in the Johns Hopkins University, his studies in surgical technique, especially the healing of wounds and the prevention of infection, pointed the way to his subsequent career. When the Johns Hopkins Hospital opened its doors in 1889, he headed the department of surgery, and when the medical school was established in 1893, he assumed the professorship and retained it through life, giving up his private practice when the chair was put on a full time basis in 1913. A conspicuous bequest to posterity was his thorough and systematic training of young surgeons through whom he may be said to have instituted a school of surgery, comparable to that of Billroth of Vienna.

In his experiments upon the thyroid and parathyroid bodies, he formulated what is known as Halsted's Law, "A transplant of a portion of a ductless gland will survive only when a physiological deficit has been produced." This line of research with that on intestinal resection and suture occupied him to the end; among his last publications was the monograph on "The Operative Story of Goitre," 1920. His operation for cancer of the breast, coincidently with the labors of Willy Meyer, revolutionized this procedure. His studies on hernia placed the radical operation on its present established footing. In the late nineties, his attention was directed to the diseases of the gall bladder and its ducts and he advocated the early operation on the common duct. Through later studies, he evolved a method of slowly constricting the major arterial trunks in aneurysm. He was the first successfully to ligate the left subclavian artery in its first portion for aneurysm and the only one recorded as performing the operation twice. Few had his knowledge of the very condition that caused his death—a stone in the ampulla of Vater.

One of the first American surgeons to recognize the value of the new aseptic surgery, Halsted used silver as a suture material and silver foil as a covering for wounds because

of its mild but positive bactericidal qualities; he made notable studies of the healing of aseptic blood-clots in closed wounds; recommended gutta-percha as a "protective" dressing for open wounds; demonstrated that fine silk could safely be buried in the tissues; insisted upon absolute hemostasis in the course of operations and devised a delicate pointed forceps to this end, and he inaugurated and urged the now universally used rubber gloves.

Halsted gave to the literature papers which are among the classics in surgery. He received the honorary F. R. C. S. of England in 1900 and of Edinburgh in 1905; the LL. D. of Yale in 1904 and of Edinburgh in 1905; and the Sc. D. of Columbia in 1904.

On June 4, 1890, he married Caroline Hampden of Columbia, South Carolina, who survived him.

Following an operation for gallstone, he died September 7, 1922.

Halsted is a conspicuous example of the great surgical teacher; in him, profound knowledge, unusual experience, and the true scientific spirit were combined with great intellectual honesty. He was an indefatigable worker. His manner was quiet, modest, unassuming.

HOWARD A. KELLY.

HAMILTON, Alexander (1712-1756), of Philadelphia, was a native of Scotland, and a graduate in medicine. He was a cousin of Dr. R. Hamilton, professor of anatomy and botany in the University of Glasgow, where it is probable he received his medical education. He "learnt pharmacy" in the "shop" of David Knox, an Edinburgh surgeon, and visited London. An elder brother, also a physician, had preceded him to Annapolis, Maryland, where he was practicing medicine in 1727. Hamilton was the preceptor of Dr. Thomas Bond (q. v.), of Calvert County, Maryland, who settled in Philadelphia and founded the Pennsylvania Hospital in 1752. In 1745, with Jonas Green, editor of the "Maryland Gazette," he organized at Annapolis the Tuesday Club, of which he was secretary and orator, and "life and soul," during its ten years of existence. The manuscript minutes of the proceedings of this club are in possession of the Maryland Historical Society, constituting three volumes, illustrated with caricatures by the pen of Dr. Hamilton himself. He is truly depicted therein as "Loquacious Scribble, Esq'r."

There appeared in 1807 a remarkable diary of a journey of 1,624 miles made in 1774 by Hamilton to Portsmouth, New Hampshire, and back to Annapolis, It is called the "Itinerarium." Hamilton bore letters of introduction to several eminent physicians, but he found the profession in a very low state, many of the doctors whom he met, especially in New York, being mere "drunken roysterers." He attended several meetings of a "Physical" (Medical) "Club," at Boston, which was presided over by the celebrated Dr. William Douglass (q. v.), a Scotchman of learning, but a cynical mortal, so full of himself that he could see no merit in anyone else. At these meetings they "drank punch, smoked tobacco and talked of sundry physical matters." One subject of discussion with his medical colleagues was the microscope, in which he shows himself an adept, having "seen Leeuwenhoek," the great Dutch microscopist, "and some of the best hands upon that subject."

His literary tastes are shown by his buying and reading a "Homer" in Boston, and by his allusions to current and classical literature. He also took the "Physical News," a medical journal published at Edinburgh. Regarding the history of the manuscript, it was given by the doctor shortly after his return to an Italian gentleman who visited him at Annapolis, and was carried by the latter to Italy. In course of time it was sold and thus got into the book stores of London, where it was found and purchased by Mr. William K. Bixby, of St. Louis. Recognizing its historical value, this gentleman printed a small edition at his own expense for private distribution. On May 29, 1747, Dr. Hamilton married Margaret Dulaney, daughter of the Hon. Daniel Dulaney, of Annapolis, "a well accomplished young lady with a handsome fortune." He died on May 11, 1756.

HAMILTON, Allan McLane (1848-1919), New York specialist in nervous and mental diseases, alienist, and medico-legal practitioner, was born in Brooklyn, New York, October 6, 1848, the son of Philip, the youngest son of Alexander Hamilton the renowned statesman, and of Rebecca McLane Hamilton. He was the great grandson of General Philip Schuyler and of Colonel Allan McLane, the commander of the "Blue Hen's Chickens" in the Revolutionary War, and the grandson of the Honorable Louis McLane who held the treasury and state portfolios in President Jack-

son's cabinet, once a minister to England. As a lad, Allan studied at the Brooklyn Polytechnic Institute and the Poughkeepsie Military Institute. In 1865, he sailed with a party which encircled South America, landing at San Francisco, on the same steamer on which Agassiz (q. v.) headed a scientific expedition bound for Brazil. His first medical studies in the basement office of a country doctor fostered a longing to enter a New York preceptor's office, which was gratified in 1867 when Henry B. Sands (q. v.) took him under tutelage. He was graduated in 1870 from the College of Physicians and Surgeons of New York, where some of his associates were Charles McBurney (q. v.), W. T. Bull (q. v.), and E. L. Trudeau (q .v.), his thesis on galvanopuncture winning the first faculty prize. The last Harsen prize given at the old New York Hospital, where, like many others, he got his first clinical training and lived with a superannuated superintendent and his garrulous family, was also presented to him. His experience in the principal hospitals of New York and Europe was extensive; he engaged in practice in the metropolis as a specialist in diseases of the mind and nervous system.

Dr. Hamilton made his debut in the profession in 1871 with the help of J. Marion Sims, (q. v.), then at the height of his fame, whose advice to start out in a fine office in a good neighborhood was minutely followed. Mayor Hewitt offered him the health commissionership, but since approval of the board could not be secured without a bribe of $5000, Hamilton withdrew his name. Later, he was appointed a health inspector and in 1873 was active in the epidemic of smallpox. In 1879, for an essay on "Diseases of the Lateral Columns of the Spinal Cord," he won the first prize given by the American Medical Association. By the early eighties, he had acquired a large practice as a neurologist. About this time, he made the first observation that lesions of the tempero-sphemoidal lobe cause disturbance of the senses of smell and taste. His interests changed later, and he took up more specifically the work of the alienist and medico-legal practitioner, becoming fascinated with the work and enjoying the spirit of the contests. At over one hundred murder trials where insanity was the issue, he was present either as a witness or in an advisory capacity, and he will be remembered by the laity as the expert who was summoned to Washington in 1882 to testify at the trial of Guiteau, the assassin of President Garfield. Hamilton held that Guiteau was not insane but possessed the same type of mind as Quinby and Mary Baker Eddy. He also examined Gallagher, the would-be murderer of Mayor Gaynor, and his interest in the Thaw case was great throughout. In 1902, he was brought to Buffalo to examine Czolgosz, the assassin of President McKinley, whom he considered insane and whose whole trial appeared to Dr. Hamilton to be a mockery of justice; Czolgosz was a defective drifting toward paranoia with delusions of persecution and grandeur. After 1880, Hamilton was greatly interested in corrective reform of court methods in dealing with this type of criminal.

Doctor Hamilton was professor of mental diseases in Cornell Medical College from 1900 to 1903; lecturer on nervous diseases at the Long Island College Hospital, Brooklyn; visiting surgeon to the epileptic and paralytic hospital on Blackwell's Island; and later physician in charge of the New York State Hospital for Diseases of the Nervous System. His connection with the asylum on Blackwell's Island presented plenty of material for study, but he constantly rebelled at the "dirty hands of politics putting in incompetent superintendents, attendants, and even doctors."

The editorship of the "American Psychological Journal" was his at one time, and he was the author of "Clinical Electro-Therapeutics" (1873), "Nervous Diseases" (1878), "Medical Jurisprudence" (1883), "Insanity in its Medico-Legal Bearings" (1894), "A System of Legal Medicine" (1894), "Railway and Other Accidents" (1904), and many contributions to medical journals. An essay on psychopathic rulers and another on the psychosis of the German Kaiser were published in the "North American Review." Early in his professional life, he gave time to newspaper work and wrote articles on dramatic subjects. He was ever an intimate of the theatres and knew all the celebrities of the stage.

Hamilton had an inventive mechanical turn of mind and made what is to this day the best (non-portable) dynamometer, also a gas cautery and a new double electrode. He was a great collector of sundry and rare objects of art, and his critical judgment was often superior to that of the dealers. His artistic ability is evident in his illustrations in his autobiography and in his clever sketches of friends. He possessed an unfailing sense of humor and a wit inclined to be sardonic. His likes and dislikes were very strong. Rarely attending medical society meetings and averse to entering into public discussions, he

loved small informal social gatherings with his confrères. He traveled much both in this country and abroad, in fact, his fondness for European society, where he had numerous friends and acquaintances, was so great that one might readily imagine that he spent much of his life abroad. He loved the atmosphere of London and at one time practiced there; the beauties of Italy so fascinated him that for a time he had a home in Capri. With Dr. Pearce Bailey (q. v.) and H. R. Stedman (q. v.) of Boston, he founded the New York Psychiatric Society, and he was a Fellow of the Royal Society of Edinburgh.

He married May C. Tomlinson of Sioux Falls, South Dakota, in 1902; they had one son, Louis McLane Hamilton. For a second wife he married Mrs. Maae Copeland Tomlinson of Sioux Falls, S. D.

After a serious illness and a surgical operation from which he never wholly recovered, the last ten years of his life were comparatively quiet. Much of this time was occupied in writing the "Intimate Life of Alexander Hamilton" (1911) and his own most readable autobiography, "Recollections of an Alienist" (1916). Several years before his death, he moved to Great Barrington, Massachusetts, where he died suddenly on November 23, 1919.

HOWARD A. KELLY.

HAMILTON, Frank Hastings (1813-1886), early and noted surgeon of Buffalo and New York, the second son of Calvin and Lucinda Hamilton, was born September 10, 1813, in the hamlet of Wilmington, Windham County, Vermont. In 1816 his parents moved to Schenectady, New York, where he studied at the Lancasterian School and "The Academy;" in July, 1827, he entered the sophomore class of Union College, and was graduated A. B. from this institution. He then studied under Dr. John G. Morgan, of Auburn. During this period he kept bright his anatomical knowledge by making oil paintings of nearly every part of the human form. A full course of lectures at the Fairfield College of Physicians and Surgeons, in 1831, a license from the Cayuga County Medical Censors, and a formal graduation in medicine from the University of Pennsylvania in 1835, gave him the needed authority for his life work.

"About this time," says the late Dr. Samuel W. Francis (q. v.), "young Hamilton was appointed demonstrator of anatomy, made all the dissections, lectured to attentive students, and subsequently, when Dr. Morgan was called to the professor's chair at Geneva Medical College, in accordance with the wishes of those around him Hamilton delivered a full course of lectures on anatomy and surgery and continued to lecture until the year 1838." On January 23, 1839, he assumed the chair of surgery in the Western College of Physicians and Surgeons, and then again, August 10, 1840, took a corresponding position in the Geneva Medical College. Here he remained for nearly four years, when, his ambition once more getting the better of him, he gave up his chair and went to Buffalo to resume practice as a surgeon. In 1843 and 1844 a visit to Great Britian and the Continent, extending over a period of seven months, supplied materials for a diary, which soon after appeared in the "Buffalo Medical Journal."

In Buffalo Hamilton met Dr. Austin Flint, Sr. (q. v.) and the two became great friends. In 1864 they, together with Dr. James Platt White (q. v.), also of Buffalo, added to the University of Buffalo a medical department, which rapidly became one of the features of the institution. Dr. Hamilton became its professor of surgery. For twelve years, from 1846 to November 28, 1858, he retained his position in the University, and then moved to Brooklyn. Hardly had he got fairly settled in his new home, and become the first professor of surgery that the Long Island College Hospital ever had, when he entered the army as a volunteer regimental surgeon, being assigned to the thirty-first New York Infantry. On February 9, 1863, he was appointed, by the president and senate, medical inspector of the United States Army, with the rank of lieutenant-colonel. After two years and four months of active service he resigned his commission and returned to New York. In April, 1861, he became professor of military surgery, fractures and dislocations, and professor of clinical surgery in the Bellevue Hospital Medical College. He remained in these positions until May, 1868, when, upon the resignation of Dr. James R. Wood (q. v.), he was made professor of the principles of and practice of surgery and surgical pathology and continued in this capacity until March 15, 1875, when he resigned.

His writings include: "Life and Character of Dr. T. Romeyn Beck." Published by order of the Senate of New York State, 1856, "Compound Fractures of Long Bones," 1857; "Treatise on Fractures and Dislocations," 1860; Second edition, 1862. "Treatise on Military Surgery and Hygiene." First edition, 1862. Second edition, 1865. Many articles

of his also appeared, at various times, in the "Buffalo Medical and Surgical Journal." "A treatise on the Principles and Practice of Surgery" was first published in 1872, a third edition of which was issued a few weeks before his death. "Surgical Memoirs of the War of the Rebellion," edited by him, was published in 1871 under the direction of the United States Sanitary Commission.

Skin-grafting was probably first suggested by Hamilton, then of Buffalo, in 1847. In 1854 he reported a case in which he had successfully grafted a large raw surface caused by a heavy stone falling on a man's leg. As an inventor and contributor to the armamentarum chirurgicum, he dispensed with the useless and clumsy for the practical and efficacious. He rendered more precise the methods of amputation through the joints by a resort to so-called "keys" and "guides."

In 1855 he was chosen president of the New York State Medical Society; in 1857 was president of the Erie County Medical Society; in 1866 of the New York Pathological Society; in 1875 and 1876 of the New York Medico-Legal Society; in 1878 of the American Academy of Medicine; in 1878 and 1885 of the New York Society of Medical Jurisprudence; from 1880 to 1884 he was vice-president of the New York Academy of Medicine. In 1868 he was made Honorary Associate Member of the College of Physicians and Surgeons, and in 1869 the trustees of Union College conferred upon him the degree of doctor of laws.

His conduct as consultant in the case of the lamented Pres. Garfield, at whose bedside he was a conspicuous figure, and his candor in joining in the publication of the true causes of the embarrassments in treatment, as revealed by the necropsy, have passed into the noted annals of surgery.

Dr. Hamilton was twice married. His first wife was Mrs. Mary Virginia McMurran, a daughter of Isaac Van Arsdale, a planter, living near Shepherdstown, Virginia. She died on April 8, 1838, leaving one son, Theodore B. He married a second time on September 1, 1840, his bride being Mary Gertrude Hart, daughter of Judge Orris Hart, of Oswego, New York. By his second wife, who died in July, 1885, Dr. Hamilton had three children. His valuable library was purchased by Dr. J. B. Hamilton (q. v.) of the United States Marine Hospital Service, and his unique collection of surgical specimens was bequeathed to the Army Medical Museum in Washington. He died in full possession of his faculties at his home in New York, of fibrous phthisis, on August 11, 1886, after protracted suffering.

HAMILTON, John B. (1847-1898), editor of the "Journal of the American Medical Association," a successful surgeon and writer and a worker for reform in the United States Marine Hospital Service, the son of Rev. Benjamin Brown Hamilton, was born in Jersey County, Illinois, on December 1, 1847. He was graduated from Rush Medical College in 1869, and married, in 1871, Mary L. Frost, having two children. Dr. Hamilton entered the Marine Hospital Service by competitive examinations, where, rising rapidly to the rank of supervising surgeon-general, he reorganized the whole department, introduced the physical examination of seamen and managed campaigns against yellow fever. His surgical skill won for him a position in Rush Medical College, and while in Washington he was surgeon to Providence Hospital and professor to Georgetown University, medical department, for eight years, and this university gave him her LL. D. On returning to Chicago he was made professor of the principles of surgery and clinical surgery in Rush Medical College and the same in the Chicago Polyclinic. The great feature of his surgical work was accurate diagnosis, and his clinic was of inestimable value to students. Among his best operations was that for hernia, he being one of the first to introduce modern methods into Chicago and improve on them.

His writings are chiefly scattered through medical journals; he edited Moulin's Surgery, and the "Journal of the American Medical Association" for four years. He made his home in Elgin, where he was superintendent of the insane asylum. A fairly full list of his writings is in the Surgeon-General's Catalogue, Washington, D. C.

He died when fifty-one, of typhoid fever, after an arduous life of unselfish devotion to the public good.

HAMLIN, Augustus Choate (1829-1905), nephew of Vice-President Hamlin, son of a famous Maine politician, Elijah J. Hamlin, was born in Columbia, Maine, August 28, 1829. He was educated at a Maine academy and at Bowdoin in the class of 1851; medically at Harvard in the class of 1855. Immediately after graduation from the Harvard Medical School, he spent more than a year in Europe, chiefly in London and Vienna, and on his return, settled in Bangor, Maine, for medical practice until the opening of the Civil

War. Previous to that time he had married Helen Cutting, daughter of Judge Jonas Cutting, of the Maine Supreme Court.

Early in April, 1861, he enlisted a company of infantry, equipped them with everything needed for war at his own expense, saw them put into a regiment and off for the war, and he himself went to the front as assistant surgeon of the Second Maine Infantry. He was promoted to the position of brigade surgeon in 1862 and medical inspector of the United States Army in 1863. His army medical experience was very large, as he attended the wounded on almost every extensive battlefield during the war and during a campaign in which he was the chief surgeon under Gen. Siegel, in northern Virginia. He personally organized his famous flying hospitals, the first of that sort then known.

Being honorably discharged in December, 1865, at the close of the war, having served the entire period, he resumed his former practice in Bangor, was a high official in the Grand Army, twice mayor of Bangor, and prominent in medical circles throughout the state. During his time of service as mayor a Russian man-o'-war spent the winter at Bar Harbor, and Dr. Hamlin devoted so much time to the medical care and comfort as well as the entertainment of the officers and crew that in recognition of the courtesy, the Emperor Alexander II. decorated him with the insignia of Chevalier of the Order of St. Anne. He was also commissioner of the centennial of the town of York, fellow of the American Association for the Advancement of Science, member of the Philadelphia Academy of Science and fellow of the Royal Society of Antiquarians of Northern Europe. He was an expert in precious stones, tourmalines in particular, of these he made a unique and exceedingly beautiful collection, from his own mine on Mount Micalin, Oxford County, Maine. He also wrote a handsomely illustrated monograph on these beautiful gems.

Dr. Hamlin was a raconteur and writer, speaking often on military operations during the war and writing a history and defense of the Eleventh Corps at the bloody conflict of Chancellorsville, for which he was presented with a magnificent loving-cup, soon after its publication.

The death of a son, of a daughter and of a much beloved mother seriously affected his affectionate nature, and he finally succumbed to death, November 6, 1905.

One of Dr. Hamlin's papers on "Transfusion of Blood" received high commendation when read before the Maine Medical Association in 1874. He was a man of unusual culture, gifted with a fine literary taste, fond of books, pronounced in his likes and dislikes, and had a large circle of friends.

JAMES A. SPALDING.

Hammer, Adam (1818-1878), pioneer German physician of St. Louis. See American Medical Biographies H. A. Kelly and W. L. Burrage, Balto. 1920, pages 485, 486.

HAMMOND, William Alexander (1828-1900), surgeon-general of the United States Army and an able neurologist, was the son of Dr. John W. Hammond of Anne Arundel County, Maryland, and was born at Annapolis, August 28, 1828, receiving his M. D. from the University of the City of New York in 1848, and after some hospital experience entering the United States Army as assistant surgeon in 1849. He served at various frontier stations in New Mexico, Kansas, Florida and at West Point, participating in numerous Indian campaigns and occupying his leisure time chiefly with physiological and botanical investigations. In 1857 he was awarded the American Medical Association prize for an exhaustive essay on "The Nutritive Value and Physiological Effects of Albumen, Starch and Gum When Singly and Exclusively Used as Foods." In 1860 he resigned military service to accept the chair of anatomy and physiology in Maryland University and remained in active conduct of his department and in professional practice in Baltimore until the outbreak of the Civil War, when he resigned, appeared before the army medical examining board, and re-entered the service as assistant surgeon. On account of his previous experience he was at once assigned to administrative work in the organization of hospitals and sanitary stations, in which he was so successful as to attract the attention of the Sanitary Commission, which, being dissatisfied with the administration of the medical department of the army, successfully urged his appointment as surgeon-general. The work of the surgeon-general's office at once assumed an aspect of efficiency and force, but the promotion of Hammond over the heads of the assistant surgeon-general and the rest of the staff did not fail to create much antagonism upon the part of his confrères. More particularly his masterful and forceful administration so clashed with the autocratic spirit of Edmund M. Stanton, Secretary of War, that the result was a court-

martial by which Hammond was dismissed from the service, a sentence shown later to be unjust and reversed by action of Congress, which, in 1878, provided for the appointment of Gen. Hammond with the full rank of brigadier-general previously held by him, upon the retired list.

During the period of his service as surgeon-general from April 28, 1862, to August 18, 1864, he accomplished many reforms in army medical administration. He inaugurated the "Medical and Surgical History of the War of the Rebellion," established the Army Medical Museum, introduced the pavilion system of hospital construction extensively throughout the service, and provided suitable habitation for the sick and wounded. The liberal issue of medical books and journals to the medical officers which has done so much towards maintaining the high standard of the department was due to him. Many other forms which later became realities were also recommended by him, such as the formation of a permanent hospital corps, the establishment of an army medical school, the location of a permanent general hospital at Washington and the institution of a military medical laboratory. In addition he urged the autonomy of the medical department in construction of buildings and transportations of supplies, a measure the full materialization of which is still believed to be essential to the service of the sick in war.

His court-martial left him in great pecuniary embarrassment, and it was only through the courtesy of a professional friend, who raised a purse for his benefit, that he was enabled, pending his ultimate vindication, to go to New York, where he became a noted alienist and lectured upon that subject in the College of Physicians and Surgeons, later in Bellevue Hospital Medical College, the University of the City of New York, and the New York Post-Graduate Medical School; of the last he was one of the founders. He made many original investigations and utilized extensive clinical opportunities for the recognition and development of hitherto unrecorded conditions; but perhaps his description of the disease called by him, and now universally known as "athetosis," is best known.

He wielded a most facile pen, and even when carrying the enormous burden of directing the medical department in the war, found time to produce a comprehensive work on "Military Hygiene." His medical books consist chiefly of works devoted to nervous affections, and of these his treatises on "Diseases of the Nervous System" and "Insanity in its Medical Relations" are the best known. But he is not unknown as a play-writer, and his "Son of Perdition" is thought by some to be the best novel of the Christ ever produced. From 1867 to 1872 he edited the "Quarterly Journal of Physiological Medicine and Medical Jurisprudence;" from 1867 to 1869 he was editor of the "New York Medical Journal," and later editor and promotor of the "Journal of Nervous and Mental Diseases," 1867 to 1883.

In addition to the writings named should be mentioned his "Physiological Memoirs," Philadelphia, 1863; "Military Medical and Surgical Essays for the United States Sanitary Commission," Philadelphia, 1864; "A Treatise on Insanity in its Legal Relations," New York, 1883. A yet fuller list can be seen in the Surgeon-General's Catalogue, Washington, D. C.

In 1878, having acquired an ample fortune and having secured his vindication from, and restoration to, the army, he returned to Washington, where he lived until his death from cardiac failure. During this period he took great interest in the subject of animal extracts, and was largely instrumental in their introduction into professional work.

JAMES EVELYN PILCHER.

Hand, Daniel Whilldin (1834-1889), army surgeon of St. Paul, Minnesota. See American Medical Biographies, H. A. Kelly and W. L. Burrage. Balto. 1920, pages 487, 488.

HAND, Edward (1744-1802), surgeon and major-general, in the Continental Army was born in Clyduff, Kings County, Ireland, December 31, 1744. In 1774 he came to America as surgeon's mate with the Eighteenth Royal Irish Regiment, but soon resigned to practice medicine in Pennsylvania. However, on the breaking out of the Revolution he sought and received a commission as lieutenant-colonel in the Pennsylvania Line, in March being commissioned colonel, and taking part in the retreat of the American Army from Long Island while in command of the First Regiment of the Pennsylvania Line. His interesting account of his part of the retreat is preserved. In April, 1777, he was made brigadier-general, and took part in the battle of Trenton; in 1778 he commanded a body of troops at Albany, then went with Gen. Sullivan against the Six Indian Nations; in 1781 he succeeded Alexander Scammell as adjutant-general, and in 1780 was made

major-general. In the years 1784-85 Hand represented Pennsylvania in Congress.

He was modest, was popular with his men although a "severe disciplinarian," and was "known as one of the handsomest men of the Continental army," and a fine horseman. He died of cholera morbus September 3, 1802, at Rockford, near Lancaster, Pennsylvania.

HANDERSON, Henry Ebenezer (1837-1918), medical historian, son of Thomas and Catherine Potts Handerson, was born March 21, 1837, in Cuyahoga County, Ohio. Thomas Handerson died in 1839, and Henry and a sister were adopted by an uncle, Lewis Handerson, a druggist, of Cleveland. Though often sick, Henry went to school a part of the time, and at fourteen was sent to boarding school, Sanger Hall, New Hartford, New York. Poor health compelled him to leave school, and with his foster father and family he moved to Beersheba Springs, Tennessee. In 1854 the boy returned to Cleveland and entered Hobart College, Geneva, New York, where he took an A. B. in 1858. Returning to Tennessee, he spent about a year in surveying land and in other work, and then became private tutor in the family of a cotton planter in Louisiana. In 1860 he matriculated in the medical department of the University of Louisiana (now Tulane University), where he studied through the winter and also heard many of the political arguments of that exciting time. The bombardment of Fort Sumter, April 12, 1861, which ushered in the war, found Handerson again a private tutor in a Southern family. He joined a company of "homeguards" formed among the planters and their sons, for the purpose of maintaining "order among the negroes and other suspicious characters of the vicinity."

On June 17, 1861, he volunteered in the Stafford Guards, which later became Company B of the Ninth Regiment of Louisiana Volunteers, Confederate States of America, Colonel (later brigadier-general) "Dick" Taylor (son of "Old Zack," the president of the United States) in command. From then until the close of the war, Handerson experienced the vicissitudes of a soldier's life, including a gunshot wound and an attack of typhoid fever. He rose steadily and became adjutant-general of the Second Louisiana Brigade, with rank of major. On May 4, 1864, Adj.-Gen. Handerson was taken prisoner and not liberated until June 17, 1865. He then resumed his medical studies, this time in the College of Physicians and Surgeons of New York (medical department of Columbia University), taking the degree of M. D. in 1867. Hobart College conferred the degree of A. M. on him in 1868.

February 25, 1878, Dr. Handerson read before the medical society of the county of New York an article entitled "The School of Salernum; an Historical Sketch of Mediæval Medicine." This essay attracted wide attention to its author's scholarly attainments and love of laborious research. Dr. Handerson practiced medicine in New York City from 1867 until he removed to Cleveland, Ohio, in 1885.

In 1889 appeared the American edition of the "History of Medicine and the Medical Profession, by Joh. Hermann Baas, M. D.," which was translated revised, corrected and enlarged by Dr. Handerson. Concerning Dr. Handerson's writings, Dr. Fielding H. Garrison gives a brief but just estimate: "The earliest of Dr. Handerson's papers recorded in the "Index Medicus" is 'An Unusual Case of Intussusception' (1880). Most of his other medical papers, few in number, have dealt with the sanitation, vital statistics, diseases and medical history of Cleveland, and have the accuracy which characterizes slow and careful work. This is especially true of his historical essays, of which that on 'The School of Salernum' (1883) is a solid piece of original investigation, worthy to be placed beside such things as Holmes on homoeopathy, Weir Mitchell on instrumental precision, or Kelly on American gynecology. To the cognoscenti, Dr. Handerson's translation of 'Baas' History of Medicine' (1889) is known as 'Handerson's Book'; he has added sections in brackets on English and American history which are based on original investigation and of permanent value to all future historians. Handerson's Baas is thus more complete and valuable than the Rhinelander's original text." Dr. Handerson contributed many well written biographies to the "Cyclopedia of American Medical Biography," 1912.

Dr. Handerson was professor of hygiene and sanitary science in the medical department of the University of Wooster, 1894-96, and the same in the Cleveland College of Physicians and Surgeons (medical department of Ohio Wesleyan University) 1896 to 1907. He was a member of the Cuyahoga County Medical Society and its president in 1895; also a member of the Cleveland Academy of Medicine, of the Ohio State Medical Society, and of the American Medical Association. He was one of the founders of the Cleveland

Medical Library Association and its president from 1896 to 1902. He was a lifelong member and trusted officer of the Episcopal Church. In later life Dr. Handerson retired entirely from practice, and two years before his death became totally blind, though retaining his other faculties perfectly until two days before his death, which occurred April 23, 1918, from cerebral hemorrhage.

On October 16, 1872, he married Juliet Alice Root, who died, leaving him a daughter, and on June 12, 1888, he married Clara Corlett of Cleveland, by whom he had two sons.

Educated in the North and South, and having many associations and friendships on both sides of the Mason and Dixon Line, naturally of a judicial and philosophical mind, Dr. Handerson was broad in his views and sympathies, and his opinion was much valued by his colleagues. He was tall and dignified in appearance, quiet in manner, yet genial. His sterling character was recognized, and he was held in high regard by both profession and laity.

SAMUEL W. KELLEY.

HANKS, Horace Tracy (1837-1900), New York gynecologist, was born at East Randolph, Vermont, on June 27, 1837. As a boy he attended academies in Orange County, in West Randolph, Vermont, and Royalston, Massachusetts. He taught in the last-named academy, and also in the public schools, like many New England boys who have been compelled to rely upon their own efforts in procuring a professional education, and in 1859 he was studying medicine under Prof. Walter Carpenter, of Burlington, Vermont, and attending lectures at the University of Vermont. In 1861 he received his M. D. from the Albany Medical College. One year was spent in the Albany City Hospital, and early in 1862 he received a commission as assistant surgeon in the Thirtieth Regiment, New York Volunteers. After serving in the field for one year and participating in several of the principal battles fought by the Army of the Potomac—notably those of Fredericksburg, under Gen. Burnside and Chancellorsville, under Gen. Hooker—he was ordered to Washington, and for a considerable time was in charge of the Armory Square Hospital. Returning to Royalston, Massachusetts, after being mustered out, he practiced in that place until 1868, when he went to New York to attend lectures at the College of Physicians and Surgeons. He decided to settle in New York, and in 1872 was appointed one of the attending gynecologists to the Demilt Dispensary. Dr. Hanks' opportunities at the Demilt Dispensary gave to him the stimulus for work in the field of gynecology, and it was not surprising that he obtained the position of assistant surgeon in the Woman's Hospital in 1875, and that he was promoted to be attending surgeon in 1889.

Dr. Hanks delivered the course of lectures on obstetrics at Dartmouth Medical School in 1878. In 1885 he was chosen one of the professors of diseases of women in the New York Post-Graduate Medical School and Hospital, and held the position until 1898, when failing health compelled him to resign. He was a consulting gynecologist to the Northeastern Dispensary, the Newark Hospital for Women, St. Joseph's Hospital of Yonkers, and several other out-of-town hospitals. He was a member of the American Gynecological Society and of the British Gynecological Association, the New York Academy of Medicine (of which he was vice-president for three years), the New York State Medical Society, the Medical Society of the County of New York (of which he was president for two years), and the New York Obstetrical Society. He was also an honorary member of the Boston Gynecological Society. In 1898 the University of Rochester conferred upon him the honorary degree of LL. D.

Dr. Hanks was twice married; to Miss Martha L. Fisk, whom he wedded in 1864. She died in 1868, leaving one daughter. The daughter died in New York in 1874. His second wife, whom he married in 1872, was Miss Julia Dana Godfrey, of Keene, New Hampshire.

For one who was so actively engaged in practice, Dr. Hanks contributed many excellent papers to the medical press. His style was forceful, clear and concise, and always carried the conviction that he had thoroughly thought out and fully mastered the subjects upon which he wrote. Among these papers are four read before the American Gynecological Society and published in the transactions: "On the Early Diagnosis of Ectopic Pregnancy and the Best Method of Treatment," 1888; "Rules to be Followed in the Effort to Prevent Mural Abscesses, Abdominal Sinuses, and Ventral Hernia, after Laparotomy," 1890; "Secondary Hemorrhage after Ovariotomy: Can We Prevent It?" 1892; "Total Extirpation of the Uterus and Appendages for Diseases of These Organs," 1894.

The graduated double ended steel sounds for dilating the uterine canal for the purpose of curetting on for exploration were long known as "Hanks' Dilators."

During the last two years of his life Dr. Hanks showed the effects of constant and exhausting work. In 1900 his condition became more serious, and well-marked symptoms of acute nephritis made their appearance, which terminated his life on November 18.

JOSEPH EDWARD JANVRIN.

HARD, Nichols (1818-1851), of Aurora, Illinois, was descended from a long line of educated ancestors who had lived in the state of New York. He was one of four brothers, each of whom studied medicine, and three of whom were among the ablest practitioners in northern Illinois during their lifetime. Nichols Hard was born July 4, 1818, probably at Geneva, New York. While his sons were still young, the father, Peter Nichols Hard, moved from New York to Grass Lake near Dexter, Mich., where he was drowned in 1837. Thrown on his own resources when 18 years of age, Nichols matriculated in the Medical College of Ohio at Cincinnati in 1839, and graduated from that school in 1841, when 22 years old. One week after his graduation, he began a journey by boat from Cincinnati to New Orleans. A little "Journal," which he kept during the trip, enables us to form some picture of this modest, enthusiastic youth, and to recognize the qualities which characterized him always. There is evidence of his acute power of observation, interest in the objects of nature, love of the beautiful, and a gentle humor. The first entry in the "Journal," a farewell to the "Queen City," "Peace be within thy walls, where I have passed hours of sadness and moments of bliss," suggests that he had not secured his medical education without a struggle. Reference is made to points of interest along the Ohio and Mississippi rivers. At Northbend he saw the "log cabin" of President Harrison and remarked: "Here from this spot on the banks of the Ohio, have the millions of freemen chosen a Chief Magistrate—whether in "wisdom or weakness," time will soon inform us." Near Baton Rouge, he accomplished the principal purpose of his journey in visiting an elder half-brother, whom he had never seen. This half-brother, Anson Owen Hard, was his senior by 5 years, and received the degree of M. D. from Yale College in 1836. He was practicing medicine at Stony Point, near Baton Rouge, La. The "Journal" ends at New Orleans, of which he wrote with much interest. In the fall of 1842, we find him at St. Charles, Ill., beginning his successful career as a teacher, and writing enthusiastic letters of his work and prospects to Eunice Farnsworth, whom he married April 9, 1843. He continued to teach in the medical school operated by George W. Richards (q. v.) and to practice medicine at St. Charles until 1845, when he moved to Aurora, Ill., where he successfully practiced medicine until his death.

In 1844, Nichols Hard became professor of obstetrics and diseases of women and children in the Medical Department of LaPorte University, and served in this capacity until 1850, when the school was discontinued. Two addresses prepared by him while connected with the medical school at LaPorte have been found. One is a valedictory address given at the close of the session in 1846, entitled "The Practice of Medicine—Its Roses and Thorns—the Way to Secure the Former and Avoid the Latter." The other address is an introductory lecture read in 1848. He then departed from the common custom and presented a discussion of a purely scientific subject. The subject of "Atresia Vaginae" was discussed in a masterful manner, illustrated from personal experience, and showed his skill as a teacher and writer. From the time, he settled in St. Charles to his death, he was a popular preceptor of medical students, large numbers of whom came to him for instructions. At the meeting of the Fox River Medical Association at Elgin, Feb. 1, 1850, he "delivered an able and interesting address on cholera, showing its contagious character as exhibited in the epidemic of 1849, especially in which appeared at Aurora, Kane Co., Ill., the fallacy of specific cures and the departure from the usual concomitant symptoms as there exhibited."

In 1850, N. Hard was made professor of anatomy in the University of Iowa at Keokuk. In the summer of 1851, he contracted cholera, and with impaired health an attack of dysentery caused his death, Oct. 16, 1851. A colleague wrote of him: "Prof. Hard maintained a good character as a pleasing and instructive lecturer during his connection with the medical schools at LaPorte, Ind., and Keokuk, Iowa, and enjoyed a high reputation as a practitioner in Aurora, Ill., the place of his residence. He has been cut down in the prime of life and in the midst of his usefulness." N. Hard was fond of the best literature, and had excellent musical taste,

as had also his wife. They were the first in Aurora to possess a piano. He collected a cabinet of geological specimens and wrote shorthand. Kindly toward others, he received an unrelated orphan girl into his family, and took an active part in the education of his two younger brothers. Both brothers became able physicians, Chester Hard in Ottawa and Abner Hard in Aurora, Ill. His life work was completed when he was but 33 years of age.

GEORGE H. WEAVER.

HARDAWAY, William Augustus (1850-1923), dermatologist of St. Louis, the son of William Augustus and Mary del Barco Hardaway, was born June 8, 1850, in Mobile, Alabama. When he was seven years old, the Hardaways moved to St. Louis, Missouri. After a preliminary education there and special courses at Westminster College and the University of Virginia, he studied medicine first at the St. Louis College of Physicians and Surgeons and then at the Missouri Medical College where he took his M. D. in 1870. Subsequently he received the honorary A. M. of St. Louis University and the LL. D. of Westminster College.

Hardaway was among the pioneers in dermatology and contributed largely to its development. He was one of the founders of the American Dermatological Association in 1876 and its president in 1885. He early introduced electrolysis, originally employed by C. E. Michel (q. v.) to destroy wild hairs of the lids. He began to teach in the Missouri Medical College shortly after graduation and continued after the merger with the Medical Department of Washington University until his resignation in 1910. As a teacher, he was clear and forceful and his knowledge was wide and exact. As a clinician he was unexcelled. He had a remarkable memory and in later years often drew on its resources as he sat with a few intimates at the close of a busy day. One of his favorite indulgences was the original limerick.

He was the author of "Essentials of Vaccination," 1882, "Manual of Skin Diseases," 1890 (second edition, 1898), and special articles contributed to the various "Systems" edited by Pepper, Keating, Hare, Morrow, Dennis, and Park, also to the "Reference Handbook of the Medical Sciences," to Gould and Pyle's "Cyclopedia of Practical Medicine and Surgery," to the "American Textbook of Diseases of Children," and to the "American Year Book of Medicine and Surgery." With Dr. L. B. Bangs (q. v.) he edited the "American Textbook of Genito-urinary Diseases, Syphilis, and Diseases of the Skin," 1898, and with Dr. Joseph Grindon, "The Handbook of Cutaneous Therapeutics," 1907.

On January 8, 1877, he married Lucy Nelson Page of St. Louis.

Dr. Hardaway died suddenly at midnight March 3, 1923.

HARE, Robert (1781-1858), an eminent American pioneer chemist and writer on scientific and moral subjects, was born in Philadelphia, January 17, 1781, the son of Robert Hare and Margaret Willing. After leaving school he went into his father's brewery, studied the composition of malt liquors and invented a barrel which would resist an extra strong pressure of carbonic acid gas. Then, at the age of twenty, he entered the chemistry department of the University of Pennsylvania where, together with Benjamin Silliman, (q. v.) he studied under Woodhouse (q. v.). Yale in 1806 and Harvard in 1816 bestowed on him the honorary degree of M. D.; in 1818 he was elected professor of natural history and chemistry in William and Mary College, holding the position until he was called to the chair of chemistry in the University of Pennsylvania the same year, a chair he was to occupy for thirty years.

As early as 1801, at the age of twenty, Dr. Hare invented the hydrostatic or oxyhydrogen blowpipe and received the Rumford medal of the American Academy of Arts and Sciences; in 1803 he read a paper before the American Philosophical Society, in which he described an apparatus by the means of which he fused for the first time in large quantities, lime, magnesium and platinum. He invented the calorimeter, a voltaic arrangement of large plates that produced heat; the deflagrator, a machine for producing heat on the plan of the oxyhydrogen blowpipe; he devised a plan to denarcotize laudanum. Dr. Hare was a life member of the Smithsonian Institution, and to it he left his chemical and physical apparatus when he resigned his chair in the University. He was a member of the American Philosophical Society, and an associate member of the American Academy of Arts and Sciences (1824). He wrote and lectured in support of Spiritualism, in which he became a believer in the later years of his life and he contributed largely to scientific periodicals. Under the "nom de plume" of Eldred Grayson, he wrote moral essays published in the "Portfolio."

Dr. Hare married Harriet Clark in 1811. He died in Philadelphia, May 15, 1858.

HOWARD A. KELLY.

HARGIS, Robert Bell Smith (1818-1893), of Pensacola, Florida, was born in Hillsborough, North Carolina, June 7, 1818, of Scotch-Irish descent. His early education was received at the University of North Carolina; he studied medicine three years under Dr. J. T. Jordan at Fayettville in the same state and was graduated from the Medical College of Louisiana (later Tulane University Medical Department) in 1844. For one year Dr. Hargis practiced in Mobile, Alabama, but having malaria he moved into a higher country at Mt. Pleasant in the same state. There he remained until 1851 when he settled in Pensacola, Florida, becoming port physician. In 1853 he took yellow fever, at that time prevalent, and went to Milton, in the same state, to convalesce, but returned the following year to Pensacola to accept the position of surgeon to the Marine Hospital, recently established, holding the office until the beginning of the Civil War in 1861. Then he served in the medical corps of the Confederate Army under General Braxton Bragg and subsequently held a commission as surgeon until the end of the war. Settling in Pensacola again in 1865, he associated himself with Dr. J. C. Whiting and established the Pensacola Hospital in 1868. In 1882 he was president of the Florida Medical Association, having previously been president of the board of health of Escambia county. With Dr. William Martin of the United States Navy, Dr. Hargis conducted an investigation of the yellow fever epidemics of 1882 and 1883. Twenty years after the close of the war he was appointed acting assistant surgeon to the United States Marine Hospital, holding the office for the rest of his life. Another honorary office he held for many years was president of the board of medical examiners of the First Judicial District of Florida.

He wrote on yellow fever in the "New Orleans Medical News and Hospital Gazette," January, 1859, again on its history and origin, in the proceedings of the American Public Health Association, 1880. He was the author of "Sketches of the History of Quarantine at Pensacola, Florida," "National Board of Health Bulletin," 1881; "The Natural History of Plagues," 1887; "The Tropical Application of Oil of Turpentine to Recent Wounds," Philadelphia "Medical News," 1888; and a large number of short articles on yellow fever quarantine and public hygiene in a variety of medical journals. He died at Pensacola, November 30, 1893.

HARISON, Beverly Drake (1855-1924), of Detroit, author of the medical practice act of Michigan, was born May 8, at Canton, New York, the son of Minturn and Susan Drake Harison. He was educated at Bishop's College, Quebec, Trinity College, Toronto, and the University of Toronto Faculty of Medicine, from which he received his M. D. in 1901. He practiced medicine in Ontario, then in Sault Ste. Marie, and moved to Detroit in 1906. Dr. Harison will be remembered as a pioneer in medical legislation; he was prominent in securing for Michigan its medical practice act, the first and only secretary of the Michigan State Board of Registration in Medicine, and the organizer and secretary of the American Confederation of Reciprocating State Medical Boards. He was president of the State Hospital, Newberry, Michigan, president of the Michigan State Medical Society, and during 1917-18 captain in the Medical Corps, U. S. A. He was the author of "Medical Reciprocity," 1902.

On October 9, 1889, Harison married Josephine, daughter of James Frederick Lister, K. C., Toronto. His death followed a long illness at the Battle Creek Sanitarium, December 6, 1924.

HARLAN, George Cuvier (1835-1909), Philadelphia ophthalmologist, was named for the French naturalist who was a lifelong friend of his father, Richard Harlan (q. v.). George was born in Philadelphia, Pennsylvania, January 28, 1835, and died September 25, 1909, following a fall from a horse. He received the degree of B. A. from Delaware College in 1855, obtaining the master's degree three years later. He graduated in medicine from the University of Pennsylvania in 1858, his inaugural thesis being upon the subject of "The Iris." On April 6, 1857, apparently several months before he received his M. D. he was appointed resident physician at Wills Eye Hospital, in which institution he held the position of surgeon from March 4, 1861 to 1864, returning to active work in the same capacity in 1868, and remaining uninterruptedly in office for twenty-three years, resigning on May 8, 1901. He was later made consulting surgeon and held this position until his death. He also held residencies in the Pennsylvania and St. Joseph's hospitals; the latter during 1858-1859. Later he became at-

tending surgeon to St. Mary's and the Children's hospitals, all in Philadelphia.

At the beginning of the Civil War in 1861 he was appointed acting assistant surgeon in the U. S. Navy, being assigned to the gunboat "Union". He resigned August 15th of the same year and in the following September was made major and surgeon in the Eleventh Pennsylvania Cavalry. During the war he was captured and sent to Libby prison in Richmond, Virginia, and honorably mustered out of the service, September 28, 1864.

In 1875 he became ophthalmologist to the Pennsylvania Institution for Instruction of the Blind, at which place he made many scientific investigations and did much clinical work. His interest in the welfare of the eyes of the children under his care never lessened. In 1879 he became connected with the Eye and Ear Department of the Pennsylvania Hospital which he raised to the high standard of efficiency which it at present enjoys. He was emeritus surgeon at the time of his death. Also he was consulting ophthalmologist in the Pennsylvania Institution for the Deaf and Dumb from 1883 until his death.

Dr. Harlan occupied the first chair of opthalmology (later emeritus) at the Polyclinic and School for Graduates in Medicine and his remarkable teaching abilities will be long remembered by many of his students. He became a member of the College of Physicians of Philadelphia in 1865, the American Ophthalmological Society in 1873, the Wills Hospital Ophthalmological Society in 1876, the Philadelphia County Medical Society in 1876, the Medical Society of the State of Pennsylvania, the American Medical Association and the American Otological Society in 1882. In 1893 he was elected president of the American Ophthalmological Society, and in 1904 chairman of the Section on Ophthalmology at the Universal Exposition held in St. Louis, Missouri. He was president of the Association of Wills Hospital Residents and Ex-residents and dean of a similar association in St. Joseph's Hospital, Philadelphia. Dr. Harlan married Mary D. Holman of Boston, October 17, 1866.

His contributions to his special branch of medicine were important and numerous. His book on "Eyesight and How to Care for It," published in 1879, enjoyed a large circulation, and his articles on "Diseases of the Eyelids" and "Operations Performed upon the Eyelids" in Norris and Oliver's "System of Diseases of the Eye" are justly ranked among the best expositions of the subject. At the time of his death he was associated with the editorial staff of "Ophthalmology".

His operation for symblepharon and his tests for malingering were well known and extensively employed. As an operator Dr. Harlan was one of the most careful, most conscientious and most successful of special surgeons; "as a man, he was gentlemanly, noble and unassuming, one who knew true friendship in all of its meanings."

LEWIS H. TAYLOR.

HARLAN, Richard (1796-1843), anatomist of Philadelphia, was born in that city, September 19, 1796, and previous to graduation at the medical department of the University of Pennsylvania in 1818, made a voyage to Calcutta as surgeon of an East India ship. In 1818 Dr. I. Parrish (q. v.) opened a private dissecting room in Philadelphia and placed Harlan in charge of it. He practiced in Philadelphia, was elected in 1821 professor of comparative anatomy in the Philadelphia Museum, and was surgeon to the Philadelphia Hospital. In 1832, after the appearance of the Asiatic cholera in Montreal, he was appointed, together with Dr. Meigs and Dr. Jackson, to proceed to that city and obtain information concerning the best mode of treating that terrible disease. In 1838 he visited Europe a second time, and after his return in 1839 removed to New Orleans, and became in 1843 vice-president of the Louisiana State Medical Society. He was a member of many learned societies in this country and abroad. He died of apoplexy in New Orleans, September 30, 1843, at the age of 47. Dr. Harlan was father of the ophthalmologist George Cuvier Harlan (q. v.).

His chief writings were: "Anatomical Investigations," comprising descriptions of various fasciæ of the brain, 10 pt. (8°, Philadelphia, 1824); "Observations on the Genus Salamandra," Philadelphia, 1824; "Fauna Americana," being a description of the mammiferous animals inhabitating North America, 1825; "Medical and Physical Researches," Philadelphia, 1835, a collection of previous medical essays; translations of Gannal's "History of Embalming," 1840.

HARLOW, John Martyn (1819-1907), of Cavendish, Vt. and Woburn, Mass. who reported a remarkable case of brain injury, was born in Whitehall, New York, November 25, 1819, son of Ransom and Annis Martyn Harlow. He fitted for college at the Methodist Collegiate Institute at West Poultney,

Vermont, and at the Ashby Academy, Ashby, Massachusetts. In 1840 he began to study medicine and surgery at the Philadelphia School of Anatomy, and studied afterwards at the Jefferson Medical College in Philadelphia, graduating at the latter place in 1844. In 1845 he began to practice in Cavendish, Vermont, where he remained for fifteen years, until obliged to retire on account of ill health. It was while at this place that he took charge of the case which gave him a world-wide fame among medical men, of a usually fatal wound of the brain. A young man who was tamping a hole in a rock, with an iron bar an inch in diameter and three feet seven inches long, had the bar blown through his skull by the premature discharge of a blast. The explosion drove the bar completely through his head, and high in the air. Fortunately the bar was round in shape and smoothed by use. The event occurred on the thirteenth of September, 1848, and the victim of the accident lived until May 21, 1861, when he died in San Francisco, California. Dr. Harlow published an account of this remarkable case, entitled, "Recovery from the Passage of an Iron Bar through the Head," and the skull and bar are now in the Warren Museum of the Harvard Medical School in Boston.

Returning to Philadelphia, Dr. Harlow passed nearly three years in travel and study, and resumed practice in Woburn, Mass. in the autumn of 1861, attaining a large practice and holding the following offices of trust: member of the school committee, president of the Woburn National Bank, member of the Massachusetts Senate and of the Governor's Council, trustee of the Woburn Public Library and of the Massachusetts General Hospital.

Dr. Harlow was married twice—first to Charlotte Davis, of Acton, who died about 1887; then to his second wife, Frances Kimball, of Woburn, who survived him. There were no children. He died in Woburn, May 18, 1907.

WALTER L. BURRAGE.

HARLOW, Henry Mills (1821-1893), well known for his long superintendency of the Maine Insane Asylum at Augusta, was born in Westminister, Vermont, April 19, 1821, inheriting from his parents an excellent physical and mental equipment. He studied at the Ashby, Massachusetts, Academy and at the Burr Seminary in Vermont, teaching school when very young and studing medicine with Dr. Alfred Hitchcock (q. v.), of Ashby, in 1841. He then took a course of lectures at the Harvard Medical School and was graduated at the Berkshire Medical Institution in 1844. He also took private instruction in nervous diseases from Prof. Rust Palmer, at Woodstock, Vermont, where he also attended lectures.

After graduating he was appointed assistant at the Maine Insane Aslyum. Busy in the study of the insane, he contributed papers of great value upon this topic to the meetings of the Maine Medical Association, of which he was President in 1861. He was also active in the Society of Superintendents of the Insane Asylums of America, being often called upon by the law courts to advise concerning the mental condition of alleged criminals and never failing to give satisfaction to the bench, bar and jury.

Few physicians have met with as many misfortunes as did Dr. Harlow during the course of his life. He had, for instance, the misfortune to lose largely the sight of both eyes from iritis so that for a long time he was unable to read, except with the greatest difficulty. He also lost a charming daughter, and had the additional and triple misfortune to lose almost in a single day, from acute appendicitis, his eldest son, Henry Williams Harlow, a most promising medical graduate.

Dr. Harlow married Louisa Stone Brooks, of Augusta, Maine, October 14, 1852. Two children survived him, a daughter, who married Dr. Oscar Davies of Augusta, Maine, and a son, George Arthur, A. B. Amherst 1887, M. D. Harvard 1893.

At the end of thirty-two years of devoted care to the insane, Dr. Harlow resigned and retired to his homestead; attended to some small medical works, gave opinions when sought, and died one day quite suddenly, as he was dictating a letter, on April 5, 1893.

JAMES A. SPALDING.

HARMON, Elijah Dewey (1782-1869), father of medicine in Chicago, was born at Bennington, Vermont, August 20, 1782. He was the eldest son of Ezekiel Harmon, descended from John Harmon, who came to America in 1636 and settled at Springfield, Massachusetts. The Harmon genealogy now containes more than three thousand names. Dr. Harmon studied medicine with Dr. Swift of Manchester, Vermont, and settled at Burlington, in that state, in 1806. He continued in practice there until 1812, when he entered the medical service of the government and served through the war. He was assistant surgeon on Commodore McDonough's flagship, the

"Saratoga," in the battle of Plattsburg, September 11, 1814. After the war he resumed practice at Burlington until financial reverses in 1829 brought about his removal West. In May, 1830, he journeyed to Chicago and was installed as surgeon in Fort Dearborn. At that time and for two years he was the only physician in Chicago of whom we have any account. When his family arrived the next year they bought his medical library, long unequaled in that town. When the cholera was brought to Chicago by General Scott's army in 1832, Harmon took care of the garrison throughout the epidemic. In the same year Harmon did the first capital surgical operation in Chicago, an amputation of the frozen feet of a half-breed Canadian. In the spring of 1833 he preempted 130 acres of land next to the lake south of what is now 16th street. In order to make good his title he built a log-house on the property and resided there until 1834 or 1835, when, in common with many others, he was seized with the Texas land fever and went to that state, settling in a town called Bastrop, where he acquired five or six leagues of land. After five years in that sparsely settled region he returned to Chicago in 1840 for the more profitable practice of his profession. His home was at the southwest corner of Michigan avenue and Harmon Court, named in his honor. When age called for relaxation from active practice he gradually withdrew and passed his last years in the cultivation of his lovely flower garden. He was called by the profession the father of medicine in Chicago. His death occurred January 3, 1869, at the advanced age of 86 years.

F. D. DuSouchet.

HARMON, John B. (1780-1858), of Warren, Ohio, founder of the Harmon family in Ohio, was born in Rupert, Vermont, October 19, 1780. He was one of the pioneer physicians of Trumbull County, coming to Ohio with his parents in 1800. He first studied medicine with Dr. Josiah Blackman of Vermont and subsequently with Dr. Enoch Leavilt of Leaviltsburg and in the war of 1812 served as army surgeon. A leading surgeon of that section of the state, he performed several major operations before the days of general anesthesia, in 1822 removing a cancerous mass from beneath the liver. About four years before his death, which occurred February 7, 1858, he retired from active practice. On February 6, 1822, he married Miss Sarah Dana of Pembroke, New York, and had six children, John, Julian, Charles, Edward, Sarah and Willie. Of these, Julian became a physician and practiced in Warren, Ohio.

James N. Barnhill.

HARRINGTON, Charles (1856-1908), Boston hygienist, the son of George and Eugenie Harrington, was born in Salem, Mass., July 29, 1856. He attended the Salem High School and took his A. B. from Harvard College in the class of 1878 and his M. D. from Harvard Medical School in 1881, during the latter part of his course in the medical school acting as assistant to Professor Edward S. Wood (q. v.) in medico-legal and toxicological investigations. In order to study these subjects further Dr. Harrington went to Germany and worked in Leipzig. There his attention was called to the related subjects of hygiene and sanitary chemistry. These he studied under Schmiedeberg at Strassburg; then he spent a semester at Munich under von Pettenkofer, resolved to make his future career as a hygienist. On his return to Boston he was appointed assistant in chemistry in Harvard Medical School (June, 1883) and at the same time became chemist to the State Board of Health, holding the latter position until 1891. In 1885 he was made instructor in hygiene in his alma mater, the office becoming "Instructor in Materia Medica and Hygiene" in 1888. After ten years he was made an assistant professor and in 1906 full professor of hygiene, a chair he filled at the time of his death. Meanwhile Dr. Harrington had been inspector of milk and vinegar for the city of Boston from 1889 to 1904. Many frauds had been practiced by the dealers in these commodities and Harrington, devoting himself to their prosecution and being an accurate analyst while a fearless and model witness, acquired a wide reputation as a guardian of the public health.

In 1904 he relinquished his activities for the city of Boston and accepted the position of secretary of the Massachusetts State Board of Health, filling the vacancy caused by the death of Samuel W. Abbott, (q. v.) who died in October of that year. Dr. Harrington was the efficient secretary when death called him four years later. His noteworthy contributions to the literature of medicine were his text-book, "Practical Hygiene," published in Philadelphia in 1901, the fourth edition appearing early in 1908, and his articles on the disinfection of the hands of operating surgeons, following bacteriological studies he had made, also his papers on clean milk. He contributed some fifty papers to the columns of

the "Boston Medical and Surgical Journal" and other medical periodicals, all of a breezy character which caught the attention of the reading medical public. He held membership in the Boston Society for Medical Improvement, the Boston Society of the Medical Sciences, the Massachusetts Medico-Legal Society, the Massachusetts Medical Benevolent Society and the Massachusetts Medical Society. Twice he represented the United States Government at international congresses of hygiene.

Dr. Harrington was married to Martha Josephine Jones, February 25, 1884. She was the daughter of John Coffin Jones, a Boston merchant, and his wife, Manuela Antonio Carillo, daughter of one of the Spanish governors of California. They had two sons and a daughter. Dr. Harrington died while on a vacation trip abroad, of chronic myocardial disease, at Lynton, England, September 11, 1908.

The faculty of medicine of Harvard placed this minute on their records on learning of Dr. Harrington's death: "A genial comrade, an accurate observer, a sound teacher, a wise counsellor, a fearless and incorruptible public servant, his place will long remain unfilled." He was a peculiarly jovial and companionable man as well as a forceful personality with positive opinions; withal he had a strong sense of humor. Of large frame he radiated geniality and always had a cheering word and spirit of helpfulness for others.

WALTER L. BURRAGE.

HARRINGTON, Thomas Francis (1866-1919), author of the three volume history of the Harvard Medical School, was born in Lowell, Massachusetts, June 10, 1866, the son of Thomas and Mary H. Harrington. After attending the Lowell High School he entered Harvard Medical School, took his M. D. in 1888, and was an interne at the Massachusetts General Hospital then going abroad for a year's study in Europe. Settling in practice in his native city he soon became chairman of the Lowell Board of Health and visiting physician to St. John's Hospital, holding the latter position for fifteen years, finally being placed on the consulting staff. For thirteen years Dr. Harrington was United States pension examining surgeon. In 1899 he published an essay on "The Philosophy of Sickness", 12 pp. Boston, and in 1903 a "Memoir of Samuel Fuller, New England's First Physician," in the Johns Hopkins Hospital Bulletin, for October, an exhaustive investigation of the facts relating to this worthy, obtained from a variety of sources. Soon after this he began to gather the material for the history of the Harvard Medical School which was about to move into its new buildings facing the Avenue Louis Pasteur. Dr. J. Collins Warren placed all of the data necessary at the disposal of Dr. Harrington, Dr. J. G. Mumford (q. v.) edited the book and it appeared in 1905 from the press of the Lewis Publishing Company of New York. Two years later Dr. Harrington moved to Boston. There he was made director of school hygiene in the public schools (1907-1915) and then medical deputy commissioner of labor in the Commonwealth of Massachusetts, holding the position at the time of his death. He was also an instructor in the schools for health officers both at Harvard and at the Massachusetts Institute of Technology; physician in chief to St. Elizabeth's Hospital after 1910; a director of St. Vincent's Orphan Asylum; an examiner for the Civil Service Commission and a delegate to the international medical congresses at Paris, 1910, Brussels, 1910 and London, 1913, while he acted as a state delegate to the international congress on school hygiene at Buffalo, N. Y. in the last named year.

Dr. Harrington was the orator before the Massachusetts Medical Society in 1908 with a discourse on the "Sanctity of Medicine"; he was vice-president of the Harvard Medical Alumni Association, a member of the American Public Health Association, American School Hygiene Association, American Playground Association, and International Association Medical Inspectors of Schools. He held the positions of captain, major and lieutenant colonel in the Massachusetts State Guard in 1917-1918 and chairman of the exemption board of district number 5, in the last year.

He married Mary I. Dempsey of Lowell, June 2, 1891 and they had three sons. He died at his home in Boston, January 19, 1919 after a five weeks' illness from ptomaine poisoning.

WALTER L. BURRAGE.

HARRIS, Chapin Aaron (1806-1860), writer on dentistry and organizer of the Baltimore College of Dental Surgery, was born at Pompey, Onondaga County, New York, May 6, 1806, the son of John and Elizabeth Brundage Harris, natives of England. When about seventeen he moved to Madison, Ohio, and studied under his brother John, who was practicing medicine there. After pursuing the course of study prescribed by law, he was

examined by the Board of Medical Censors of Ohio and was licensed to practice. He began practice himself at Greenfield, Highland County, Ohio, and continued there some years, when his attention was called to the possibilities of dentistry by his brother John, who had taken it up in 1827. In 1833, after the study and practice of dentistry, Chapin settled in Baltimore, and during the next two years contributed to the pages of medical and periodical literature.

He published his first book in 1839; it was entitled, "The Dental Art: A Practical Treatise on Dental Surgery," and went through thirteen editions. Many thousand copies of this book, probably the most popular on dental work ever published, were sold. Next came his "Dictionary of Dental Science," a dictionary of dental science, biography, bibliography, and medical terminology, 1849 (five editions), the later editions also edited by Gorgas. In 1846 he revised with numerous additions Joseph Fox's "Disease of the Human Teeth, Their Natural History and Functions, with Mode of Applying Artificial Teeth, Etc." He also translated for the "American Journal of Dental Science" the works of a number of French authors.

He was a laborious and untiring worker, writing far into the morning after days of ceaseless labor and fatigue and keeping this up to the end of his life. For the preservation and extension of the experience of dentists he interested some of his New York brethren, and with their aid founded "The American Journal of Dental Science." In the need for educational advantages for dentists they joined him in a petition to the authorities of Maryland University to found a dental department. This effort failing, together with a similar one in one of the New York medical colleges, they determined upon independent action and during 1839-40 secured signatures of citizens to the Legislature of Maryland for the incorporation of a College of Dental Surgery in Baltimore. The charter was granted February 1, 1840. Dr. Harris received several degrees—M. A. from the University of Maryland; M. D. from Washington Medical College, Baltimore, 1838; D. D. S. from Philadelphia Dental College, 1854. The Harris Dental Association of Lancaster, Pennsylvania, founded in 1867, was named in his honor. He was a diligent reader and student and collected a large and valuable private library.

He was remarkably handsome; was six feet two and a half inches in height and finely proportioned, with hazel eyes and a most benevolent expression.

He married, January 11, 1826, Lucinda Heath, daughter of the Rev. Barton Dawnes Hawley, of White Chimneys, Loudon County, Virginia, and had nine children.

His death occurred on September 29, 1860, after an illness of eight months from an obscure disease of the liver.

EUGENE F. CORDELL.

HARRIS, Elisha (1824-1884), pioneer statistician and expert on public health of New York, was born at Westminster, Vermont, March 5, 1824. The son of a farmer, he attended schools in the neighborhood and helped his father on the farm; when sufficiently advanced he taught school and then studied medicine under Dr. S. B. Woolworth, graduating at the College of Physicians and Surgeons, New York, in 1849, and beginning practice in that city. In 1855 he was appointed superintendent and physician-in-chief of the Quarantine Hospital on Staten Island, and in 1859 was given charge of the floating hospital anchored below the Narrows facing the sea. During the Civil War he was a leading spirit in sanitation and with Henry C. Bellows and others organized the National Sanitary Commission; he invented a railway ambulance and received a bronze medal from the Paris Exposition of 1867; the Société des Sécours aux Blessés awarded him a silver medal. His ambulance was used in the Franco-Prussian War. At the close of the war, Harris supervised the sanitary survey of New York. His tenement house survey was a thorough going investigation fruitful in results to the poor of the city. When the New York Metropolitan Board of Health was organized in 1866 he was appointed register of records, a post ably filled until 1870, when a change of administration brought about his retirement. In 1873 he was made registrar of vital statistics, but when city politics changed in 1876, this position was taken from him. He remained faithful to the work of sanitation in spite of his ill-treatment at the hands of the depraved politicians, who then, as now, ever keep a more or less continuous throttling grip on New York City.

He was ever a prolific writer on public health questions; as samples of his writings and prophetic vision we may cite: "Four Reports on Quarantine Hospitals, Yellow Fever and Cholera"; "An Essay on Pestilential Diseases"; "Ventilation of American Dwellings"; "Review of the Sanitary Experiences

of the Crimean Campaign"; "A History of the Work and Purposes of the United States Sanitary Commission"; "A Practical Manual on Infectious and Contagious Diseases in Camps, Hospitals and Ships"; "The Report on the Sanitary Condition and Wants of New York"; "The Criminality of Drunkenness"; "Nine Reports on Reformatory and Penal Institutions"; "Six Reports of the Bureau of Vital Statistics of New York."

Harris maintained a wide correspondence with distinguished sanitarians throughout the United States and Europe. When the legislature organized the State Board of Health, in 1880, he was one of the three commissioners, and was unanimously elected secretary and superintendent of vital statistics.

He died at Albany, January 31, 1884.

HOWARD A. KELLY.

HARRIS, Robert Patterson (1822-1899), medical statistician of Philadelphia, was born in Chester Valley, Chester County, Pennsylvania, in 1822, the son of Dr. Robert William Harris, who married the daughter of Robert Patterson, provost of the University of Pennsylvania, and had six children whom he trained wisely but very strictly, especially with regard to Sunday observance. I have not been able to discover to which school Robert the younger went as a boy. He received his A. B. degree from the University of Pennsylvania in 1841, and A. M. and M. D. in 1844, and then for a year worked at the Demilt Dispensary in New York. Then followed some clinical study in Paris and a final settling down to work with his father in Philadelphia, where he practiced for over thirty-five years. Surgery possessed the strongest possible attraction for him and he followed its development along gynecological lines with extreme interest. He was, besides, perhaps the most prominent medical statistician this country has ever seen. He presented the College of Physicians with an autograph manuscript of all the Cesarean sections in the United States up to date and this study brought to his notice cases in which lacerations of the abdomen and of the uterus by the horns of cattle had resulted in the delivery of a living child. He published a paper in the "American Journal of Obstetrics" (1887), entitled "Laceration of the Abdomen and Uterus in Pregnant Women," which gave nine cases of cow-horn delivery with five living children, and in 1892 another "Abdominal and Uterine Tolerance in Pregnant Women," giving eleven more cases—"a better showing for the cow horn than the knife," as he remarked. Another valuable statistical object was collecting the fate of all the viable extrauterine children. A statistical paper on "Ectopic Gestation" involved him in an imbroglio with Lawson Tait who called him "a library surgeon." This paper was translated into German by A. Eidman of Frankfürt-on-Main and appeared in the "Monatschrift für Geburtshülfe und Gynäkologie" for August, 1897. Many of the editorials in the "Medical News" (Philadelphia) were from his pen. He took up Loretta's operation for divulsion of the pylorus. He edited "Playfair's Midwifery" in this country for Lea Brothers. He wrote "A Record of Caesarian operations that have been performed in the state of Louisiana during the present century." "New Orleans Medical and Surgical Journal," June, 1879. The last article he wrote, "Congenital Absence of the Penis with the Urethra making its Exit into or below the Rectum," appeared in the "Philadelphia Medical Journal" for January, 1893.

In February of 1899 he had a second stroke of paralysis following one in 1895, and he died after a few days' illness in his seventy-seventh year. His income was always rather slender and he never married or kept a house but boarded out.

HOWARD A. KELLY.

HARRIS, Thaddeus William (1795-1856), Massachusetts physician, botanist and entomologist, was born in Dorchester, Massachusetts, November 12, 1795. He was the son of Thaddeus Mason Harris (1768-1842), a minister and descendant of William Harris, who came to this country with Roger Williams, and was author of "Journal of a Tour of the Territory Northwest of the Allegheny Mountains" (1805); "A Natural History of the Bible" (1821); and "Biographical Memoirs of James Oglethorpe" (1841).

Thaddeus William Harris was graduated at Harvard University in 1815, received his A M., in course and his M. D. in 1820. He practiced at Hilton Hill, near Boston. In 1831 he was made instructor in botany and entomology at Harvard, also holding the position of librarian. In 1837 he became commissioner for the Zoological and Botanical Survey of Massachusetts and collected specimens and made a catalogue of insects common to Massachusetts, showing 2,350 different species. He was author of "A Report of the Insects of Massachusetts Injurious to Vegetation" (Cambridge, 1841); a second impression was pub-

lished in 1842 and a new and enlarged edition appeared in 1852. He organized the Harvard Students' Natural History Society. His death occurred at Cambridge, Massachusetts, January 16, 1856. His son, William Thaddeus Harris (1826-1854), graduated at Harvard University in 1846; he edtied Hubbard's "History of New England," and published "Epitaphs from the Old Burying-Ground at Cambridge"; the son died at the age of twenty-eight.

HARRISON, Gessner (1807-1862), one of the noblest sons of the University of Virginia, who dropped out of sight during the great Civil War almost without comment, an illustration of "inter arma silent literae" was born June 26, 1807 in Harrisonburg, Virginia, the son of Peachy and Mary Stuart Harrison. His father was a physician. From the first, Gessner was an earnest student and entered the University of Virginia at eighteen. There were strong objections to the University in those early days because of the customary lack of religious instruction and worship, due to President Jefferson's determination to preserve religious liberty at all hazards. In July, 1828, at the close of the fourth session, the first graduates of the University were declared and among them was Harrison, in Greek and Medicine.

His plan to practice medicine was dissipated, however, by his appointment to the chair of ancient languages in his alma mater, which he occupied with distinguished credit until 1859; in 1856 the chair was divided, Prof. Basil L. Gildersleeve holding Greek. Harrison devoted himself particularly to the comparative etymology of Latin and Greek, following the lines opened up by Bopp's "Comparative Grammar." His medical training enabled him to explain to his students the physiological laws of speech. Although he never left his native state, he developed remarkably under the daily intimacies of stimulating colleagues. Under his fostering care standards of education were raised not only in the University but, as a reflex, in the primary schools.

Harrison was the author of an "Exposition of Some of the Laws of Latin Grammar", published in 1852 and "On Greek Prepositions and the Cases of Nouns with which they are used", in 1858, a laborious task; in 1834, he printed a condensed "Geography of Ancient Italy and Southern Greece," with outlines of history, as a necessary adjuvant to language study; he also wrote the history of the University of Virginia for Duyckinck's "Cyclopedia of American Literature." Unable to provide adequately for his family on his salary at the University, he resigned after thirty one years' service, and at the age of fifty three bought a plantation in Nelson County, Virginia, planning to receive about one hundred students; the Civil War unhappily ruined his plans.

In December, 1830, he married Eliza Lewis Carter, daughter of George Tucker, professor of moral philosophy. Dr. George Tucker Harrison, eminent gynecologist, boon companion, raconteur, and wit of New York City, and Randolph Harrison, eminent lawyer of New York, were sons. The strain of teaching by day and nursing a son ill with camp fever by night resulted in Dr. Harrison's death, April 7, 1862.

HARRISON, John Pollard (1796-1849), physician, teacher and writer, of Cincinnati, Ohio, was born in Louisville, Kentucky, June 5, 1796, a son of Maj. John Harrison, of Virginia, an officer in the Revolutionary War; his mother, Mary Ann Johnson, a daughter of Benjamin Johnson, sixth and youngest son of Sir William Johnson, Bart. He received his early education from the Rev. John Todd, a Presbyterian clergyman of Louisville. When about fifteen he began the study of medicine with Dr. John Crogan and in 1817 went to Philadelphia to attend the medical lectures of the University of Pennsylvania, and studied under Dr. Chapman and Dr. Dewees (q. v.) In April, 1819, he received his M. D. from the university and began practice immediately in Louisville. In 1820 he married Miss Mary T. Warner of Philadelphia. In that year the Louisville Hospital was founded. Dr. Harrison was one of the attending physicians, and there began his career as a teacher. In 1835 he removed to Philadelphia, where he published a volume of medical essays. During that year also he was elected professor of materia medica in the Cincinnati College, his associates being Daniel Drake, S. D. Gross, and others of note. In 1841 he was elected professor of materia medica and lecturer on pathology in the Medical College of Ohio, and in 1847 was transferred to the chair of theory and practice of medicine, a chair he occupied until the time of his death.

Dr. Harrison acquired distinction as a writer for medical journals. The "Proceedings" of the Medical Convention of Ohio for 1841 contain two articles from his pen: "Dis-

eases induced by Mercury" and the "Address on Medical Education." In 1844-5 he published his great work on "The Elements of Materia Medica and Therapeutics."

He was on the staff of the Commercial (later Cincinnati) Hospital and vice-president of the American Medical Association in 1849. In 1847 he became associate editor, with Dr. L. M. Lawson (q. v.), of the "Western Lancet" and was an editor of the "Western Journal of Medicine." He wrote reports of cases and contributions to pathological anatomy in the now rare "Ohio Medical Repository," Cincin. 1826-1827.

He died in Cincinnati, of cholera, September 2, 1849. His wife and six children survived him.

HENRY E. HANDERSON.

HARRISON, Samuel Alexander (1822-1890), physician and historian of Talbot County, Maryland, born at Clay's Hope farm in Saint Michael's district, Maryland, on October 10, 1822, was the son of Alexander Bradford Harrison and Eleanor, daughter of Colonel Perry Spencer, of Spencer Hall. He was graduated at Dickinson College in 1840, at the age of eighteen, then studied medicine at the University of Maryland, where he received his diploma in 1842. He began to practice, but impaired health induced him to relinquish this and to seek benefit in St. Louis, Missouri, where he engaged in business. He declared that he had "little faith in medicine but great faith in surgery." In a few years he returned to Maryland and after a brief residence in Baltimore, moved to Talbot County, where he devoted himself to agriculture and literary work. From 1864 to 1867 he was superintendent of public schools in Talbot County.

Dr. Harrison's research and study of the history of the Eastern Shore section of Maryland resulted in numerous historical papers read before the Maryland Historical Society, and afterwards published by it. His writings on Talbot County, including Queen Anne's County and the western half of Caroline County, formerly part of Talbot, "comprise a concise and critical history"; they are used largely in the "History of Talbot County, Maryland, 1661-1861," by Oswald Tilghman (Baltimore, 1915), which bears on its title-page the legend, "Compiled principally from the literary relics of the late Samuel Alexander Harrison." Dr. Harrison's portrait forms the frontispiece to the book.

In 1847 he married Martha Isabel, daughter of Benjamin Denny; his second wife was Mary Ann Rhodes, who survived him nineteen years. He had two daughters. One of them married Colonel Oswald Tilghman.

Among his historical manuscripts is a "History of the Church of England, and the Protestant Episcopal Church in Talbot." His manuscripts and scrapbooks are now deposited in the Maryland Historical Society.

Dr. Harrison died at "Foxley," the home of Colonel Tilghman, on May 29, 1890.

HOWARD A. KELLY.

HARTLEY, Frank (1856-1913), surgeon of New York, was born June 10, 1856, in Washington, D. C. His father, John Fairfield Hartley, was assistant secretary of the treasury of the United States; both father and mother came from Maine. Frank attended the public schools of Washington and entered the Emerson Institute, where he was prepared for Princeton University. There he received an A. B. in 1877, and at the College of Physicians and Surgeons, Columbia University, was made an M. D. in 1880. After serving as interne at Bellevue Hospital he took a post-graduate course at Vienna, and Leipsic 1882-1884. He was appointed instructor in surgery in Columbia in 1888, and professor of clinical surgery in 1900, being a successful quiz master in his early career. Beginning his hospital service as assistant surgeon at Roosevelt Hospital in 1885, he served as surgeon at Bellevue from 1888 to 1892, and after that as surgeon to the New York Hospital. At the time of his death from nephritis, June 19, 1913, he was professor of clinical surgery in his alma mater, attending surgeon to the New York Babies' Hospital, and consulting surgeon to the French, Italian, General Memorial, St. Joseph's at Paterson, N. J., and White Plains, N. Y., hospitals, besides being a member of the American Urological and American Surgical associations and the customary national, state and local medical societies. Princeton conferred her LL. D. on him in 1909.

In 1892 he published "Intracranial Neurectomy of the Second and Third Divisions of the Fifth Nerve; a New Method" "New York Medical Journal, 1892, vol. lv. 317-319." This was followed by "Intracranial Neurectomy of the Fifth Nerve" "Annals of Surgery, Philadelphia, 1893, vol. xvii, 511-526, 3 pl." Although he made numerous other contributions to medical literature, notably to the col-

umns of the "Annals of Surgery", in which he published at least fifteen papers, he was known chiefly as the deviser of the method of bisecting the ganglion of the trigeminal nerve within the skull for the relief of facial neuralgia.

HARTSHORNE, Edward (1818-1885), editor and ophthalmologist of Philadelphia, second son of Dr. Joseph Hartshorne, (q. v.), was born in Philadelphia, May 14, 1818. Having prepared for college at a private school in Philadelphia, he went to Princeton, and graduated A. B. in 1837, taking his A. M. in 1840. His desire to study medicine was not at first approved by his father. Edward's choice, however, was very positive, and his father consented. While a student at the University of Pennsylvania, he worked under Dr. W. W. Gerhard (q. v.). His M. D. was taken in 1840, with a thesis on "Pseudarthrosis, its Causes and Treatment," afterwards published by request of the faculty of the university in the "American Journal of the Medical Sciences." Immediately after graduating Dr. Hartshorne was engaged for several months as first assistant physician, under Dr. T. S. Kirkbride (q. v.), in the newly established Pennsylvania Hospital for the Insane, in West Philadelphia. From 1841 to 1843 he was one of the resident physicians of the Pennsylvania Hospital in the city and, in 1843, first resident physician in the Eastern Penitentiary in Philadelphia. In 1844 Dr. Hartshorne went to Europe to extend his studies, especially by observation in the large hospitals of the Continent, then returning home he at once began the work of a practitioner. For one year he edited the "Philadelphia Journal of Prison Discipline." His contributions to medical literature became frequent; beginning with articles and reviews in the "Philadelphia Medical Examiner," then edited by Dr. Hollingsworth; afterwards, reviews and numerous bibliographical notices in the "American Journal of the Medical Sciences," especially between 1850 and 1870; also, in the "North American Medico-Chirurgical Review." In 1853 he was called upon to edit, with notes and additions, the American edition of Taylor's "Medical Jurisprudence," a task so well accomplished as to meet with general approbation.

He was for seven years an attending surgeon to the Wills Hospital for the Blind; afterwards, till 1864, surgeon to the Pennsylvania Hospital. With many others usually engaged only in civil practice, during the war, after the battle of Antietam, he was on duty for a time as assistant surgeon, in the field, and for two or three years, as attending or consulting surgeon at the McClellan, Nicetown, and other Army hospitals, in and near Philadelphia. In the course of this service, a poisoned wound of his left hand incurred while amputating a septic limb, induced a severe illness; and this had, no doubt, a depressing influence upon his health throughout the rest of his life. He was actively concerned in the organization of the Philadelphia branch of the United States Sanitary Commission, during the war, being secretary of its executive committee. He was successively elected vice-president and president, of the Pathological Society, and of the Ophthalmological Society of Philadelphia.

He married, in 1850, Mrs. Adelia C. Pearse, daughter of John Swett, formerly of Boston. She survived him, with one son, Joseph Hartshorne the only one left of five children.

After contending for eight years with chronic nephritis, he passed tranquilly from this life, June 22, 1885, aged sixty-seven.

HENRY HARTSHORNE.

HARTSHORNE, Henry (1823-1897), physician, scientist and teacher, of Philadelphia, son of Dr. Joseph Hartshorne (q. v.), was born on March 16, 1823, in Philadelphia, his mother being a daughter of Isaac Bonsall, a preacher in the Society of Friends. When thirteen he went to Haverford College and took his A. B. in 1839, his M. D. at the University of Pennsylvania in 1845, and the honorary LL. D. from there in 1884. Three years after his election as resident physician to the Pennsylvania Hospital, in 1846, he married Mary, daughter of Jeremiah Brown of Philadelphia.

Among his appointments were professor of the practice of medicine, Pennsylvania College; professor of anatomy and physiology, Philadelphia Central High School; professor of hygiene, Pennsylvania University; professor of organic science and philosophy, Haverford College; president, Howland College School; fellow of the College of Physicians.

It was as teacher and writer that Dr. Hartshorne did his best work. "His broad culture and high attainments, his calm serenity of character, were universally recognized." He was selected professor of the institutes of medicine in the Philadelphia College of Medicine in 1853, and in June, 1855, was made a consulting physician and lecturer in clinical

medicine to the Philadelphia Hospital. The list given of honorable appointments filled, of books written, inadequately represent the human side of a man. He advocated the cause of women physicians in 1872; was interested in the salvation, spiritually and medically, of Japan in the prohibition of opium, the care of the insane, and in all missionary work. When, finally, he died in Tokio, on February 10, 1897, the funeral was attended by Japanese and other foreigners, by missionaries, merchants, teachers and medical students.

His chief writings were: "Essentials of the Principles and Practice of Medicine," 1867; "On Organic Physics." "Proceedings of American Philosophical Society"; articles in "Johnson's New Illustrated Cyclopedia" on anatomy, philosophy, brain, breast, chest circulation of the blood, deaf mutes and evolution; "On Some Disputed Points in Physiological Optics"; "On the Theory of Erect Vision With Inverted Images"; "On Ocular Color Spectra and Their Causation"; "Medical Record for Private Medical Statistics." Prepared under the sanction of the Medical Society of the State of Pennsylvania and of the Biological Department of the Philadelphia Academy of Natural Sciences, 1859; "Memoranda Medica," 1860. He was an editor of the "Friends Review," after 1872, and he wrote a dramatic romance entitled, "Woman's Witchcraft, or the Curse of Coquetry" (1854), and "Summer Songs."

HARTSHORNE, Joseph (1779-1850), of Philadelphia, was born in Alexandria, Virginia, December 12, 1779, son of William Hartshorne and Susannah Saunders. The father was a flour merchant and manufacturer whose residence was "Strawberry Hill," a country seat about six miles from Mt. Vernon. His ancestor, Richard Hartshorne, left his home in Leicestershire, England, because of his religious belief as a Friend, and came to America in 1669 and purchased land in the Highlands of Neversink on Shrewsbury River and the land nearby, including what is now Sandy Hook, New Jersey. The land on which Sandy Hook lighthouse stands was bought from the family by the United States Government in 1816. William Hartshorne's sympathies were with the revolutionists, while those of his family were with the Royalist party, and this probably influenced him in seeking a home in the south. His nearness to the home of Washington made him both neighbor and friend; he was long treasurer and secretary of the Potomac Navigation Company, of which Washington was president.

Joseph Hartshorne had an attack of smallpox when he was five years old and was treated with large doses of calomel, to which was attributed an inflammation of the feet, leaving him permanently lame. With a vigorous mind and body and deterred from sports, he took to books, and was a distinguished student. On leaving school he entered his father's counting-house, but soon began to read medicine and later entered the office of Dr. James Craik (q. v.), Washington's physician. In 1801 he became resident apprentice and apothecary in the Pennsylvania Hospital; he studied at the University of Pennsylvania and was graduated M. D. in 1805, offering as his thesis "Effects Produced by Air on Living Animals." He prepared an American edition of Alexis Boyer's "Lectures on Diseases of the Bones," adding an appendix, with notes on cases (1805).

After two long voyages as surgeon and supercargo he returned to Philadelphia, but practice was slow and he had to struggle for an existence. His father offered him a shelter in the old Virginia home, but Joseph declared that he would never go back until he could take with him "bank-notes enough to paper the walls of the best room at 'Strawberry Hill,' a determination said to have been fulfilled, for he came home a rich man.

In 1813 he married Anna, daughter of Isaac Bonsall of Philadelphia.

In 1815 he was elected a surgeon of the Pennsylvania Hospital and was a colleague of Physick and John Syng Dorsey (q. v.). He was a member of the Philadelphia Medical Society, the American Philosophical Society and of the College of Physicians. He became seriously ill in 1849, probably from gallstones, and was taken to Brandywine Springs, where he died August 20, 1850. His sons, Edward and Henry (q. v.), both physicians, survived him.

HOWARD A. KELLY.

HARTWELL, Edward Mussey (1850-1922), expert in physical training, hygiene and statistics, was born in Exeter, New Hampshire, May 29, 1850, the son of Shattuck and Catherine Stone Mussey Hartwell. He was prepared for college at the Lawrence Academy, Groton and at Boston Latin School, and entering Amherst was graduated in 1873. Three years later Amherst gave him an A. M. and in 1908 her LL. D. Johns Hopkins University conferred on him the degree of Ph. D.

in 1881 and Miami Medical College an M. D. the following year. Immediately after graduating from Amherst Dr. Hartwell was vice-principal of the Orange, N. J. high school and then for three years instructor in the Boston Latin School. His medical studies were begun with Dr. William H. Mussey (q. v.) in Cincinnati; from 1883 to 1891 he was associate in physical training and director of the gymnasium at the Johns Hopkins, becoming, on the last named date, director of physical training in the public schools of Boston, a position he held for six years, resigning to become the head of the department of statistics of the City of Boston, which had been organized in 1897. His official position was secretary but he was the energizing factor in the department for the rest of his life. Previously (1888-1889) Dr. Hartwell had made studies in London, Berlin, Vienna and Stockholm, on hygiene, education, and statistics as a special agent of the United States Department of Labor, and it was while in London that he married Miss Mary Letitia Brown of Baltimore. A son and two daughters were the result of the union.

Dr. Hartwell made frequent contributions to literature, on physical training, school hygiene and the condition of the blind; from 1906 to 1908 he served as chairman of the Massachusetts Commission for the Blind. Many of his papers appeared in the publications of the United States Department of Labor, the United States Bureau of Education, National Municipal League, and the American Statistical Association. He was a member of the Boston Society for Medical Improvement, American Statistical Association, the Medical and Chirurgical Faculty of Maryland and various social clubs. He lived in Jamaica Plain, a suburb of Boston and died at his home there, February 19, 1922.

HARVEY, Edwin Bayard (1834-1913), secretary and executive officer of the Massachusetts Board of Registration in Medicine, was the son of Ebenezer and Rozella Harvey. He was born in Deerfield, New Hampshire, April 4, 1834, and died of chronic myocarditis, in Westborough, Massachusetts, September 28, 1913. His boyhood days were spent on a farm, his father being a farmer and also a stone mason. His early education was obtained in the public schools of New Hampshire, and the Military Institute at Pembroke, N. H. The year 1855 and a part of the year 1856 were passed in the Seminary at Northfield, in the same state, now known as Tilton Seminary. He was graduated from Wesleyan University, Middletown, Connecticut, in 1859, after which, for a short time, he taught school in Poultney, Vermont. He also served for two years as principal of Macedon Academy, Macedon, New York. He was for two years professor in natural science at Wesleyan Academy, Wilbraham, Massachusetts, and while there formed a friendship with a physician, the outcome of the intimacy being a determination on the part of Dr. Harvey to study medicine. Up to this period it had been his purpose to make teaching his life work. Entering Harvard Medical School he was graduated in 1866. It was his intention to settle for practice in the west, and accordingly after graduation he went to Waukegan, Illinois, and opened an office, but not finding the place to his liking he stayed but a short time and returned east and settled in Westborough, Massachusetts, where he began practice. He at once took a leading position, not only in his profession, but in all public affairs. He was an acknowledged parliamentarian, and for many years acted as moderator in all town meetings. Like many practitioners of early times, for some time he carried on a drug store in the town. During his early years of practice the local paper in the town was suddenly left without an editor, and with his usual versatility Harvey stepped into the breach and added to his ever increasing duties that of editor, much of his work in this direction being done between the hours of midnight and daybreak. The work finally proved too much, and feeling the need of a vacation as well as of further study, in the year 1872 he visited the leading hospitals in Europe, studying about a year in Leipsic and Vienna.

He joined the Massachusetts Medical Society in 1867, and was a councilor for over forty years, being elected in 1869 and serving continuously until his death. He was president of the Worcester District Medical Society in 1883 and 1884, and for two years (1898-1900) was president of the parent society. From 1868 to 1900 he served continuously on the Westborough school board, and from 1887 to 1900, acted as superintendent of schools. He was chairman of the board of trustees of the Westborough Public Library, and it was largely due to his efforts that the present library building of the town was erected. He was a trustee of the Westborough Savings Bank, and in 1873 was appointed by Governor Washburn a trustee of the Reform School at Westborough, and in 1876

was reappointed by Governor Gaston. Dr. Harvey was a member of the Massachusetts House of Representatives in 1884 and 1885, and of the Massachusetts Senate in 1894 and 1895. He was the author of the bill to provide free text-books in public schools, laboring assiduously for its passage.

In medicine he early turned his attention to constructive legislation, and had the honor of being the author of the bill for the establishment of the Massachusetts Board of Registration in Medicine, and in aiding in its passage in 1894. In the closing hours of the legislative session of 1895, at the request of Governor Greenhalge, he resigned from the Senate to accept the position of secretary and executive officer of the Board of Registration in Medicine, a position he held from June 20, 1895, until April 1, 1913, when owing to continued ill health he was forced to resign as secretary, but in accordance with the request of his associates, continued a member of the board until his death. After 1895 he gave up active practice.

Like all men of strong personalities, he often met opposition both personal and official, which sometimes developed into enmity, yet he had one of the kindest hearts, and was beloved by those who truly understood him, and especially by those most closely associated with him. His advice was often sought by members of the Legislature upon questions relating to public health, and his aid was frequently requested in framing bills pertaining to legislation relating to medical affairs. One piece of work of which he was justly proud was a paper written by him on the "Impracticability of Interstate Reciprocity," delivered before the National Confederation of State Examining Medical Boards, in Boston, June 4, 1906. This paper was a classical and logical exposition of the complicated problems involved in this important question, and was so highly regarded as to be reprinted at the expense of the American Medical Association. By competent critics this article has been termed "the argument which has never been answered."

Dr. Harvey was married in Concord, New Hampshire, July 30, 1860, to Abby Kimball Tenney. They had no children.

He was a member of the Siloam Lodge of Masons, Westborough, and was a member of the Westborough Evangelical Church.

In a few words, it may be said that Dr. Harvey was one of those men occasionally seen among our forebears whose will and ambitions led first to a thorough preparation for a constructive and influential life and then never departed from the pursuit of achievement. He never turned his back on an opponent, and he never cringed when facing overwhelming odds, as so often happens when battling against forces that oppose good legislation.

WALTER P. BOWERS.

HASKELL, Benjamin (1810-1878). During the war of 1812, or more precisely at daybreak, September 9, 1814, the British frigate "Nymph" lying off Rockport at the tip of Cape Ann, Massachusetts, sent ashore two barges to attack the town. They surprised and captured the small fort on Bearskin Neck and as the bell on the meeting-house began to ring the alarm one of the barges, to silence the ringing, fired at the belfry and lodged a round shot in one of the steeple posts where it may be seen today. The old white church now stands side by side with a white-painted square mansion set well back from the main street of the town at the top of a beautiful tree-dotted green lawn, edged round with granite from the quarries near at hand. The shot in its course to the belfry passed directly over the old tavern where little Benjamin Haskell, four years old, lived with his father and mother, Josiah and Rachel Tarr Haskell. There he had been born October 22, 1810. Twenty-five years later, after Benjamin had received an A. B. at Amherst (1832) and an M. D. at Bowdoin (1837) he was to settle in Rockport, to worship at this church and eventually to live in the house next door, and pass the rest of his life caring for the health of his fellow townsmen, helping in the causes of temperance, education and charity and getting himself so beloved that shortly before his death his patients presented him with a gold watch and chain as a mark of their affection. He represented the good old Puritan stock, for he was descended from William Haskell, a settler in Gloucester in 1643, the father of Benjamin having taken up his residence in Sandy Bay village, which was later to be known as Rockport. Before going to Rockport Dr. Haskell acted as assistant physician at the McLean Insane Asylum at Somerville, and practiced two years at South Boston. He early evinced a literary turn, for we find him contributing articles on "Somnambulism," to the "Boston Medical and Surgical Journal" in the year 1837 (vol. xvi, p. 292-302); "Animal Magnetism," (vol. xvii, p. 104-111); another paper on animal magnetism, (do., 366-368); "On Inflam-

mation," (do., 407-416). Nearly twenty years later he published his chief contribution to medical literature in a pamphlet entitled: "Essays on the Physiology of the Nervous System with an appendix on Hydrophobia," Gloucester, 1856, 87 pp., previously issued in the columns of the "Boston Medical and Surgical Journal," the last being read before the Massachusetts Medical Society at its annual meeting, May 27, 1856. He confuted the theories of Sir Charles Bell and Marshall Hall as to the sensory and motor functions of the spinal nerves, believing that physiologists overlooked "the existence of a spiritual principle within the body" and that "the real cause of the production of a given phenomenon, is mental instead of physical." He supposed "the nervous system to be employed as an instrument of sensation and motion exclusively, while, at the same time, the powers of sensation and motion inhere in the mind itself."

Dr. Haskell was a critical student of the physiological literature of the time and a man of originality and positive convictions which he expounded with skill and a ready use of language. His ideas were, however, sometimes clouded by complicated and confusing classifications and hypothetical considerations. His services as a writer and speaker were in demand by his neighbors.

In 1839 he married Mary Jane, daughter of Amos Calef of Gloucester.

In personal appearance he was six feet tall, wore a full beard and stooped a little as he walked. His kindness of heart is shown by his carrying off his wife's entire baking of bread to a poor family that was in need. One stormy night an unknown man stumbled into Dr. Haskell's office and said he was starving. The doctor got him something to eat, tucked him up on his office sofa and went to bed, saying to his remonstrating wife, "He can't steal much, and I will take my chances that he is honest." The wayfarer proved himself to be both honest and grateful. Small wonder that Dr. Haskell was mourned when he died of pneumonia at his home at the age of sixty-eight, January 21, 1878.

WALTER L. BURRAGE.

HASTINGS, Caroline Eliza (1841-1922), pioneer woman physician of Boston, was born in Barre, Massachusetts and received her early education in the schools of that town. When she had graduated from Mt. Holyoke Seminary she entered the New England Female Medical College, Boston, and received an M. D. in 1868, beginning practice in Boston. She became interested early in the Talitha Cumi Home and Hospital for unmarried girls who are pregnant, a charity that was founded in 1846, and she was on the administrative board for many years; later she was professor of diseases of women at Boston University School of Medicine, holding the position for seven years. She served as a member of the Boston School Committee for several years at a time when that committee had a large membership, representatives of the different wards of the city. She was a woman of strong convictions, was always ready to defend them in debate, especially as a member of the sub-committee on textbooks, and was a strong advocate of greater cleanliness of the schools; she was one of the earliest to advocate that luncheons be provided for the high school pupils. She lectured on medical subjects from time to time, carried on an active practice, advanced the cause of woman in medicine, albeit a bit aggressively, and retired to Sharon, Massachusetts to pass the declining years of her life. There she died in her eighty-second year, July 10, 1922.

Dr. Hastings was short of stature, wore spectacles and was seen constantly on the streets of Boston, walking in a determined manner with her professional handbag swinging alongside. There was no doubt in the mind of anyone who saw her that she would arrive at her destination even though obstacles crowded her way.

HASTINGS, Seth (1780-1861), physician of Clinton, New York and cultivator of a "botanical garden," was born at Washington, Litchfield County, Connecticut, August 23, 1780, the eldest son of Seth Hastings who left Washington in 1797, removing to the then almost unbroken wilderness of Oneida County, New York, the son, then seventeen years old, accompanying the family.

When Seth, Jr., had completed his academic studies he studied medicine in his father's office and at the age of twenty-one was admitted into partnership. For nearly fifty years he was the leading physician of Clinton, and was often called to adjoining towns. Clinton has been called a transplanted New England town, and for nearly a hundred years preserved many of the characteristics of the earlier Puritan settlements of the East. It became an educational center; an academy, which later was raised to the rank of a college and named for Alexander Hamilton, who had giv-

en invaluable aid in its establishment, had brought instructors from Yale and students desirous of entering the professions. It was in this community of substantial farmers, talented educators and keen business men that the life of Dr. Seth Hastings, Jr., was passed. He was from the first one of the leading minds of the community, and did much to determine and mold its character. He was the friend of temperance and order, morality, education and religion. He was actively interested in all good public enterprises; his religious character was marked.

About the year 1808, Dr. Hastings built the red brick house which for more than ninety years was known as the "Hastings Homestead." This house was a home of generous hospitality. Dr. Hastings was particularly fond of social gatherings in which music formed a leading part of the entertainment. For many years he was the leader of the choir in the Old White Meeting House. On Thanksgiving evenings for many successive years the parlors of his house were filled with family friends, old and young, of a musical turn, and the walls echoed with joyful singing of tunes old and new, ancient ones having the preference. On such occasions he seemed to be in his true element. It is said that one could seldom pass the old brick mansion without hearing vocal or instrumental music, or both. In 1811 Dr. Hastings was commissioned surgeon of a regiment of militia in the County of Oneida.

He was much interested in horticulture and botany, and his orchard and garden were remarkable for that time. He was constantly trying to obtain better and hardier fruits, and took great satisfaction in making experiments with scions sent him from distant parts of the country. Among his trees he cultivated some mulberries on which he raised silkworms, and silk was spun from the fibre produced. He had a large botanical garden in which all native plants that could be induced to grow there were to be found, together with many sent him by correspondents from other sections of the country. Students who were pursuing a course in medicine with him were required to work in the garden. In this way an opportunity was given them to become acquainted with the plants and in many of these young men a love for botany was inspired that influenced their later lives. Samuel Beach Bradley (q. v.) was one of the students who thus acquired his first interest in science. Poppies were largely cultivated in the garden, and the juice carefully collected, was made into opium, which was used in the doctor's practice. Others of the herbs grown there, also played their part in curing the ailments of his patients, for in that early day doctors had to rely on themselves for many of their remedies.

There were few surgical appliances at this time, and for the simple operations requiring instruments, Dr. Hastings made designs which were worked out by the village blacksmith.

In 1802 he married Huldah Clark, daughter of John and Annie Emmons Clarke, who had removed to Clinton from Colchester, Connecticut; she died in September 1850. To Dr. Hastings and his wife, fifteen children were born, fourteen of whom reached maturity. To all of these he gave good educations, four of his eight sons graduating from Hamilton College, two of them becoming physicians, one a Presbyterian minister, one a missionary to Ceylon, one a lawyer, one a landscape architect, one a civil engineer, and one a wholesale merchant.

An old-time daguerreotype, taken in the 40s, shows Dr. Hastings as a remarkably fine looking man with well shaped head, high forehead, snowwhite hair but youthful looking face and very keen, bright eyes. When in his seventieth year he was stricken with paralysis, and for ten years was confined to a wheeled chair, unable to speak, but retaining his mental faculties, and until the last interested in scientific subjects and in all the stirring events preceding the Civil war. His death occured in Clinton, March 26, 1861.

ANNIE C. HASTINGS GOTT.

HAWES, Jesse (1843-1901), was born in Corinna, Maine, August 21, 1843, and practiced chiefly in Greeley, Weld County, Colorado, his death occurring there from angina pectoris, August 4, 1901. He had been prepared to enter Bowdoin College when the Civil War broke out. He enlisted at once in the ninth Illinois cavalry, the family having shortly before moved to that state, and served through the war, being confined in Cahaba prison for nearly a year, an experience he embodied in "Cahaba," a volume published about 1890. From 1865 to 1868 he studied in the University of Michigan and then was graduated M. D. from Long Island College Hospital in 1871. For some time afterwards he studied in Edinburgh, Scotland, but the exact date is not known.

Dr. Hawes was president of the Colorado State Medical Society in 1884 and professor of obstetrics in the University of Denver for

some years. He wrote many brief articles upon surgical subjects, published in the Transactions of the American Medical Association or of the Colorado State Society. His "Report upon Charlatanism in Colorado" appeared in their Transactions for 1883.

In 1874 he married Clementine Rockwell, and one child, a daughter, Mary Moneta, was born.

At the beginning of his practice in Greeley Dr. Hawes lost several cases in succession from puerperal fever. This misfortune worked so against the increase in his practice that for years he struggled with poverty. No doubt the increased efforts he made to bring back the confidence of those families that had left him on this account was responsible for the fact that he finally became the leading obstetrician of the northern part of the state, and a teacher of obstetrics in the University of Denver.

JOSIAH N. HALL.

HAWKES, Micajah Collins (1785-1863). The student of American medical history will find hardly another physician who so completely occupied the attention of medical circles throughout the nation as did Dr. Hawkes from 1821 to 1826, for during those five years the case of Lowell versus Faxon and Hawkes attracted universal interest in medical literature and at the meetings of state medical societies. Micajah Collins Hawkes, the son of Matthew and Ruth Collins Hawkes, was born in Lynn, Massachusetts, July 16, 1785, was brought up as a Quaker, and remained a member of that sect until he was dismissed for marrying "outside of the Meeting." He worked on his father's farm until he was of age, then studied at Phillips Exeter Academy, and was graduated the oldest in the class of 1808, having as classmates, Edward Everett, John Godfrey Palfrey, John Adams Dix, Jared Sparks and William Willis, men famous in American history.

Soon after graduating he studied medicine with Dr. William Ingalls (q. v.), of Boston, and was about ready to begin practice when the War of 1812 began. He enlisted as surgeon's mate on a privateer and was captured but soon released. Directly afterward he was appointed surgeon to the U. S. Sloop of War "Hornet," Captain James Lawrence, and was present at the defeat of the British brig "Peacock," off Demarara, February 24, 1813. As the "Peacock" was sinking a sailor brought off to Dr. Hawkes a medical chest which may still be seen at Eastport, Maine. The "Hornet," having on board the many wounded and the rescued survivors of the "Peacock," made for New York and arrived there safely, but during the voyage Dr. Hawkes met with an accident which made him slightly lame for life.

Directly after these events he resumed his studies in Boston, and was asked to go out as surgeon to the "Chesapeake," but declined the urgent and flattering invitation of Captain Lawrence because the crew were untrained and unfit to fight. History tells us all too sadly of the defeat of the "Chesapeake," of the death of the lamented Laurence in the fight with the "Shannon" off Boston Light, June 1, 1813, and testified to the good judgment of Dr. Hawkes.

Dr. Hawkes obtained his medical degree at Brown University in 1814, practiced in Boston, and August 6, 1815, married Sally Wheeler of Salem, Massachusetts. About a year later, leading physicians of Boston were asked to send to Eastport, Maine, some young physician to take the practice of Dr. Barstow, and Dr. Hawkes was chosen for the position. He opened his office in that town June 17, 1817, soon became well known as a careful physician, and by some successful operations obtained control of nearly all the surgical cases occurring for years in that region. He was also at one time contract surgeon to the garrison, and later on, collector of the port, and of the district of Passamaquoddy, and then without warning, and at a time when his prospects seemed most cheerful, he was made the actual defendant in a suit for malpractice which overshadowed him for five long years, but from which he emerged victorious after three trials before the courts of Maine.

The circumstances of this remarkable case these were: Charles Lowell of Lubec, Maine, fell from a spirited horse, which then rolled back on him. He was taken home and Dr. John Faxon of the village was called, but as he had no experience with fractures, Dr. Hawkes was sent for, and after riding several miles on horseback and being rowed the rest of the way, he arrived and diagnosed a dislocation of the femur and fracture of the acetabulum. After reducing the dislocation, as he assured himself by the satisfactory motion of the leg, he put the patient to bed, tied both feet together with bandages, and went home. He called again in a few days, found everything progressing well and said he should not come unless sent for. The patient, without permission, left his bed on the fourteenth day, walked 150 rods, had a relapse, the leg

assumed an unnatural position and remained for life rather longer than the other. Dr. Hawkes was called in again, but being delayed by urgent obstetrical emergencies, did not arrive until the next day, when he found affairs as stated, said that they were due to the neglect of the patient, that he could do nothing more and retired from the case. Mr. Lowell soon started for Boston, and then, without informing any of the surgeons what had been done for him he consulted first, Dr. John Collins Warren (q. v.), who diagnosed a dislocation into the ischiatic notch and advised a reduction, which was attempted, but in vain, with the assistance of the staff of the Massachusetts General Hospital, and in the presence of many physicians. Mr. Lowell then consulted Dr. Ingalls and a "natural bone setter" with no better results. All of these consultants were then informed of the trap which Lowell had set for them so that they might be compelled to testify against Dr. Hawkes.

Litigation then ensued in the case of Lowell "versus" Faxon and Hawkes. Dr. Faxon having really nothing to do with the affair, the defence rested wholly with Dr. Hawkes, who put up a stiff fight. The first trial resulted in a verdict against Dr. Hawkes for $1900, the second terminated in a disagreement of the jury, and after a third and prolonged trial, the court advised the defendants to pay their own costs and the case was thrown out of the court.

The plaintiff afterward practiced law in the West, and in Ellsworth, Maine, for several years, and having so directed in his will, immediately after his death in 1858, a post-mortem examination was made, revealing a dislocation downward and forward with neoplastic tissue, forming an adventitious socket for the head of the femur. The history of this case would not be complete were it not mentioned here, that the trunk, head and legs were buried at Ellsworth, whilst the bones of the pelvis remain preserved in the Warren Anatomical Museum in Boston. This instance, moreover, of a post-mortem examination after a malpractice suit, is one of only two, so far unearthed, in American medical history.

After the ending of his law suit in 1826, Dr. Hawkes resumed the quiet current of his practice and worked hard to regain the money spent in defending his good name. People liked and respected him, his practice flourished, he wrote one or two medical papers for publication, and drove about with his good old horse "Ridgeway" hitched into the shafts of a chaise, which was decorated on both sides with a picture of the good Samaritan of the New Testament. A similar picture in flamboyant colors likewise adorned the facade of his hospitable mansion in Eastport. He wore his hair in a cue to the end of his days, and had an intense dislike for birds, and in order to prevent robins from robbing his cherry trees of their fruit, he tied to the branches shining balls of tinsel to frighten them away. The visitor to Eastport of today should not fail to look in at the old homestead of Dr. Hawkes, and note the handsome mahogany wainscoting of one or two of the living rooms, whilst a careful study of the various pamphlets by Mr. Lowell and the celebrated "Open Letter" of Dr. John Collins Warren to Chief Justice Isaac Parker will well repay the student of American medical history.

JAMES A. SPALDING.

HAY, Walter (1830-1889), Chicago neurologist, was born in Georgetown, District of Columbia, June 13, 1830, son of Charles Eustace Hay and Lucy Chandler. He was the grandson of Judge Hay, of Virginia, and was descended from Anthony Hay of Scotland, who settled in America after the Battle of Culloden. Educated in private schools and at the Jesuit College at Georgetown, Walter Hay entered the United States Coast Survey in 1847 with the idea of becoming a topographical engineer, but in 1852 he resigned because of ill health. From 1849 to 1853 he studied medicine under Grafton Tyler at Georgetown, and in 1853 was graduated at Columbian College, Washington. From that time until he moved to Chicago in 1857 he lived in Florida, to benefit his health. In 1858 he was appointed in charge of St. James' Episcopal Hospital at Chicago; he was one of the founders of St. Luke's Hospital in 1864, and was the first physican to the hospital, serving one year. In 1866 he was active in controlling the cholera epidemic, and in 1867, with J. V. Z. Blaney (q. v.) and J. H. Rauch (q. v.) he organized the Chicago Health Department. In 1871 he served on the Fire-Relief Committee of five members formed to aid sufferers from the great Chicago fire (October 9, 1871); and the same year was called on to organize the department of mental and nervous diseases, with a clinic, in Rush Medical College. In 1872 he became adjunct professor of the theory and practice of medicine; later, he organized the neurological depart-

ment in St. Joseph's Hospital, Chicago.

He was one of the organizers of the American Neurological Association in 1875 and in this year was made assistant surgeon in the United States Army and was on the staff of General Sheridan. In 1877 he removed to Dubuque, Iowa, and helped to organize the Dubuque Charity Hospital. From 1867 until its sale in 1875 he was associated with J. A. Adams in editing the "Chicago Medical Journal." From 1882 to 1885 he was professor of materia medica and from the latter year to 1889 was professor of neurology in the Chicago Medical College.

Dr. Hay married Rebecca, daughter of Samuel Ringgold, of Maryland, in 1856, who died in 1857; in 1864 he married Angelica, daughter of George Bridges Rodney, of Delaware; she died a year after her marriage, and in 1872 he married Maria, daughter of George Wallace Jones, of Iowa.

He died in 1889.

Hayden, Ferdinand Vandevere (1829-1887), writer on the geology of the United States. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 506, 507.

HAYDEN, Horace H. (1768-1844), founder of the Baltimore College of Dental Surgery, was the son of Thomas Hayden, a lieutenant in the Revolutionary Army, and Abigail Parsons, and the farm upon which one William Hayden settled at Windsor, Connecticut, in 1642 is still owned by his descendants. Horace Hayden was born at Windsor, October 13, 1768, and, like his father, became an architect and builder. At the age of fourteen he made two trips to the West Indies as cabin boy aboard a brig. Later, when twenty-one or twenty-two, he again visited these islands, intending to live there, but the unhealthy climate compelled him to return. When sixteen he took up his trade as mechanic and pursued it for several years.

His attention was directed to dentistry in 1795 by his needing a dentist and remarking the skill of Mr. John Greenwood, New York. He therefore borrowed books and essays from Greenwood and set to work with energy to master the subject. In 1800 he removed to Baltimore, when an opening presented itself. His knowledge of his new calling was still imperfect and he was without friends and fortune, but he was earnest and ambitious and soon drew practice and instructed students in dentistry in the evenings. It was in consequence of his attainments in these and other medical and scientific studies that the honorary M. D. was conferred on him by Jefferson Medical College in 1837 and by the University of Maryland in 1840. During the attack upon Baltimore by the British in 1774 he joined the militia, but medical men being in demand and his surgical skill being recognized he was assigned to duty at the hospital as assistant surgeon, where he cared for the wounded as long as his services were required. Although joined by Dr. Chapin and Dr. Harris in a petition to the authorities of the university for the founding of a department of dentistry, he failed to secure his desire and was compelled to found an independent school, the Baltimore College of Dental Surgery, which was chartered on February 1, 1840, and of which he was president and first professor of the principles of dental science and later professor of dental physiology and pathology, a title he held until his death, four years later. As early as 1817 Dr. Hayden advocated the formation of an association of dental practitioners, but only in August, 1840, when a number of prominent American dentists assembled in New York City and founded the American Society of Dental Surgeons was this effected. He was chosen its first president and held this office until death.

Dr. Hayden achieved fame also as a geologist, for he collected a valuable cabinet of American minerals, which in 1850 became the basis of the great collection of Roanoke College, Virginia. The literature was so limited that he was compelled to master the French language that he might have access to the best books on that subject, from which he made many translations. His researches were embodied in a volume of four hundred pages, entitled "Geological Essays" (Baltimore, 1820), said to be the first general work on that subject published in America. He discovered a new mineral which was named after him "Haydenite," and he was also a botanist of distinction, writing on silkworm culture and other subjects. He was a great sportsman.

On February 23, 1805, he married, at Baltimore, Marie Antoinette Robinson, daughter of Lieut. Daniel Robinson of the United States Revenue Service. He died at Baltimore, January 26, 1844. In 1901 mural tablets were erected at the University of Maryland, and Baltimore College of Dental Surgery. Hayden's license to practice dentistry is at the former institution.

EUGENE F. CORDELL.

HAYES, Isaac Israel (1832-1881), physician and Arctic explorer, was born in Chester County, Pennsylvania. His father was Benjamin Hayes and his mother Ann Borton. He was graduated in medicine at the University of Pennsylvania in 1853 with a thesis on "Gunshot Wounds." He practiced in Philadelphia a short time before he was appointed surgeon of the second Grinnell Expedition in search of Sir John Franklin (1853), commanded by Elisha K. Kane (q. v.) and known as "Kane's Expedition." Hayes was not only surgeon and naturalist, but proved valuable as an explorer. In the autumn of 1853 he helped to lay out depots on a trip on Glacier Island from Van Rensselaer Harbor; in the following May (1854) he crossed Kane Sea and was the first civilized man to set foot on Grinnell Land, traveling along the coast to Cape Frazer, about 79° 45′ north latitude. In the summer of 1854 the "Advance" was frozen in, and on August 28 Hayes with eight companions left the ship in an attempt to reach Upernavik, Dr. Kane granting permission, but advising against the move. The party was stopped by ice and struggled through aided by the Etah Esquimaux until December when in wretched condition they returned to the "Advance"—the party under Kane reached Upernavik by sledge and boat in the summer of 1854.

On July 7, 1860, Hayes sailed in command of the "United States" which had been "fitted out by public subscription for exploration of the open polar sea." On July 10, 1861, he broke ice "an unprecedentedly early date for an Arctic vessel" and explored part of the shore of Ellsmere Land, and was the first known white man to land there. In 1869 he went to Greenland in the "Panther" with William Bradford, the artist. In 1867 he received the founder's medal of the Royal Geographical Society, and in 1869 the gold medal of the Paris Society in recognition of his work in the Arctic. Dr. Hayes never married.

He wrote: "An Arctic Boat-Journey in the Autumn of 1854" (1860); "Physical Observations in the Arctic Seas" (1860-1861); "The Open Sea" . . . . (1867); "Cast Away in the Cold" . . . . (1868); "The Land of Desolation" (1871); "Pictures of Arctic Travel" (1881).

Dr. Hayes died in New York, December 17, 1881.

HAYNES, Francis Leader (1850-1818), surgeon of Southern California, was born at Philadelphia, July 11, 1850, the son of John Sidney and Elvira Mann Koons Haynes. He was a delicate boy but rather precocious mentally, so that he was graduated from the medical department of the University of Pennsylvania in 1871, submitting as an essay, "Physiological Effects of Bromide of Potassium." He served as interne in the Episcopal Hospital of Philadelphia and began practice in that city, moving to Los Angeles, California, in 1886, where he began pioneer work in surgical asepsis. He was an active and enthusiastic member of the Los Angeles County Medical Association and of the Southern California Medical Society, before which he read papers on abdominal surgery—in which he specialized—antiseptic wound dressings, repair of recent lacerations of puerperal tissues, the improved Cesarean section and similar topics, published largely in the "Southern California Practitioner." He was professor of Gynecology in the Medical College of the University of Southern California at Los Angeles.

Dr. Haynes devoted much attention to the training of nurses on the Pacific Coast, a matter that had received little attention there in the "nineties." He taught in his hospital and wrote "A Surgical Primer For Nurses," first put out in manifold typewritten form and published as a book in 1895. In the introduction he said: "Be as clean as you can, be as thorough as you can, be as quick as you can, and remember that behind all that you do there is a life." Education and vocational training were interests of Dr. Haynes and he served until his death as an enthusiastic trustee of the Whittier State School of three hundred boys, situated a few miles from Los Angeles.

A hard worker and almost morbidly conscientious Dr. Haines succumbed to cerebral embolism at his home in Los Angeles, October 18, 1898, at the age of forty-eight, mourned by the profession of California.

WALTER LINDLEY.

HAYS, Isaac (1796-1879), medical editor and opthalmologist, of Philadelphia was born in that city, July 5, 1796, the son of Samuel and Richea Gratz Hays. His father, a wealthy merchant, gave his son a cultured education; first he was under the Rev. Samuel B. Wylie and then entering the academic department of the University of Pennsylvania he took an A. B. in 1816. The father put young Isaac into his counting house, but a year at business proved unsatisfactory and the boy began the study of medicine under Dr. Na-

thaniel Chapman, (q. v.) a noted practitioner of the time. In 1820 Isaac received his M. D. degree from the University of Pennsylvania, where Chapman was professor of the theory and practice of medicine and clinical medicine. Ophthalmology engaged his attention and he soon acquired considerable reputation in eye surgery, being on the staffs of the Wills Hospital and the Pennsylvania Infirmary for Eye Diseases. In 1826 Dr. Hays joined the editorial staff of the "Philadelphia Journal of the Medical and Physical Sciences," of which Dr. John D. Godman (q. v.) had been the editor. The next year Dr. Godman was called to New Jersey to fill the chair of anatomy at Rutgers Medical College and Dr. Hays became sole editor, changing the title of the journal to "The American Journal of the Medical Sciences" and giving it a more broadly representative character by securing the cooperation of the leading minds in medicine in all parts of the country. Dr. Hays continued as editor until 1869 when he shared the editorship with his son, Dr. Isaac Minis Hays, who was graduated from the medical department of the University of Pennsylvania the previous year. This monthly journal has continued to be the leading medical publication of the country to the present time. In 1843 its success led to the establishment of the weekly "Medical News" and in 1874 to that of the "Monthly Abstract of Medical Science," both under the same editorial management. Altogether Dr. Hays was interested in editing for fifty years and his name has been inseparably associated with this noted American medical journal, "The American Journal of the Medical Sciences," which has maintained the highest character both for the quality of the articles which appear in its pages and for the manner of their presentation.

Dr. Hays was elected a member of the Academy of Natural Sciences of Philadelphia in 1818, and was its president from 1865 to 1869. He was an active member of the American Philosophical Society, and for a number of years was a member of its council; a corresponding member of the Royal Society of Northern Antiquarians, Copenhagen; fellow of the College of Physicians; first president of the Ophthalmological Society of Philadelphia and honorary member of the American Ophthalmological Society. He edited Laurence's work on "Diseases of the Eye"; Arnott's "Elements of Physics"; Wilson's "American Ornithology", and Hoblyn's "Dictionary of Medical Terms". With Dr. Robert L. Griffith he translated two volumes by Broussais: "The Principles of Physiological Medicine" and "Chronic Phlegmasia". He began our first "American Cyclopedia of Practical Medicine and Surgery" but finished only the letter A (1834-1836). In 1833 he published: "Descriptions of the Inferior Maxillary Bones of Mastodons." He recorded the first case of astigmatism in this country, Donders speaking of it as the fifth case in chronological order to be described in the literature.

In 1834 Dr. Hays was married to Sarah Minis, of Savannah, Ga. They had four children. He died following an attack of influenza, April 12, 1879, at the age of 82. He was described by his contemporaries as handsome, tall, benevolent, a blond and dignified gentleman of courteous manners and a warm heart. To the end of his long life Dr. Hays took a keen interest in editing the journals with which his name is inseparably associated. To the last his mind was unclouded.

WALTER L. BURRAGE.

HAYS, Isaac Minis (1847-1925), editor, ophthalmologist, of Philadelphia was born in that city, July 26, 1847, son of Dr. Isaac (q. v.) and Sarah Minis Hays. He was graduated from the University of Pennsylvania, A. B., 1866; M. D. 1868; A. M., 1869. In the last year he became co-editor of the "American Journal of the Medical Sciences" with his father whom he succeeded in the editorship in 1878, continuing until 1890 and showing unusual judgment in the selection of papers for publication. He also edited the "Medical News" from 1878 to 1889. When the International Medical Congress met in Philadelphia in 1876 at the time of the centennial, he was chosen secretary-general.

For twenty-five years from January, 1897, he served as secretary and librarian of the American Philosophical Society, collecting and cataloguing the great mass of Benjamin Franklin's papers and manuscripts and publishing a "Cronology of Benjamin Franklin," 1904 (2nd edit., 1913), and "Calendar of the Franklin Papers," 1907; the celebration of the Franklin Bi-Centenary in 1906 was largely due to his efforts. In no small degree does our knowledge of Franklin's personality depend upon these historical researches.

On October 15, 1873, he married Emma, the daughter of George A. Wood of Philadelphia.

A number of articles on ophthalmology came from his pen, as well as the American edition of "Treatise on the Diseases of the Eye" by Soelberg Wells, 1873.

Dr. Hays died suddenly of heart disease, in Philadelphia June 5, 1925.

HAYWARD, George (1791-1863), the first to do a major surgical operation with ether anesthesia, was born in Boston, March 9, 1791, and died of apoplexy in the same city, October 7, 1863. He was the son of Dr. Lemuel Hayward (1749-1821) of Jamaica Plain, Massachusetts, surgeon of the Revolution. He received the degree of A. B. from Harvard College in 1809, and also from Yale in the same year, and the degree of M. D. from the University of Pennsylvania in 1812. Then he studied abroad under Sir Astley Cooper, Abernethy and other eminent teachers of the time. Of a sanguine temperament he put great energy and zeal into his medical work from the first. On his return from abroad he was one of the members of a private medical club including in its membership Channing, Bigelow, Gorham, J. C. Warren and Ware (q. v. to all), who met weekly for the reading of medical papers to be published later in the "New England Journal of Medicine and Surgery." In 1830 Hayward joined with J. C. Warren and Enoch Hale (q. v.) in forming a private medical school, which lived eight years.

He translated Bichat and Béclard's "General Anatomy," four volumes, 8°, thus first bringing to the attention of the profession of this country the new science of histology, and he assisted in framing the report upon smallpox by the consulting physicians of the city of Boston, in 1837, outlining the procedure adopted to-day in handling contagious diseases.

Dr. Hayward devoted himself largely to surgical work and was known as a careful and judicious operator, so that in 1835, when Harvard established a professorship of the principles of surgery and clinical surgery, he was chosen to fill the chair. He held teaching clinics at the Massachusetts General Hospital, where he was visiting surgeon, and it was he who did the second surgical operation ever done upon a patient under the influence of ether, the removal of a fatty tumor of the shoulder, on October 17, 1846, occupying seven minutes. This was the day following the first operation under ether, by J. C. Warren. On November 7, 1846, Hayward did the first major operation under ether anesthesia in the same institution, amputation of the thigh, occupying a minute and three-quarters exclusive of the tying of the vessels. The operation was done before a large audience of students and physicians, and the patient, a delicate girl of twenty, with a scrofulous knee-joint, was entirely ignorant that her leg had been removed.

While recording secretary of the Massachusetts Medical Society from 1826 to 1832 he wrote full and clearly written records, and when president from 1852 to 1855 he was devoted to the interests of the society. At this time he was made one of the seven fellows of Harvard College, an office he held until his death, a rather unusual honor to be bestowed on a member of the medical profession. He seems to have been almost morbid in his fear of publicity, and destroyed all papers that might have been used by future biographers. He published "Some Account of the First Use of Sulphuric Ether by Inhalation in Surgical Practice" in the "Boston Medical and Surgical Journal," April 21, 1847.

WALTER L. BURRAGE.

HAYWOOD, Edmund Burke (1825-1894), of distinguished English and North Carolina ancestry, was born in Raleigh, North Carolina, January 13, 1825, and during his day was the greatest physician in the state capital. His collegiate education was obtained at the University of North Carolina and his professional degree from the University of Pennsylvania in 1849. From 1861-65 he continuously rendered service to the Confederacy as surgeon of the Raleigh Light Infantry; inspector of military hospitals, Morris Island, South Carolina; surgeon-in-charge of Fair Grounds Hospital, Raleigh, surgeon at Seabrook Hospital during the fights around Richmond; later surgeon-in-charge of Pettigrew's Hospital, Raleigh.

He served as president of the North Carolina Medical Society (1869), and of the Raleigh Academy of Medicine, having been one of the founders of that institution. The University of North Carolina conferred upon him the degrees of A. M. and LL. D. His contributions to medical literature were considered of great value, among them being "The Physician, His Relation to the Community and the Law." It was largely through his influence that the institution for the colored insane of the state was erected at Goldsboro; he also urged the establishment of the Western Asylum for the insane at Morganton. As a surgeon he ranked at the head of his profession and performed with success many of the important operations such as: the Cesarean section, done in August, 1847; strangulated inguinal hernia, two

cases out of four being cured; lacerated perineum. In 1869 he successfully performed ligation of the right iliac artery for traumatic aneurysm of the femoral artery, the first operation of the kind ever performed in the state, and considered so important that it was published in pamphlet form by the State Medical Society. In April of the same year he assisted Dr. Washington Atlee (q. v.) of Philadelphia in performing an ovariotomy at Raleigh. The patient being left entirely in Dr. Haywood's charge, recovered and afterwards became the mother of three children. He operated twice successfully for the removal of submucous fibroid of the uterus. He performed many other notable surgical operations, among those being: aspiration of the pericardium for "hydrops pericardii; external esophagotomy for impacted foreign body low down in the esophagus; amputation of the thigh in its upper third for gangrene of the leg caused by traumatic femoral aneurysm; tracheotomy for foreign body in the bronchus.

In 1850 he married Lucy A. Williams, daughter of Mr. Alfred Williams. He died on January 18, 1894, in the house in which he was born. He was survived by one daughter and six sons. One son, Hubert, became a doctor.

HUBERT A. ROYSTER.

HAZLETT, Robert W. (1828-1899), of West Virginia, was born in Washington, Pennsylvania, April 16, 1828, his parents being Samuel and Sarah Johns Hazlett. His paternal grandparents, Robert Hazlett from Edinburgh, and Mary Caldwell Hazlett, daughter of Katherine Caldwell (née René), a Huguenot, came to America in 1785. He had his college course at Washington, now Washington and Jefferson College, some years later receiving his A. M. He early evinced an interest in medicine and showed it by preparation of many specimens for the college lectures on anatomy and physiology by Dr. James King, a work for which he possessed natural artistic talent. Hazlett began to study medicine in Wheeling, West Virginia, with his cousin, Dr. R. H. Cummins, receiving his M. D. in 1851 from Jefferson Medical College, Philadelphia, also taking a post-graduate course and soon after settling in South Wheeling. In 1857 for recuperation he went into the mountains, and, always fond of geology, became interested in searching for coal and oil, and "located" and supervised the boring of the state's first productive oil well. In June, 1861, Hazlett again left practice, this time to enter the Union Army as surgeon of the second West Virginia Volunteer Infantry. In the autumn of 1862 he was appointed brigade-surgeon of Lathanis Independent Brigade, and in 1863 surgeon of the United States General Hospital at Grafton. The war over, Dr. Hazlett resumed practice in Wheeling, was very successful and ranked high among his fellows. He was president of the Ohio County Medical Society and president in 1893 of the State Medical Association. From its origin he was consulting physician to the City Hospital.

Dr. Hazlett married Mary Elizabeth Hobbs, October 7, 1852, and had four sons and one daughter—Howard, Samuel, Edward, Robert, and Katherine.

He died at his home in Wheeling, West Virginia, on September 2, 1899, after a year's illness with pernicious anemia. His writings, which were not numerous, are to be found in the transactions of the West Virginia State Medical Association.

SAMUEL LAWRENCE JEPSON.

HEARD, Thomas Jefferson (1814-1899), climatologist, of Texas, was born in Morgan County, Georgia, May 14, 1814, of Scotch-Irish and English ancestry. He came of patriotic stock, his grandfather, a Virginian, having fought throughout the American Revolution, and his father a soldier in the War of 1812. He took a first course in medicine at the Transylvania University (1836-37), and received his M. D. from the University of Louisiana in 1845. In 1837 he settled in Washington, Texas, where he remained until 1857 when he moved to Galveston, his home for the rest of his life. He early stood for the treatment of malaria with quinine, ammonia, opiates and salts, instead of bleeding, purgatives and mercury. As surgeon and as soldier he aided in keeping back the Mexicans from Texas (1838-1842); in the Civil War he served in the Confederate Army as examining surgeon on the staff of General T. B. Howard.

In 1866 he became professor of the theory and practice of medicine in the Galveston Medical College, but resigned after one course of lectures; in 1876 he was elected professor of materia medica and therapeutics in the University of Louisiana, but resigned in 1877 because of ill health. He was one of the organizers and the first president of the Texas State Medical Association. He wrote "Epidemics, Topography and Climatology of

Texas" (1868), and "Epidemics and Climatology" (1869), and he contributed to medical journals.

In 1839 he married Frances A. Rucker, of Washington County, who with one daughter survived him. He died at Galveston, March 8, 1899.

GEORGE H. LEE.

HEARN, William Joseph (1842-1917), "Joe" Hearn, as his friends loved to call him, a quiet unassuming member of the staff of Jefferson Medical College, father to and loved in turn by many generations of students, was among the first to perform sundry surgical operations which today have passed into the stock surgical repertory. He was born at Laurel, Delaware, December 27, 1842, a descendant of Sir William Hearn who crossed the main in 1688, leaving London, England, for Maryland to take possession of a large grant of land. Joseph was educated in his native town and then entered Jefferson Medical College, graduating in 1867. He began practice in Laurel and in 1870 moved to Philadelphia where Samuel D. Gross (q. v.) appointed him anesthetist and private assistant, succeeding Frank Maury (q.v.) under whom he had studied. He became an authority in anesthetics, and Gross declared that he had given them for him for eleven years without serious accident. In the new Jefferson Hospital on Sansom Street, he became Gross' chief of clinic in 1877 and inaugurated and ran the out-patient surgical department until 1882 when Gross became professor of the principles of surgery and clinical surgery and Hearn succeeded him as surgeon to the hospital. In the school, he was assistant demonstrator of anatomy, 1871-79; assistant demonstrator of surgery, 1879-82; quiz-master in surgery for five years; professor of the principles and practice of surgery; and emeritus professor of surgery. Here he was the first to give instruction in microscopy and upon the histology of tumors; he also gave a course on dermatology, as well as on genito-urinary diseases. Meanwhile he conducted a course of operative surgery and bandaging in connection with McClellan's school of anatomy.

Dr. Hearn was one of the first to trephine and remove a portion of the motor cortex for epilepsy and to tap the lateral ventricles for hydrocephalus. He did a transperitoneal ligation of the external iliac artery for aneurism of Scarpa's triangle, unpublished; sutured the rectum to the abdominal wall for prolapse; and incised hydrocele and treated the sac with carbolic acid and packed it with iodoform gauze. His operation for diverticulum of the esophagus was the second, following von Bergmann. Before the hemostatic forceps were used in this country he used little clips to arrest hemorrhage.

As the result of a runaway accident, he was thrown from his carriage and his skull was fractured; he dragged out many sad and weary months. On December 21, 1917, he died from pneumonia at the home of his daughter in Media, Pennsylvania.

HEBERT, Louis (-1627). Every student of Canadian history knows that from the first days of the colonization of New France, an important rôle as colonists was played by members of the medical profession. If they were not remarkable for any great professional brilliancy, they were generally men of sterling character and courage. Louis Hébert, apothecary, surgeon and agriculturist, is regarded next to Champlain, as the "Father of New France." When Champlain induced his old friend of Port Royal to venture once more to become a colonist of New France, he knew he had accomplished a greater work in building up his colony than had been done since its foundation. For Louis Hébert had proved his worth at Port Royal, not only as a surgeon, but as a keen and ardent agriculturist.

When Champlain returned to France in 1617, his mind filled with the wondrous future he was planning for Quebec, he knew it was of vital import to obtain as colonists men of the best type, not jail-birds such as Roberval had had to contend with, nor mere adventurers, who came for the love of adventure or gain and went away again, but men who would cultivate the land. And so the thought of his friend came to him—Louis Hébert, who had cultivated such beautiful gardens at Port Royal, until that settlement was destroyed by Samuel Argall, when Hébert returned to France. Louis Hébert had received a good education, for his father was a man of repute, being apothecary to Catherine de' Medici. Louis followed his father's business and had a shop on the banks of the Seine, where he was well patronized, but in the summer of 1606 he suddenly announced to his friends and relations that he was sailing with Poutrincourt and fifty other colonists for the New World, of which there had lately been so much talk. Among others who sailed in the ship was the Parisian lawyer, historian and poet named Lescarbot, the friend and

lawyer of Poutrincourt. It is to Lescarbot that we are indebted for the vivid portrayal of how the first winter in the new settlement at Port Royal was passed. "For my part," writes Lescarbot, "I can say that I never worked so hard in my life. I took pleasure in laying out and cultivating my gardens, in making alleys, in building summer-houses, growing wheat, rye, barley, oats, beans, peas, and garden plants, and in watering them, for I was most anxious to find out, by personal experience, the quality of the soil."

With Lescarbot worked Hébert and the days were not long enough for these two enthusiastic agriculturists; they must needs work by moonlight, digging and planting. Lescarbot and Hébert returned to Paris in the Autumn of 1607, but Hébert, after a short stay, came back to Port Royal accompanied by Biencourt, Poutrincourt's son. He assisted Biencourt in managing and taking care of those colonists who had remained, and when Biencourt was absent acted as his lieutenant, until the place was destroyed in 1613 by the English. Hébert then returned to Paris, as he thought, for good, and once more opened his shop on the banks of the Seine.

When Champlain arrived in France in 1617 he visited Hébert, and so beguiled him with his marvellous accounts of the country about Quebec that Hébert again sold his possessions and with his family started for Honfleur, where he arrived on March 15. Champlain had induced a new fur trading company to promise to support Hébert and his family for two years, and afterwards to make him an allowance of two hundred crowns for three years. On arriving at Honfleur, Hébert found, to his chagrin and dismay, that all the promises which the company had held out to him were false. In vain did Hébert appeal for fair treatment. The company refused to keep their promises; they offered him one hundred crowns, instead of two hundred, and, moreover, required his bond for free medical attendance at all times to the settlers and to the clerks belonging to their company. Hébert was at their mercy, but rather than return to Paris, for he had disposed of all his effects, he embarked with his family for the New World. Their passage was a stormy one, and when they reached Newfoundland, the ship encountered a great field of icebergs. At one time it seemed as if all on board must perish. Father Joseph, one of the passengers, knelt upon the deck and prayed for Divine assistance, and we are told in the "Relations of the Jesuits" that Madame Hébert took Marie Rollet, her youngest child, and held her up through the hatchway, that she might receive the father's blessing. It was on this long and stormy voyage of thirteen weeks and a day that the courtship of Anne, the eldest daughter of Hébert, commenced. Among the passengers was one Etienne Jonquest, a sturdy son of Normandy. He wooed Anne so successfully that the two were married in the Autumn by Father le Caron. This was the first marriage in Canada, according to Church rites, but Anne had a short wedded life, for she died in 1619 and was followed by her husband within a few weeks.

Louis Hébert chose for the site of his future home in Quebec, land on the height above—later called Mountain Hill, part of which was between the present streets of Famille and Couillard. He lost no time in building his home, a substantial stone house, thirty-eight feet in length by nineteen in width, the best house for many years to come in Quebec, and the first dwelling in what was afterwards the upper town, for as yet Champlain had not built his fort on the cliff. Not far from the house ran a stream of pure water, and this land decided Hébert in his choice of a site. For ten years Hébert toiled like any hardy peasant upon his farm. He sowed Indian corn and vegetable seeds, planted apple trees and his beloved grape vines. All his spare time, when not attending to the sick, was devoted to his agricultural pursuits. Every year he cleared more ground and tried fresh experiments in farming; every year his farm became more and more productive. He was able, almost from the first, to support his family on what he raised, and this in spite of the fact that the company forced him to sell them his grain at a price fixed by themselves, one of the many acts of injustice rendered him by the company. This farm was the show farm of Quebec—the model farm, so to speak, of the day. From this time agriculture began to find its place in New France, and in these golden days of Canada's greatness, she may well be proud of her first farmer.

The life of this clever, original Frenchman was crowded with interest from the day he first left Paris and settled at Port Royal to his final home at Quebec. Through innumerable hardships and difficulties he had struggled on with unfailing courage and hope. He had accomplished wonders during his ten year's residence at Quebec. In January, 1627, a great sorrow came upon his friends. Hébert fell on the ice when he was crossing a river

and died shortly afterwards from the effects of the fall. They buried him amidst grief in the cemetery of the Recollet Fathers, at the foot of the cross. Only three days before the accident, Hébert had visited the Fathers and as though he had had a premonition of his death, he had requested that when that event took place, he should be buried in that spot.

M. CHARLTON.

HEERMANN, Adolphus L. (1818?-1865), pioneer ornithologist who struggled on in his beloved task of hunting, preparing, and preserving his specimens with a physical disability as minutely threatening as the sword of Damocles, a man to whom is due much of the development of our knowledge of western birds, was born about 1818, probably in South Carolina. When elected a member of the Philadelphia Academy of Sciences in 1845, he was a resident of that city. In 1846, he was graduated in medicine from the University of Maryland. On his first expedition in 1843 he crossed the Rockies possibly with Fremont. In March and April, 1848, accompanied by John Krider, well-known gunsmith of Philadelphia, he went to Florida, collecting at Key West and Charlotte Harbor. A year later he made his first trip to California—apparently by the Isthmus route since he mentions birds observed at Mazatlan—where he lived for three years spending most of his time at Sacramento but exploring the American and Calaveras rivers and making trips to San Francisco, San Diego, the Coronados and Farallone Islands, and Guaymas (Sonora). Upon his return to Philadelphia, Cassin wrote to Baird, "Heermann has arrived from California with a collection of about 1200 bird skins.....also the greatest kind of a lot of nests and eggs." He described his collection in the Journal of the Academy (January, 1853), "Notes on the Birds of California observed during a Residence of three Years in that Country." He was anxious to join an expedition to Japan where his fluent French would have been useful, but the Pacific Railroad survey parties were organized and he was appointed surgeon and naturalist to the command, which was to explore southern California to seek available passes through the mountains for routes along the thirty second and thirty fifth parallels to the coast. The maladies encountered during the expedition were never serious, consisting of diseases incident to country and camp life; intermittent fever, diarrhea, and dysentery; there were only a few surgical cases of incised and punctured wounds. Upon his return he prepared two reports on the birds collected on the exploration, published in 1859. He spent the winters of 1854-55 and 1855-56 in San Antonio, collecting a number of birds. In 1862 and perhaps a few years prior, he made small colored drawings of birds copied from works in the library of the Philadelphia Academy of Natural Sciences which he placed at the back of the trays of eggs in his cabinet. He was suffering from locomotor ataxia which by this time seriously crippled him. His collection and the drawings (which have disappeared, though the eggs were probably incorporated in the Krider collection now belonging to Dr. William E. Hughes) he left with his old friend, John Krider, when he moved to Texas a few months later, where he and a younger brother had some house property in San Antonio and a ranch nearby the Rio Medina; he never returned to Philadelphia. After Mr. Henry E. Dresser came to live with Heermann, they collected together; once in the saddle, he could ride. As his infirmity increased, he gave up the longer expeditions and on the shorter ones his legs were strapped to the saddle to avoid his falling. When Mr. Dresser left, Heermann still insisted on going out with his gun. On September 2, 1865, he was found dead, having apparently fallen and been killed by the accidental discharge of his gun.

He had never, as he said, entertained the idea of "committing matrimony."

Although he was an able writer, as his reports and articles in Cassin's "Birds of California and Texas" show, Heermann was primarily an explorer and field naturalist and "thought the writing of reports a bore" (vide Cassin). Throughout his writings it is apparent that his main interest lay in nests and eggs and in one of his Pacific Railroad reports, the term "oology" occurs possibly for the first time in the literature of North American birds. Several of his better known contributions are: "Catalogue of the Oological Collection in the Academy of Natural Sciences of Philadelphia," 1853; "Additions to North American Ornithology, with Descriptions of new Species of the Genera Actidurus, Podiceps, and Podilymbus," 1850. Several birds of the western coast perpetuate his name, notably, "Larus heermanni" and "Melospiza cinerea heermanni," and one snake, "Pityophis heermanni."

HOWARD A. KELLY.

Heitzman, Carl (1836-1896), a founder of the American Dermatological Association. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 513.

HELMUTH, William Tod (1833-1902), surgeon and dean of the New York Homeopathic College and Hospital, was born in Philadelphia, October 30, 1833. He was the great-grandson of the Rev. Justus Helmuth, who came over from Brunswick about 1750 to take charge of the first German Lutheran church in America. In 1850 William Helmuth began to study medicine with his uncle, Dr. W. Helmuth, graduating three years later and beginning practice in Philadelphia. When twenty-two he became professor of anatomy in the college of which he was afterwards dean, and in that same year published his "Surgery and its Adaptation to Homeopathic Practice." The year 1858 saw him at St. Louis, where he was a founder of the Homeopathic College of Missouri and its professor of anatomy, and in 1869 he organized the St. Louis College of Homeopathic Physicians and Surgeons, being its dean and professor of surgery.

He went from St. Louis to New York to be surgeon of the Hahnemann Hospital and the New York Surgical Hospital, and became one of the most prominent surgeons of the homeopathic school. In 1877 the regents of the university of the state of New York gave him their M. D., and Yale, in 1888, her LL. D.

His "System of Surgery" went through five editions, and his articles included: "An Essay on Cleft Palate," 1867; "Nerve Stretching," 1879; "Suprapubic Lithotomy," 1882; "Ovarian Tumors and Ovariotomy," 1885; "A contribution to the Study of Renal Surgery," 1892. As co-editor of the "North American Journal of Homeopathy," "New England Medical Gazette," "New York Journal of Homeopathy," "New York Homeopathic Times," and editor of the "Western Homeopathic Observer," he did good journalistic service and his pen was never idle. He wrote also on lay topics.

His wife was Miss Pritchard of St. Louis, and they had two children. On May 15, 1902, he died suddenly of angina pectoris, after an illness of only three days.

HEMPEL, Charles Julius (1811-1879), one of the leading homeopathic physicians of America, was born in Solingen, Germany, September 5, 1811. He received a good education in his native country. In his studies he was thrown largely upon his own resources, but he was an unusually bright and assiduous student. At the age of 21 he went to Paris, where he studied under Thénse, Gay Lussac and other prominent teachers. The celebrated historian Michelet took a great liking to him, gave him a home in his family, and was ever afterward his friend. In 1835 Hempel emigrated to America. He settled in New York where, for several years, he was engaged in journalistic and literary work. In 1842 he entered the medical department of the University of the city of New York, from which he was graduated in 1845. Already in his graduating thesis, "Eclecticism in Medicine," he showed a marked predilection for the Hahnemannian doctrine. He practiced medicine in New York until 1856, when he accepted the chair of materia medica at the Hahnemann Medical College of Philadelphia. He resigned this position in 1860 and removed to Grand Rapids, Michigan, the home of his wife. Hempel had married Mrs. Mary E. Calder in 1855. His later years were clouded with affliction. As a result of an accident, paralysis of his lower limbs set in, and still later he lost his eyesight. He died in Grand Rapids, Michigan, September 24, 1879.

Hempel was a prolific writer. He translated all the prominent German and French works on homeopathy into English and wrote numerous articles and monographs on the same subject. His chief work is his "Materia Medica," of which several editions appeared. In 1842 he published a grammar of the German language. In 1874 appeared his "Science of Homeopathy."

ALBERT ALLEMANN.

Henderson, Andrew Augustus (1816-1875), medical director of the United States Navy. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 514.

HENDERSON, Thomas (1743-1824), physician, officer in the American Revolution, and public servant, was born in Freehold, New Jersey, in 1743; the baptismal record, by William Tennent (1705-1777), in Old Tennent Church at Freehold, is August 28, 1743. He was the son of John and Ann Henderson. His father was the first president of the board of trustees of Old Tennent Church and was largely responsible for the

charter of the church in 1750; an account of the securing of the charter written in "John Henderson's Beautiful Chirography" is still extant. Thomas Henderson graduated at Princeton University in 1761, then studied medicine under Nathaniel Scudder (q. v.), and practiced at Freneau, then at Freehold. In 1766 he became a member of the Medical Society of New Jersey, the first state medical society in the country. He was deeply concerned in all things regarding the Colonies and was a member of the "Committee of Observation and Inspection" (1774), and of the "Committee of Safety"; he was major in Stewart's Minute Men in 1776, and was lieutenant-colonel in Forman's brigade, and gave valuable service at the Battle of Monmouth. Henderson was the "solitary horseman" who riding up to Washington, told him of the retreat of Gen. Lee. In 1776 he was surrogate of Monmouth County; in 1777 he was made a member of the Provincial Council; in 1780-85 member of the New Jersey Assembly; in 1783 and in 1799 he was judge in the Court of Common Pleas; in 1790 master in chancery; in 1794 he was vice-president of the Council of New Jersey. He served in Congress when Washington was President, and in April, 1796, made a speech favoring a treaty with Great Britain.

Henderson was a trustee and ruling elder in Old Tennent Church and a charter member of the Monmouth County Bible Society (1817). He was a large property owner; the British burned his home in 1778, but the house which he rebuilt and in which he lived many years is still standing a mile and a half from Monmouth Court House. In the Library of the Historical Society of New Jersey is a manuscript written by Thomas Henderson to the Hon. Elias Boudinot, giving incidents in William Tennent's life of which he was cognizant (see Tennent, John Van Burgh). He was the minister's physician, and was with him during the last twenty-four hours of his life.

He married (1767) Mary, daughter of John Hendricks, who died soon after their marriage; in 1778 he married Rachel, daughter of John Burrowes, who died in 1840. They had seven daughters.

Henderson died December 15, 1824, at Freehold.

HOWARD A. KELLY.

Hendricks, George A. (1852-1899), teacher of anatomy and editor, of Minneapolis, Minn. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 515.

HENROTIN, Fernand, (1847-1906), Chicago gynecologist, and medical educator, was born in Brussels, Belgium, September 28, 1847, the son of Dr. Joseph F. Henrotin. He immigrated to Chicago with his parents in 1857 and attended the high school and was graduated from Rush Medical College in 1868. The father had a lucrative practice to which Fernand succeeded on his death. Young Henrotin was appointed prosector of anatomy at Rush, a position he held for two years, during that time publishing a booklet on "First Aid," inspired by his service in the fire department of the city, to which he was physician for twenty-one years. He was interested in military medicine and helped to found the Association of Military Surgeons of Illinois, and during his entire life advanced the affairs of this organization while acting as chief surgeon to the First Brigade. He had a service on the medical staff of the great Cook County Hospital and late in life was president of its medical board. It was at the Alexian Brothers Hospital that he did most of his gynecological operating. There he was senior surgeon while acting also as consulting gynecologist to St. Joseph's and to the German hospitals. He was professor of gynecology in the Chicago Polyclinic. Being a founder his memory was perpetuated in a new building for the Polyclinic, "The Henrotin Hospital", which was nearly completed at the time of his death. Dr. Henrotin's specialty was operative gynecology and he gave particular attention to vaginal operations and to drainage by that route. To "Gynecology and Abdominal Surgery", by H. A. Kelly and C. P. Noble, he contributed the chapter on vaginal hysterectomy; a chapter on ectopic gestation from his pen was a part of the "Practice of Obstetrics, by American Authors", and one on gynecology in the "International Text-book of Surgery". Besides these he wrote many short articles for the current medical periodicals. From 1894 until his death he was a member of the American Gynecological Society enlivening its sessions with the presentation of papers and breezy discussions of the papers of others. He had a full-chested sonorous voice and a good presence while speaking. He was one of the founders of the International Congress of Obstetrics and Gynecology and was American secretary of the Congress for several years. One of his interests in later

life was the advancement of the standards of medical education, especially in the field of postgraduate work. About two years before he died he published a booklet entitled "Democracy of Education in Medicine", which contained many useful and practical suggestions in this field. His memberships included: The Illinois State Medical Society, Chicago Gynecological Society (president), Belgian Gynecological Society, corresponding member, in addition to the American Gynecological Society and the International Congress.

Soon after settling in practice Dr. Henrotin married Emily B. Prussing, daughter of a prominent Chicago lawyer. He died at the relatively early age of fifty-nine, when he was planning to retire to a beautiful country place and devote himself to writing, having in mind a work on pelvic surgery, in which he had had such a large experience, also he was at work on a novel embodying the phases of social life with which he had come in contact. The end came on December 9, 1906.

WALTER L. BURRAGE.

HENRY, Frederick Porteous (1844-1919). F. P. Henry, as he was commonly called, was born on his grandfather's farm in Middlesex County, New Jersey, July 21, 1844. He received his preparatory education in private academies in Mobile, Alabama, and New Jersey, and in Tours and Dresden, and his college education at Princeton, which gave him an honorary A. M. in 1891. In 1868, he graduated in medicine from the College of Physicians and Surgeons in New York.

Settling in Philadelphia, Dr. Henry became one of the physicians to the Episcopal Hospital, holding this post from 1874 to 1888, when he was elected to the staff of the Philadelphia Hospital to which he later became senior physician. He was also on the staff of Jefferson College Hospital and professor, first, of pathology and, later, of clinical medicine in the Philadelphia Polyclinic. In 1891, he accepted the chair of the principles and practice of medicine in the Woman's Medical College of Pennsylvania, which he held until shortly before his death. He was consulting physician to several hospitals.

Dr. Henry was one of the original one hundred members of the Association of American Physicians; he long gave himself unstintedly to the College of Physicians of Philadelphia, of which he was a Fellow, and as its honorary librarian was ever active in fostering its unique library; he was an ex-president of the Philadelphia County Medical Society and Pathological Society of Philadelphia. He was also a corresponding member of the Royal Academy of Medicine of Rome. Henry was a frequent contributor to medical journals, particularly on blood studies in which he was one of our pioneers. In 1881, the Cartwright prize essay was awarded him for his "Observations with the Haemacytometer upon the Globular Composition of the Blood and Milk." His work on anemia was published in 1887. He edited the seventh edition of Flint's "Principles and Practice of Medicine"; the "Standard History of the Medical Profession of Philadelphia" (1897), a work of great value involving a large amount of research, which is unfortunately rare owing to a miscarriage in its marketing; and the "Founders' Week Memorial Volume" (1909), a repository of multitudinous facts relating to Philadelphia institutions and indispensable to the historian. Interests outside his profession claimed a part of Dr. Henry's attention. He was a vestryman of St. Peter's Church of Philadelphia; the manager of Christ Church Hospital, a home for indigent old ladies; the director of the Musical Fund Society of Philadelphia; and a member of the University Club of Philadelphia and the Author's Club of London.

Josephine B. de Nancrede, a sister of Professor C. B. de Nancrede (q. v.) and Dr. Henry were married in November, 1869, in Philadelphia. They had a daughter and two sons, one of whom, J. Norman Henry, is a physician.

Dr. Henry died on May 24, 1919. He belonged to the type which each generation loves to point out as the best example of the old-fashioned, gentle courtesy of its forefathers; his kindly presence long moved like a benediction about the streets of Philadelphia. Though learned, he was never a pedant.

HOWARD A. KELLY.

HENRY, Morris Henry (1835-1895), organizer of the New York ambulance service and editor, was born in London, England, July 26, 1835, and came to the United States in 1852. His father was a celebrated Oriental scholar. Dr. Henry was educated at the Polytechnic in Brussels and at the Government School, Somerset House, London, graduating in medicine from the University of Vermont, 1860, and taking his M. A. there in 1876, and his LL. D. from the University of North Carolina, 1885. After graduating in medicine he joined the United States Navy,

serving as assistant surgeon under Admiral Farragut during the Civil War, then settling in New York City, he engaged in general practice and was surgeon-in-chief to the department of venereal and skin diseases, Emigrant Hospital, Ward's Island, from 1872 to 1880.

He was the organizer of the Ambulance Service of New York City; a member of the University of Athens, and had been decorated by the King of Greece and the Sultan of Turkey for services. In 1870 he was originator and editor of the "American Journal of Syphilography and Dermatology," the first American journal on these subjects.

He died in New York, May 17, 1895.

J. McF. Winfield.

HENSHALL, James Alexander (1836-1925), America's authority on fish, especially the black bass, son of the Rev. James Gershom (M. D.) and Clarissa Holt Henshall, was born February 29, 1836 in Baltimore, Maryland. He was graduated in medicine in New York and Cincinnati, married Hester Stansbury Ferguson, June 9, 1864, and practiced until 1896, when he entered the government service as superintendent of the U. S. Bureau of Fisheries at Bozeman, Montana. In 1909, he accepted a similar office at Tupelo, Mississippi, occupying it until 1917. His later life was spent in the city of Cincinnati.

Henshall was the first to propogate the grayling successfully, won honors at the Chicago Exposition as assistant chief of the fisheries department, received a silver medal at the Paris Exposition, (1900) and was given the gold medal at the St. Louis Exposition (1904) for his literature on fish culture and sportsmanlike methods of catching fish. He was the author of the federal fisheries plan, and it is conceded that we owe the preservation of the black bass to his efforts. To the end of his eighty-nine years, even when eyesight failed and he was confined to bed, he fought against pollution of the inland and coastal waters and devoted himself to the conservation of wild life.

His "Book of the Black Bass", 1881, is the most comprehensive treatise on this species; other books are: "Camping and Cruising in Florida," 1888, "More About the Black Bass", 1889, "Ye Gods and Little Fishes", 1900, "Bass, Pike, Perch and Others", 1903, "Favorite Fish and Fishing", 1908, "Florida Fish and Fishing", 1922, "Autobiography", 1922. For years he wrote for magazines and scientific publications on fishes, fishing, and zoology.

He served as president of the American Fisheries Society twice and of the Montana Society of Natural Sciences, and as honorary national president of the Izaak Walton League. Just five minutes before hundreds acclaimed his re-election to the last office, April 4, 1925, Doctor Henshall passed away at his home in Cincinnati. Word came as the cheering subsided, and the assembled delegates arose with bowed heads in memory of one who for half a century had devoted himself to the glorification of wild life. Further data concerning his life may be found in his "Autobiography," published in 1922.

HERBST, William S. (1833-1906), physician and botanist, was born at Trexlertown, Pennsylvania, September 24, 1833; his father, Frederick William Herbst, born February 3, 1804, emigrated from Saxony, Germany, in 1826, took an M. D. from the Jefferson Medical College in 1827, and settled in Berks County, Pennsylvania, where he practiced medicine, and died in 1880. The father was not only deeply interested in the education of his son, but made him a companion on his daily professional visits in the county; when the doctor went to see patients, the boy remained outside to gather specimens. He had an old German botany, and having heard of a botanical work by Mrs. Lincoln and failing to find it in Reading, sent to Philadelphia and bought it. William was educated at Nazareth Moravian Seminary, Freemont Seminary and Williston Seminary, and at the last-named studied botany under Edward Hitchcock (q. v.), who introduced him to the first edition of Wood's "Botany," and young Herbst was so enthusiastic in collecting and arranging specimens that he gave nearly all his time to this study. Returning home he began to study medicine under his father, later going to Jefferson Medical College, he graduated in 1855 and settled to practice in Trexlertown, Lehigh County, Pennsylvania. His interest in botany was unabated and he specially studied fungi, more particularly "Basidiomycetes." From the spring of 1889 until October, 1906, Herbst corresponded with Professor Charles H. Peck, New York State Botanist, writing letters which were "brief and concise, relating entirely to the subject of fungi forwarded to Peck." Peck wrote him of one letter: "That was a splendid fungus you sent me. It is an undescribed species of the "Sparassis." I propose to name it with consent, "Sparrasis Herbsti," sp. nov."; and again, "Thanks for

your kind offer to send me some more specimens of "Queletia mirabilis," Fr. So far you are the only one to find it in this country."

Herbst found time to write a book on the "Fungal Flora of the Lehigh Valley, Pennsylvania, 1899, and was the author of the following articles: "The Selfish Flower"—"Gentiana Andrewsii"; "Welcome Spring Flowers"; "Corn Smut and Superstition"; "Mushrooms or Toadstools."

He married Ellen, daughter of David Schall; after his death on December 22, 1896, his widow gave his specimens to the Academy of Natural Sciences, Philadelphia. Dr. Herbst had a son, Henry Herbert, who became a physician (University of Pennsylvania, 1881). He was born in Trexlertown in 1858; he is the author of "Physical Education" (1893); "School Hygiene" (1896); "Ethology of Diphtheria" (1898).

HOWARD A. KELLY.

HERDMAN, William James (1848-1896), alienist and teacher in the medical department of the University of Michigan, was born September 7, 1848, at Concord, Muskingum County, Ohio, of Scotch-Irish ancestors and had a general education in the common schools, and Michigan University, whence, in 1872, he received the degree of Ph. B. and in 1875 his M. D. There he was successively in 1875-90, demonstrator of anatomy; 1879-80, lecturer on pathological anatomy; 1880-82, assistant professor of pathological anatomy; 1882-88, professor of practical and pathological anatomy; 1888-90, professor of practical anatomy and diseases of the nervous system; 1890-98, professor of nervous diseases and electrotherapeutics; 1898-1906, professor of diseases of the mind and nervous system and of electrotherapeutics. For many years he gave special lectures to the law department classes. From 1882-1887 he was professor of orthopedic surgery in the Northwestern (Ohio) Medical College. During the same period he was consulting surgeon to St. Vincent's Hospital in Toledo, Ohio; member of the American Electro-therapeutic Association, president in 1894; member of the Michigan State Medical Society and the Zanesville Academy of Medicine; fellow of the American Academy of Medicine. In 1897 the University of Nashville gave him the degree of LL. D. He was very active in promoting the Young Men's Christian Association in the university, and a strong worker in the Presbyterian Church in Ann Arbor. He was active in securing rational anatomical laws regulating the dissection of human bodies and also, with Dr. J. W. Langley (q. v.), in establishing the electrotherapeutic laboratory in the University of Michigan, one of the first in the country. He was the founder of the department of nervous diseases in the university. The Psychopathic Hospital was largely the result of his thought and efficient work—preeminently his monument for all time. Dr. Herdman enlisted in the United States military service April 5, 1865, as private, Company F, 198th regiment, Ohio infantry and was discharged May 8, 1865, by general orders.

Herdman was about six feet high, perfectly proportioned with a large head covered with luxuriant brown hair, high forehead, bushy eyebrows shielding the deep set eyes, long curly mustache, a keen glance, a kindly manner and of remarkable dignity.

On September 15, 1873, he married Nancy Bradley Thomas, who with three children survived him; the son, Elliot Kent, became a physician. Dr. Herdman died December 14, 1906, in Johns Hopkins Hospital, Baltimore, following an operation for malignant disease of the abdomen.

Some of his writings were: "Best Methods of Counteracting Psychoses, due to the Strain and Stress Incident to our Public School System," "Journal American Medical Association," vol. xli; "Ascending Neuritis," "The Physician and Surgeon," vol. xxvii; "Primary Lateral Sclerosis"; ("Translations Michigan State Medical Society," 1889); "Some Forms of Trophoneurosis," with illustrations (Ibid., 1894); "Vascular Disease as a Factor in the Etiology of Epilepsy," "Journal Michigan State Medical Society," vol. iii.

LEARTUS CONNOR.

HERING, Constantine (1800-1880), founder of homeopathy in America, was born at Oschatz, Saxony, Germany, January 1, 1800, son of Christian Gottlieb Karl Hering, musician and author and of Christiane Friedericke Kreutzberg Hering. The ancestors of the Herings came from Moravia where the name was spelled Hrinka. When eleven, Constantine was sent to the Classical School of Zittau, where he made a large collection of minerals, plants and bones of animals. His medical studies began at the Surgical Academy of Dresden. Coming upon an old copy of Euclid he was inspired to study mathematics and Greek, so he went home and devoted himself to these studies until 1820. He then went to the University of Leip-

zig, where he took courses in medicine and was associated with Dr. J. Henry Robbi, who being asked to write a pamphlet against homeopathy, referred the matter to young Hering. Hering studied the works of Hahnemann and after two years of study became convinced that Hahnemann was right and avowed his adherence to homeopathy. He entered the University of Würzburg where Schoenlein was teaching and received his degree of doctor of medicine on March 23, 1826. One of the principles declared in his thesis was "Not to deliver individual men from particular diseases, but to deliver the whole human race from the cause of disease, is the ultimate goal of medical science."

He married Theresa Buchheim, who was born at Bautzen, Saxony.

Hering now became instructor in mathematics and natural science in the Blochman Institute in Dresden; in a few months he was appointed by the King of Saxony to go to Surinam, Dutch Guiana, to make researches in zoology and botany. There he remained for six years, continued his study of homeopathy and wrote articles for the "Homeopathic Archives." These articles came to the notice of the King who directed him to attend strictly to the duties of his appointment, but Hering at once sent in his reports, accounts and specimens, resigned his position and began to practice medicine in Paramaribo. He continued to study natural history and sent contributions of plants, reptiles and animals to the Academy of Natural Sciences in Philadelphia, of which he was a corresponding member. In Surinam, Hering went among the lepers, doing much to relieve their sufferings; in 1831 he wrote a paper on "The Antipsoric Remedies in their Relation to Leprosy." He took up the study of snakes and deposited a specimen of the Lachesis Trigonocephalus, or South American Surukuku, in the museum of the Academy at Philadelphia. Leaving Surinam, he sailed for Saxony, by way of Salem, Mass., but his ship, badly damaged upon the coast of Rhode Island, put into Martha's Vineyard for repairs, in January, 1833, when Hering went at once to Philadelphia and began to practice medicine, living there for nearly fifty years.

At this time—1833—homeopathy was little known in the United States. There were no text books in English, no manuals of materia medica and the few practitioners were using Hahnemann's books in German. On April 10, 1835—Hahnemann's birthday—Hering with Dr. Wesselhoeft and others, founded the first homeopathic medical college at Allentown, Pennsylvania, called "The North American Academy of the Homeopathic Healing Art." Another institution that owed its origin to Dr. Hering was "The American Institute of Homeopathy," founded April 10, 1844, Dr. Hering being its first president. In February, 1848, the Homeopathic College of Pennsylvania was founded by Constantine Hering, Jacob Joanes and Walter Williamson, and Hering was elected professor of materia medica, September 7, the same year. From 1864-67 he was professor of the institutes of homeopathy and practical medicine; 1867-69 of the institutes and materia medica. When the Homeopathic College of Pennsylvania merged with the Hahnemann Medical College, in 1869, Hering was professor of the institutes and materia medica until 1871; he was dean from 1867 to 1871, and emeritus professor of the institutes and materia medica from 1876 to 1880. He established the "American Journal of Homeopathic Materia Medica." Hering's important work was the Homeopathic Materia Medica. He wrote some three hundred and twenty-five articles mostly on remedies and indications for their use; he either edited or wrote eighty-nine books or pamphlets. His "Domestic Physician" had fourteen editions in Germany, seven in America, two in England, and was translated into many languages. The following books by Hering had great popularity: "Analytical Therapeutics; or Symptoms of the Mind"; "Condensed Materia Medica"; and the translation and revision of Gross' "Comparative Materia Medica." His "Magnum Opus" was: "The Guiding Symptoms of our Materia Medica," in ten volumes, to which he gave fifty years of his life. Hering proved ninety-one drugs; his work in this line was greater than that of any other physician—Hahnemann himself proved but sixty-four. His method in conducting a proving is shown in a report of the committee appointed by the American Provers Union, Philadelphia, 1853. In his Lachesis, the poison of the Lachesis Trigonocephalus; eighty-eight pages in the Guiding Symptoms give a record of 3,800 symptoms. He was the first to propose triturations and dilutions in the decimal scale instead of in the centesimal scale used by Hahnemann. Paracelsus was his delight and he had a splendid collection of his works, which after his death was secured by the Hahnemann Medical College of Philadelphia. The collection comprises one hundred and eighty-nine titles of books, eighteen volumes

of bound pamphlets, manuscripts on Paracelsus, written by Hering; also thirty pictures of Paracelsus, his residence, his study and a photograph of his skull. It is interesting to note that the Paracelsus system was a crude homeopathy. Paracelsus said: "Likes must be driven out by likes. What makes jaundice, that also cures jaundice and all its species"; and again, "The medicine that shall cure paralysis must proceed from that which causes it."

In 1843, after Hahnemann's death, Madame Hahnemann invited Hering to Paris to take the practice of her husband, but he declined. Hering lived at 112 and 114 North 12th Street, Philadelphia, where he kept to the old German custom of having two medical students live with his family to keep in touch with the work and progress of the College. Here was his study where he slept and where he worked daily from three o'clock A. M. until eight, while the great city slept about him; on the day he died he was at work on Calcarea carb., or "ostrearum," as he called it, as it was made from the oyster shell.

He introduced and gave the first impulse to Isopathy in 1830 when he proposed as a remedy for hydrophobia the saliva of the rabid dog and for smallpox, matter from variolous pustules.

Hering was a lover of music, and musicales were held frequently at his home. He was a Swedenborgian; his motto was: "Love truth because it is truth and do good because it is good."

He died of heart disease July 23, 1880.

HERRICK, Henry Justus (1833-1901), a prominent physician of Cleveland, Ohio, of New England descent, was born in Aurora, Portage County, Ohio, January 20, 1833. While yet a lad, his father removed to Twinsburg, Summit County, Ohio, where the boy divided his time between labor upon the farm or in a sawmill and attendance during the winter at the ordinary district school, in 1854 entering Williams College, supporting himself by teaching school during the vacations, and graduating there in 1858. On his return to Ohio in 1858, he studied under Dr. Martin L. Brooks, of Cleveland, and in 1860 went to Chicago and continued with Dr. Brainard, matriculating in the Rush Medical College and graduating there in 1861. After a tour of service in the United States Marine Hospital at Chicago, Dr. Herrick returned to Cleveland and became assistant to Dr. Brooks, his old preceptor, in the charge of the United States Marine Hospital. In 1862, however, he was commissioned assistant surgeon of the seventeenth regiment of Ohio infantry; promoted to surgeon in the same year; captured at the battle of Chickamauga, spent two months in the Libby Prison and was exchanged, and followed General Sherman in his famous march to the sea. During a short furlough in 1863 he married Mary Brooks, the daughter of his former preceptor. Two of his sons also became doctors. At the close of the war Dr. Herrick spent several months in New York City to refresh his medical knowledge, then returned to Cleveland and continued to practice there until his death from uremia, January 28, 1901.

In 1866 Dr. Herrick was elected to the chair of obstetrics and the diseases of children, in the Charity Hospital Medical College of Cleveland, and four years later was transferred to the chair of the principles of surgery in the same institution, then known, however, as the medical department of the University of Wooster. On the reorganization of this college in 1881 Dr. Herrick resigned his position and accepted the chair of pathology and hygiene in the medical department of the Western Reserve University. Subsequently he was transferred to the chair of gynecology and hygiene there and, on his retirement, was honored with the title of professor emeritus. He was president of the Ohio State Medical Society in 1873-4, and at one time or another of the Ohio State Sanitary Association, the Northeastern Ohio Medical Society and the Cuyahoga County Medical Society. He was also a frequent contributor to the medical journals and to the transactions of the various societies of which he was a member. Among the more important contributions from his pen were: "Carcinoma: a Form of Perverted Nutrition" (Transactions of Ohio State Medical Society, 1891); "The Radical Cure of Hernia," "Columbus Medical Journal," vol. vi, 1887; "Dietetics in Idopathic Fevers," "Columbus Medical Journal," vol. v, 1887; "Hypnotism," "Cleveland Medical Gazette," vol. xii, 1896-7.

HENRY E. HANDERSON.

HERRICK, Stephen Solon (1833-1906), of New Orleans and San Francisco, sanitarian, teacher, author, was born December 11, 1833, in West Randolph, Vermont. He was graduated A. B. at Dartmouth College in 1854 and M. D. from the University of Louisiana in 1861. He served as assistant surgeon in the Confederate States Army in 1862-3; and after-

wards in the Confederate Navy until the end of the Civil War. He was inspector and secretary of the health department of New Orleans from 1869 to 1886; and held the same office in San Francisco and in the State of California from 1885 to 1896. He was professor of chemistry in the New Orleans School of Medicine 1869-70,. and professor of natural physics and chemistry in the Louisiana Agricultural and Mechanical College, 1876-77. He was on the editorial staff of the "New Orleans Medical and Surgical Journal" from 1866 to 1880. He practiced medicine from 1865 to 1887 and wrote on medical subjects for "Wood's Handbook of Hygiene and Public Health" and "Reference Handbook of the Medical Sciences." He won a prize from the American Medical Association in 1869 for an essay on "Quinine." At one time Dr. Herrick was president of the New Orleans Medical and Surgical Association.

He married Julia Cowand of New Orleans in 1867.

He died May 20, 1906.

HERRICK, William B. (1813-1865), of Chicago, first president of the Illinois Medical Society, was born in Durham, Me., Sept. 20, 1813. When 16 years old, he began teaching school, and at intervals attended Gorham Academy, Me. He went to lectures at Bowdoin and Dartmouth colleges, graduating from the medical department of the latter Nov. 16, 1836. In 1837, he settled in Louisville, Ky., and was appointed assistant demonstrator of anatomy in the Louisville Medical Institute. In 1839, he moved to Hillsboro, Ill. In 1844, although elected to the chair of surgery in the medical department of Illinois College, he did not occupy it, but went to Chicago and became lecturer on anatomy in Rush Medical College. From 1845 to 1850, he was professor of anatomy, from 1850 to 1855 professor of anatomy and physiology, and from 1855 to 1857, professor of physiology and pathology.

When the Mexican War began, he was appointed assistant surgeon in the First Regiment of Illinois Volunteers, and was in the engagement at Buena Vista. Later, he was in charge of the hospital of Saltillo. In May, 1847, ill health compelled him to resign, and he returned to Chicago to resume his duties. In June, 1850, he was one of the organizers of the Illinois State Medical Society, and served as its first president. He also in that year aided in organizing the Chicago Medical Society, and was its second president. He aided in editing the "Illinois and Indiana Medical Journal" from 1846 to 1849, and wrote many able reviews and editorials. When the U. S. Marine Hospital at Chicago was opened in 1852, William B. Herrick was appointed surgeon and physician to the institution. He was compelled to resign his college position in 1857 because of broken health, never having been well after the sickness he contracted during the Mexican campaign. He returned to his native state,where he died on Dec. 31, 1865.

It has been said of Herrick "few who have been associated with him, in the office of medical instructor, ever exceeded him in the influence he had upon his students by the zealous and high-toned ardor that characterized his quest of science and his skill in communicating it to others."

GEORGE H. WEAVER.

HERSEY, Ezekiel (1709-1770), pioneer physician of Massachusetts, was born at Hingham, in that state, September 21, 1709, and was graduated from Harvard College in 1728. He studied medicine with Lawrence Dal'Honde, a French physician of Boston, who had gained notoriety in the controversy over the introduction of inoculation for small-pox. Dal'Honde was an ally of William Douglass (q. v.) who opposed Boylston so strenuously in that memorable affair. Hersey did not partake of the prejudices of his preceptor, but was one of the first to submit to the new preventive measure. He practiced at Hingham and gained great popularity which extended his practice into the counties of Plymouth, Norfolk and Barnstable. President Quincy of Harvard College wrote of him: "His intellectual powers were strong, his manners pleasing and his professional attentions assiduous and faithful. To the rich his charges were proverbially moderate, and to the poor his services were ever ready, and even gratuitous. Yet he attained great wealth, according to the estimate of his contemporaries, and was among the most beloved and honored of the distinguished men of that period."

In the agitation which preceded the Revolution, Hersey was active. He was often chairman of the committees from Hingham, to act with similar committees from other towns of Massachusetts in formulating measures for defense. His eloquence is spoken of as "most persuasive." Dr. Hersey died December 9, 1770, bequeathing to Harvard College the sum of one thousand pounds towards the support

of a professor of anatomy and physic. This was twelve years before the founding of the Harvard Medical School and the sum was placed at interest, to be augmented later (1791) by a similar sum from his widow, for the same object. From these sums and a further bequest of five hundred pounds by Dr. Abner Hersey (1722-1787), a brother, there were founded and maintained the "Hersey Professorship of Anatomy and Surgery" and the "Hersey Professorship of the Theory and Practice of Physic." Dr. Ezekiel Hersey also left funds for the establishment of an academy in Hingham.

Abner Hersey took medical students as apprentices, according to the custom of the day, practiced all his life in Barnstable, Massachusetts, and left a will that was said to be one of the strangest documents on record, so that the legislature was forced to put an end to his scheme for perpetuating his estate. He wore a coat made of seven tanned calfskins and railed at the fashions of the time.

HERTER, Christian Archibald (1865-1910), of New York, one who advanced scientific medicine, was born in Glenville, Connecticut, September 3, 1865, and died at his home in New York City, December 5, 1910, in the forty-sixth year of his age. His early education, partly by private teachers and at the Columbia Grammar School, was largely influenced and directed by his father, a man of wide culture and scholarly attainments. He graduated M. D. at the College of Physicians and Surgeons (Columbia University) in 1885, and pursued graduate professional studies at the Johns Hopkins University, and later in Germany and France. He was visiting physician to the New York City Hospital from 1894 to 1904, professor of pathological chemistry at the University and Bellevue Hospital Medical College from 1898 to 1903, and after 1903 professor of pharmacology and therapeutics at the College of Physicians and Surgeons. He was a member of the Board of Referees appointed by the president of the United States to act as advisers to the Department of Agriculture in the enforcement of the National Food and Drugs Act.

With the incorporation of the Rockefeller Institute for Medical Research in June, 1901, Dr. Herter, who had been active and influential in the preliminary conferences, became a member of the board of directors, and served for a number of years as its treasurer. From the date of his graduation in medicine, Dr. Herter's life was one of singular devotion to the pursuit and advancement of scientific medicine—a devotion ever increasing and burning never more brightly than during the last years of a progressive and wasting nervous affection. To this life-work he brought the intellectual qualifications of the successful investigator of nature, good training, industry and enthusiasm. With the scientific temperament was joined, in unusual degree, the imaginative and artistic, in music especially, his accomplishments being those of a virtuoso.

Opportunities for scientific research Dr. Herter created largely for himself, by constructing on the top floor of his house a well-equipped laboratory for experimental, pathological, bacteriological and chemical investigations, and by securing the services and cooperation of able assistants and collaborators. From this private laboratory issued during fifteen years numerous and valuable contributions.

Dr. Herter was a prolific contributor to medical science, his published articles and books numbering not less than seventy, and covering a wide range of activity. His earliest scientific interest related to diseases of the nervous system, his first publications in this field appearing in 1888, followed in 1889 by his valuable study of experimental myelitis, and later by several articles of pathological and clinical interest, and by the publication in 1892 of the first edition of his text-book on "The Diagnosis of Diseases of the Nervous System." After this period his work lay more and more in the domains of experimental pathology, and especially of pathological chemistry, being concerned with problems of metabolism, of the formation of gall-stones, of glycosuria, of anemia and toxemia and of infantilism; and in the later years particularly with the study of the intestinal bacterial flora and intestinal putrefaction. His lectures on "Chemical Pathology in its Relation to Practical Medicine," published in 1902, met a most favorable reception. He approached pathological problems with broad biological, and even philosophical interest.

Dr. Herter's services to American medicine are not to be measured solely by his published contributions, valuable as these are. The example and influence of his personality and of the ideals which he represented made strongly for higher professional standards and for the wider recognition and cultivation of medical science. The lectureships which Dr. Herter, in association with Mrs. Herter, established upon wise and generous foundations at the Johns Hopkins Medical School and the

University and Bellevue Hospital Medical College serve a most useful purpose in the promotion of scientific medicine.

It was mainly through Dr. Herter's instrumentality and generous support that the "Journal of Biological Chemistry" was established in 1905, and he was also active in the organization, in 1908, of the American Society of Biological Chemists. Biological chemistry in this country owes a large debt to him.

His services were of great help in the planning and development of the Rockefeller Institute. After the opening in September, 1910, of the hospital of the Institute, to which he had been appointed physician, and which owes much in its conception and general character as a research hospital to the time and thought devoted to it by him, Dr. Herter began to make use of the opportunities there offered, which seemed to be the fulfilment of his dreams for the study of the problems of disease as presented by the living patient. The zeal and ardor with which he entered upon this work seemed to his colleagues wonderful, and indeed heroic, in view of the increasing and distressing physical infirmities of the last weeks of his life.

WILLIAM H. WELCH.

HERZOG, Maximilian Joseph (1858-1918), Chicago pathologist, was born in Frankfort-on-the-Main, Germany, September 17, 1858, son of Jesaias Herzog and Johanna Maas. He studied biology at the universities of Giesen, Strasburg and Marburg, 1879-1881. In 1882 he came to America and studied medicine at the Medical College of Ohio, Cincinnati, at which he was graduated in 1890; from 1891 to 1892 he did post-graduate work at the Universities of Würzburg, Berlin and Munich. He was laryngologist and otologist at the German Hospital, Cincinnati (1892-1894); professor of pathology and bacteriology at the Chicago Polyclinic and Hospital (1896-1903); pathologist Government Laboratories, Manila, P. I. (1903-1906); professor of pathology Chicago Veterinary College (1806-1816); chief of Department of Pathology, Cook County Hospital, from 1912, dean and professor of pathology in the Medical Department of Loyola University from 1912 until his death. In 1916 he became superintendent and director of laboratories and research at the Muncipal Tuberculosis Sanitarium of Chicago, holding this position at the time of his death, which occurred at the Sanitarium, August 9, 18, from chronic interstitial nephritis.

Herzog was president of the Chicago Pathological Society in 1892-1893. In 1917 he received a captain's commission in the Medical Reserve Corps, United States Army, but from physical disability was honorably discharged in April, 1918. The degree of LL. D. was given him by Loyola University in 1913.

Herzog wrote: "Text Book on Disease Producing Micro-Organisms" (1910); and "Text Book on General and Comparative Pathology" (1916). In 1894 he married Seraphine Ernau of Berlin, Germany.

HETHERINGTON, George A. (1851-1911), New Brunswick alienist, was born at Johnston, New Brunswick, March 17, 1851, and died suddenly June 14, 1911, aged 60, at St. John, New Brunswick, in which city the greater part of his professional life had been spent. His primary and collegiate education completed, he taught school for a short time, but soon after followed his natural bent to pursue medical study, and attended two years at the University of Michigan. While thus engaged, he received an appointment on the staff of the Washtenaw County Asylum, and there gleaned his first knowledge of the practical care of the insane, and the study of psychiatry. He then completed his medical course in the College of Medicine and Surgery, Cincinnati, O., graduating in 1875. Post-graduate study in the New York Clinic followed, after which the young man returned to his native heath, and practiced medicine successfully for about five years. At this time he took a further course of study in his chosen profession at the Royal Infirmary, Edinburgh, and the Rotunda, Dublin, that lasted for some months, returning to St. John in 1882, where he practiced for many years. In 1896 he received the appointment of medical superintendent of the Provincial Hospital for the Insane at St. John, a position he held until 1904, when he reluctantly resigned owing to ill health. During his superintendency the affairs of the hospital were on a high plane, the institution being administered along modern lines, both in its medical and executive spheres. After his retirement he remained in St. John until his untimely death, though barely able to practice. Although his life was a busy one, he was prominent in many societies, being a life member of the British Medical Society, fellow of the British Gynecological Society, past chancellor of the Knights of Phythias, a 32nd degree Mason, and paymaster of the 62nd Regiment, for many years with the rank of captain.

HEUSTIS, Jabez Wiggins (1784-1841), pioneer physician and citizen of Alabama, was born in 1784, in St. John, New Brunswick. He received his medical education at the College of Physicians and Surgeons, New York, taking his M. D. in 1812. In 1806-1807 he was assistant surgeon in the United States Navy, later becoming surgeon in the United States Army under General Andrew Jackson and serving with him in his southern campaigns. He went to live in Cahaba, Alabama, afterward moving to Mobile. Dr. Heustis wrote "Physical Observations and Medical Tracts and Researches on the Topography and Diseases of Louisiana" (1817); "Medical Facts and Inquiries Respecting the Causes, Nature, Prevention and Cure of Fever" (1821); "Bilious Remittent Fever of Alabama" (1825). He was a contributor to the "American Journal of the Medical Sciences" in which appeared his "Topographical and Medical Sketches of Mobile for the year 1835" (1836, vol. xix, pp. 65-85); and "Case of Glanders in a Youth" (1837, vol. xx, pp. 346-350). He married Miss Gayle, of Selma, Alabama. He was honored as a physician and surgeon and a writer; he wrote of local conditions and was held as an authority. He died at Talladega Springs, Alabama, in 1841, as the result of blood poisoning, contracted while performing an operation.

HEUSTIS, James Fountain (1829-1891), professor of surgery in Alabama Medical College, the son of Jabez Wiggins Heustis (q. v.), was born in Cahaba, November 15, 1829. He received his early education in the common schools of Mobile, and graduated in medicine at the University of Louisiana (now Tulane) in 1848. He served as assistant surgeon in the United States Navy from 1850 to 1857, when he resigned, he having been promoted in 1856 to be passed assistant surgeon; he began practice in Mobile. When the Alabama Medical College was organized in 1859 he became professor of anatomy, but when the Civil War broke out he went with the Confederate Army and served throughout the War, first as surgeon, later as medical director of Bragg's army; in 1875 he was elected professor of surgery in the Alabama Medical College.

He was twice married, in 1856 to Anna M., daughter of A. E. Watson, purser United States Navy; she died in 1860 and in 1865 he married Rachael, daughter of J. C. Lyons, of Columbus, South Carolina. Dr. J. F. Heustis died in 1891.

HEWETSON, John (1867-1910), of the Johns Hopkins Hospital, Baltimore, elder son of James Hewetson, of Scotch Presbyterian descent, was born at Port Elgin, Ontario, June 18, 1867, and died September 10, 1910, of pulmonary tuberculosis, in St. Joseph's Hospital, Victoria, British Columbia. He was educated at Upper Canada College and thence entered McGill University, where he was graduated in Medicine in 1890. The same year he became assistant resident physician in the Johns Hopkins Hospital, where he remained more than three years, during which time, in addition to performing his routine duties, he did valuable statistical work on the cases of typhoid fever, and in conjunction with Dr. William S. Thayer, made special investigations on the malarial fevers.

In 1894 he went to Europe to take up postgraduate work and attended the International Medical Congress in Rome, as a delegate from the Johns Hopkins Hospital. In the same year he began work in Leipzig in the Anatomical Institute, where at the suggestion of Professor His and Professor Flechsig, he prepared under Hans Held, several series of exquisite preparations of the medulla, pons and mid-brain of new-born babes, hoping from their study to throw fresh light upon the development of the conduction paths in this portion of the central nervous system. These specimens were placed in Dr. Mall's laboratory in Baltimore and have served as a basis for numerous studies in that institution.

His plans were suddenly cut short in the summer of 1895 by the discovery of tubercle bacilli in his own sputum. After fighting the disease for some months in Switzerland, he made a voyage to Australia. In 1897, somewhat improved, he returned to Riverside, California, where he lived and took care of his invalid father and managed his business for him. His summers were usually passed in British Columbia. He married Miss Susan Bacon of Boston and his death was undoubtedly hastened by that of his devoted wife in the preceding year. She left no children.

Important as was the medical work accomplished by John Hewetson during his too brief career, it was overshadowed by the character and personality of the man, which were evidenced by his peculiar power of inspiring love and respect in his colleagues as well as in his patients and friends.

A bas-relief of Dr. Hewetson was placed by his friends in the officers' dining room in the Johns Hopkins Hospital.

FRANK R. SMITH

HEWLETT, Albion Walter (1874-1925), professor of medicine in the Leland Stanford Jr. University, California, was the son of Frederick and Cleora Melissa Whitney Hewlett, and was born November 27, 1874 at Petaluma, California. His B. S. degree at the University of California, 1895, was followed by the M. D. of Johns Hopkins University School of Medicine 1900, and study in Germany, 1902-03. He returned to become assistant instructor and assistant professor of medicine at Cooper Medical College, San Francisco, until 1908. During the next eight years, he was professor of internal medicine and director of the clinical laboratory of the University of Michigan. In 1916, he accepted the chair of medicine of Leland Stanford Junior University. He served in the World War as lieutenant commander, M. C. U. S. N. R. F.

Dr. Hewlett is known for his translation of Krehl's "Clinical Pathology," 1905, and as author of "Functional Pathology of Internal Diseases," 1916-1922. He was a member of the Council on Pharmacy and Chemistry of the American Medical Association, from 1916 to 1922. An outstanding contribution is his report, "Clinical Effects of 'Natural' and 'Synthetic' Sodium Salicylate." He also served as chairman of the Section on Pharmacology and Therapeutics of the American Medical Association and as secretary, 1911-12, and chairman of the Section on Pathology and Physiology, 1912-13.

He married Louise Redington of San Francisco, June 12, 1907.

A brain tumor caused his death, November 10, 1925.

HEWSON, Addinell (1828-1889). A great many medical men get their names associated with methods and cures they have advocated, and Addinell Hewson, in addition to his predilection for therapeutic electricity, "took up the earth treatment for wounds, contusions, inflammations, tumors and surgical dressings" so that his name became connected with his "earth treatment" about 1853, some twenty-five years after his birth on November 22, 1828, as the eighth son of Prof. Thomas T. Hewson (q. v.) of Philadelphia.

The grammar school of the University of Pennsylvania received him as a boy and from the university he was graduated in Arts in 1847, taking his M. D. from Jefferson Medical College in 1850, and receiving an A. M. from the University of Pennsylvania the same year.

As surgeon on a sailing vessel he went to Ireland and became a student under Sir William Wilde at St. Mark's Hospital in Dublin and also attended the lectures at the Rotunda Hospital. He seems to have been liked there, for Sir William asked him to edit a work of his on "Aural Surgery," and in London, also Sir William Lawrence offered a partnership if he would remain in England. He gave him, too, an old engraving, very precious to Hewson, of William Hewson, his grandfather, gathered with other students around John Hunter. But 1851 saw Addinell settled in Philadelphia as a practitioner, first serving as one of the resident physicians at Pennsylvania Hospital. Three years later he married Rachel Macomb Wetherill, daughter of Dr. William Wetherill of Philadelphia, and had three sons and three daughters. In 1872 he went to Europe again to recuperate, and was summoned to Mentone to treat Dr. H. R. Storer (q. v.) of Newport, Rhode Island, suffering from tibial abcess. The "earth" treatment, to which Hewson had added sulphuretted hydrogen gas, was successful in this case.

Dr. Hewson suffered occasionally, from the effects of being thrown from his gig in 1868, but for a long time his slight seizures were known only to the few, but finally as he was going to his room a severe attack came on September 11, 1889. He fell on the stairs and in about an hour the end came. So passed away a cultured Christian gentleman and a scientist of no small rank, one so anxious to do his best even in delivering lectures, that he first wrote them and practiced their delivery with one Wood, an actor.

Among his appointments were: surgeon to the Wills Hospital for Eye Disease; surgeon to the Pennsylvania Hospital from 1861 to 1867; lecturer at the summer school of Jefferson Medical College and contract surgeon during the Civil War.

Some of his many papers to the various medical journals were: "Earth as a Topical Application in Surgery," Philadelphia, 1872; "On the Treatment of Fibroids of the Uterus by Means of Dry Earth" (Transactions of the American Medical Association), 1880, vol. xxi); "Cervical Lymphadenoma treated by the Application of Earth," "Medical News," Philadelphia, 1882, vol. xli.

HEWSON, Thomas Tickell (1773-1848), professor of comparative anatomy in the University of Pennsylvania, was the son of William, a London surgeon, and Mary Stevenson Hewson, and was born in London, April 9,

1773. His mother was the daughter of Mrs. Margaret Stevenson, a widow in whose house Benjamin Franklin lived when in London as "agent of the Colony of Pennsylvania." As a boy young Hewson was so studious that he was called "little inquisitive Tom" and "all soul and no body." He had his early education at a private school kept by William Gilpin at Cheam, Surrey. The mother having moved to Philadelphia in 1786, Thomas entered the junior class of the College of Philadelphia, afterwards the University of Pennsylvania, taking an A. B. in 1789. He returned to England in June, 1794, and the next September entered St. Bartholomew's Hospital as one of two house surgeons. In November, 1795, he went to Edinburgh, where he remained until July, 1796; then going back to London, he stayed until July, 1800, when he returned to Philadelphia and began practice.

From 1806 to 1818 he was physician to the Walnut Street Prison. His faithful services to the prisoners during the prevalence of a "malignant typhus fever" were commemorated by the prison inspectors by the gift of a silver vase. In 1822 he established a private medical school, taking himself the chair of anatomy while Thomas Harris taught surgery and Franklin Bache (q. v.) materia medica and chemistry. Other positions held by him were: surgeon to the Philadelphia Almshouse, physician to the Orphan Asylum, and in 1816 he was elected professor of comparative anatomy in the department of natural science of the University of Pennsylvania, although he seems not to have given a course on the subject until the spring of 1818.

He married on November 5, 1812, Emily, daughter of John Banks, of Washington; they had twelve children, one of the sons being Addinell (q. v.), a Philadelphia surgeon.

He was especially active on the committee that had to do with the making and revision of the National Pharmacopoeia. He was a member of the Edinburgh Medical Society, the American Philosophical Society, the American Linnaean Society and the medical society of the District of Columbia. He was president of the Philadelphia College of Physicians. Harvard conferred on him the honorary M. D. degree in 1822.

Dr. Hewson died February 17, 1843, at the age of seventy-four.

HIBBERD, James Farquhar (1816-1903), of Richmond, Indiana, was of English-Quaker ancestry, and was born at Monrovia, Frederic County, Maryland, November 4, 1816. Later in life he assisted in the formation of the Ohio and Indiana State Medical Societies, and served the American Medical Association as president, 1894, showing great executive ability and skill as presiding officer, qualities not too common among the fraternity. Dr. Hibberd's youth was spent with an uncle in Berkeley County, Virginia, where, besides working on a farm, he took a course in the Hallowell Classical School at Alexandria, read medicine with his cousin, Dr. Aaron Wright, and then went to Yale Medical School to receive his degree of M. D. in 1840. He practiced at Salem, Oregon, for several years, entered the College of Physicians and Surgeons, New York, and was graduated in 1849, shipping at once as surgeon on the steamship "Senator" for San Francisco, thus becoming a "Forty-niner." In California he practiced and engaged in business until 1855 when he renewed his medical studies in New York and settled in Dayton, Ohio, in June 1856, removing to Richmond, Indiana, that fall to remain the rest of his life.

In the session of the Ohio Medical College, Cincinnati, 1860-61, Dr. Hibberd filled the chair of physiology and general pathology. In 1863 he was in charge of a corps of volunteer surgeons and nurses at Murfreesboro, Tennessee; in 1869 he went abroad and was a delegate to the International Medical Congress at Florence; from 1875 to 1876 he was mayor of Richmond and in 1881 health officer of his county, being instrumental in creating a state board of health. From the last date until 1889 he made an annual report on necrology to the state medical society, a most valuable service, and he contributed many papers to the "American Practitioner," the "Indiana Medical Journal" and to the Transactions of the Indiana Medical Society, always supporting the home journals. The Indiana State University conferred on him the honorary degree of LL. D. in 1885.

In 1842 Dr. Hibberd married Nancy D. Higgins, who died in 1846, leaving one son; in 1856 he married Catherine Leeds, who died in 1868, leaving a son; and in 1871 he married Elizabeth M. Laws. He died of the infirmities of old age at his home, September 8, 1903, at the age of 87.

Hickey, Amanda Sanford (1838-1894), pioneer woman physician of Auburn, N. Y. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 525.

Hiester, John Philip (1803-1854), botanist and geologist of Reading, Pennsylvania. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 525.

HILDRETH, Eugenius Augustus (1821-1885), writer and botanist of Wheeling, West Virginia, was born in that city September 13, 1821, and died there August 31, 1885. His father, Ezekiel Hildreth, was a graduate of Harvard (1814), and a man of rare scholarly attainments. His mother was a daughter of Jonathan Zane. Eugenius was graduated at Kenyon College in 1840, and at the Medical College of Ohio, in Cincinnati, in 1844. After serving as resident physician of the State Hospital for one year, he settled in Wheeling. He was president of the Wheeling Board of Education; also of the Medical Society of West Virginia, in 1876 and 1877, and served on important committees of the American Medical Association. Dr. Hildreth was a member of the State Board of Examiners for surgeons in the army, and from 1873 till 1885 a member of the United States Board of Surgeons for pensions. Among his contributions to medical literature may be named, "Ice in Obstetric Practice" (1850); "Climatology and Epidemic Diseases in West Virginia" (1868); (Topography, Meterology, Climatology and Epidemics of Ohio County, (1870); "A Report on Medical Botany in West Virginia" (1871). Dr. Hildreth was a consistent Christian and an active member of the Episcopal Church. He was one of the founders of the West Virginia Hospital for the Insane, and a member of the first Board of Directors in 1864.

FRANK LE MOYNE HUPP.

HILDRETH, Samuel Prescott (1783-1863), one of the earliest of the pioneer physicians of Ohio, was born in the town of Methuen, Essex County, Massachusetts, September 30, 1783, the son of Dr. Samuel Hildreth. He began life on a farm, but eventually decided to study medicine, and studied under Dr. Thomas Kittredge of Andover. In 1805 he settled down to practice in Hempstead, New Hampshire. In September, 1806, he mounted his horse, carrying with him all his possessions, and directed his course towards Marietta, Ohio. On reaching the town, October 4, 1806, he began practice at once, but the inhabitants of a flourishing town called Belprie (Belpre), some fourteen miles further down the river, appealed to him to come to them, because they had no physician among them, and Dr. Hildreth went at once, reaching there December 10, 1806, the very night on which the unfortunate Blennerhasset abandoned forever his fairy isle, which lay just off Belprie in the river. In the following summer an extensive epidemic of malarial fever prevailed along the course of the Ohio river, and Dr. Hildreth found his hands full. However, in August he managed to snatch sufficient time from the pressing duties of his profession to marry Rhoda Cook, an immigrant from New Bedford, Massachusetts. An attack of lameness in one of his hips, due, it was believed, to excessive riding on horseback, induced Dr. Hildreth to return to Marietta in March, 1808, and there he remained until his death on July 24, 1863.

He was always interested in the advancement of the medical profession, and in 1811 drafted and secured the passage of a bill for the regulation of the practice of medicine and for the organization of medical societies in Ohio. This bill became law. As a medical writer Dr. Hildreth was one of the best known of his day, and his papers were received with pleasure by the few journals then existing. As early as 1808 he contributed to the "New York Medical Repository" (vol. x) a very full account of the epidemic of malarial fever which had prevailed in the Ohio valley during the preceding year. In 1812 he contributed to the same journal (vol. xv) a description of the American "colombo," with a drawing of the plant, and in 1822 (vol. xxii) articles on hydrophobia and a curious case of Siamese twins occurring in his own practice. In 1822-23 a widespread epidemic of malarial fever again prevailed throughout the Ohio valley, and was described in the following year (1824) by Dr. Hildreth, who had himself suffered from the disease and recovered under the treatment of "Jesuits" bark in quarter ounce doses every two hours, alternated with a solution of arsenic." This description was in the "Philadelphia Journal of the Medical and Physical Sciences," and followed by an article on the sequelæ of the epidemic, which appeared in the "Western Journal of Medicine" at Cincinnati in 1825. For nearly forty years he contributed to "Silliman's Journal" on meteorology, geology and paleontology. Other writings were: "History of the Diseases and Climate of Southeastern Ohio" 1837; "Pioneer History," 1848; "Lives of the Early Settlers of Ohio," 1852; "Contributions to the Early History of the Northwest," 1864.

Dr. Hildreth became an honorary member of the Massachusetts Medical Society in 1837; he was president of the Ohio Medical Con-

vention of 1839, and on retiring from office delivered a valedictory address on the diseases and the climatology of southeastern Ohio, most interesting and valuable in character. ("Journal of Proceedings of Medical Convention," Ohio, 1839.) Dr. Hildreth was an earnest and enthusiastic student of natural history, geology and climatology, on all of which subjects he wrote papers of value, and at his Marietta home he collected and preserved an extensive cabinet of natural history. A journal of diseases observed by the doctor in his long practice, a bill of mortality in Marietta since 1824, with thermometric and barometric records for a long term of years, complete the catalogue of the useful results of the busy life of this pioneer physician of Ohio in the first half of the nineteenth century.

HENRY E. HANDERSON.

HILL, Edward Henry (1884-1904), founder of the Central Maine Hospital, was born in Harrison, Maine, in 1844. He was educated at Bridgton Academy, also at Bates College, in the class of 1863, and graduated at the Harvard Medical School in 1867. He began practice at Durham, Maine, but soon moved to Lewiston, where he entered into partnership with the well known Dr. Garcelon (q. v.), later to be governor of Maine.

No life of Dr. Hill would be complete without proper mention of his energetic assistance in founding the Central Maine Hospital. The Maine General Hospital, at Portland, had a field of its own, but there was imperative need of an emergency hospital in the cities of Auburn and Lewiston. For years the subject was agitated, a small hospital was established, but it soon degenerated into a mere pest house. One plan after another fell through, until Dr. Hill printed an article on this topic in 1871 which at once attracted great attention. His suggestion was to tax every person five cents a week to care for a hospital. This scheme fell through, but the frequency of accidents without any proper place for their treatment became more acutely felt as time went on. Thus, at the State Fair, near Lewiston, a woman had to be delivered of a child in a horse stall on the straw; a man picked up in the streets died on a table in the City Hall. Dr. Hill kept the agitation going for seven years, yet there was no hospital. Finally he made up his mind that if there was to be no public hospital he would have one of his own; he therefore bought a house with land around it, paying down, personally, what he could. Public sentiment was at last aroused. With the house and land to show, the Legislature at last helped and the Central Maine Hospital was a reality. He also participated actively in the discussions of the Maine Medical Society. His remarks, being generally offhand, for in those days no abstracts were studied beforehand, were always to the point, and instructive; he told what he had seen personally at the bedside and never echoed the books. One of his best papers was on "Perineal Urethrotomy," read before the society in 1885. As a surgeon he was an excellent operator and performed most of the capital operations of the day.

In 1872 Dr. Hill married Miss Charlotte C. Thompson, by whom he had two children.

In 1895 he made an interesting visit to Europe. Some delay and exposure at the custom house in returning brought about a relapse of an old arthritis, contracted ten years before from exposure while out driving to see a patient. He suffered acutely until death at last released him, July 17, 1904.

JAMES A. SPALDING.

HILL, Gardner Caleb (1829-1915), of Keene, New Hampshire, author of "History of the Healing Art," was born at Winchester in that state, March 20, 1829. He was the son of Caleb and Polly Howard Hill, received his education in the schools of his native town and the academies in Winchester and Swanzey, and Saxton's River, Vermont. In 1856 he was graduated from the Castleton Medical College, and ten years later took a post-graduate course at Harvard Medical School. Dr. Hill was a school-teacher in Winchester, Swanzey and Keene for nearly twenty years before devoting himself entirely to the practice of medicine. From 1857 to 1867 he practiced in Warwick, Massachusetts, then he removed to Keene, where he passed the remainder of his life. He was a member of the common council, a county commissioner and county treasurer; he served also on the board of education in both Warwick and Keene; he was city and county physician in Keene, and an active member of the Cheshire County Medical Society besides being a member of the staff of the Elliott City Hospital.

He published in the "Keene Sentinel" several articles on local historical subjects; the one that appeals largely to the medical profession was his "History of the Healing Art," 1905, a good-sized pamphlet containing interesting sketches of the early practitioners of medicine in New Hampshire.

Dr. Hill married Rebecca F. Howard of Valpole in 1856. She died in 1893 and the following year he married Carrie R. Hutchins of Keene.

He died at his home, May 1, 1915.

HILL, Hampton Eugene (1850-1894). Of an investigating nature in childhood, and valuable as a surgeon in his medical life, Hampton Eugene Hill was born in Mount Vernon, Maine, April, 1850, the eldest son of John and Dorcas Hill, both of whom possessed originality of character. He early developed a curious fondness for studying animals, alive or dead. When he was ten years old his parents moved to Biddeford, Maine, where he studied in the High School, then worked in a drug store and finally obtained a similar position in Portland. While there he began to study medicine at the Portland School for Medical Instruction at the Medical School of Maine, but ultimately taking his M. D. at the University of Michigan, in 1871. At the urgent request of his uncle, Dr. Hiram Hovey Hill (q. v.), of Augusta, Me., he settled there as his assistant, but possibly the death of his wife, Lizzie Homan, three months after their marriage, so saddened his life, that he was glad to return to Biddeford where his parents lived. While at Augusta, it may be added, he served as demonstrator of anatomy at the Medical School of Maine, at Brunswick. He was soon in active practice at Biddeford, and had all that he could attend to. He married a second wife, Mrs. Myra Manseur, of Corinna, Maine, whose death, after a surgical operation performed by his skilful hands, occurred a few years later on. This severe trial, and the unusual sadness of this unique case, combined to hasten Dr. Hill's death. His actual working life lasted hardly twenty years, for at one time he had to pass more than a year in Dakota on account of his health, but in that period he performed many operations at the request of the local physicians.

He was a member of the Maine Medical Association, and read before it two remarkable papers, one in 1871 on "Popliteal Aneurysm" and the other in 1884 on "Six Unusual Ovariotomies." Among his surgical feats were thirty-four laparotomies with but four deaths and twenty-four consecutive ovariotomies without the loss of a patient. He once removed a uterine fibroid weighing forty-seven pounds. He was not a dashing operator, but very exact, and carried through successfully every detail. He took infinite pains in every operation, prepared every bandage, disinfected every instrument, threaded every needle, and in his urgent cases remained with the patient until the danger was passed.

His last days were darkened by sorrow from which we hesitate to lift the veil. His work was done; he gradually passed away, leaving among the medical men of Maine a memory of his remarkable work. On Tuesday, January 9, 1894, he ceased to live.

JAMES A. SPALDING.

HILL, Hiram Hovey (1810-1889), a genius in medicine, was born in Turner, Maine, April 30, 1810, and here he passed his youth, manifesting unusual fondness for investigations in natural history. His powers of observation were early developed, and he was soon recognized as a boy bound to get at the bottom of every subject of his anatomical studies, even at the age of twelve, being suggestive of the future. He had an ordinary school education, and at seventeen went to Augusta as a clerk to his grandfather, who was register of deeds. In that office he had access to books, and devoted his spare time to Latin, natural history and the construction of apparatus. He lived at one time with Dr. Dexter Baldwin, of Mount Vernon, and from seeing him ride about, he got the desire of being a doctor. At the age of twenty-one he studied with Dr. Gage, of Augusta, Dr. Amos Nourse (q. v.) of Bath, and Dr. John Hubbard (q. v.) of Hallowell, who was destined to be governor of Maine. After attending two courses of lectures at the Medical School of Maine he was graduated at that institution in 1836 and, returning to Augusta, opened an office in which he practiced for fifty-three years. A mechanical genius, he turned early to surgery, and did many successful operations at a time when such were regarded as nothing short of miraculous. He invented surgical instruments which proved of great utility and value. He was a member of all the old Maine medical societies, and later on, one of the founders of the Maine Medical Association, one of its early presidents, and aided largely in building up the Medical School of Maine and the Maine General Hospital. Among his papers read before the Maine Medical Association was one on "Cystitis" in 1875. Perhaps his best paper was on "A Case of Popliteal Aneurysm cured by Pressure."

Soon after beginning practice he married Sarah Ann Carpenter, of Augusta, and she dy-

ing in 1874, he married, in 1880, Clara Lothrop Dalton, of Norridgwock, but he had no children.

Personally I recall Dr. Hill as tall and slim, with a long face, clean shaved upper lip, long beard, a keen aspect, and a man full of talk. As Carlyle says, he was a loose talker, meaning that his words flowed long and even, yet always full of sense. Hill was honored with the A. M. from Colby in 1853. Although apparently as well as he had been for some time, in October, 1889, when making a call in consultation he fell on a dark stairway and injured his right hip. From this injury he was not to recover, but, confined first to his house and then to bed, he gradually failed and died December 2, 1889, conscious to the last.

James A. Spalding.

HILL, William Nevin (1857-1908), sanitarian of Baltimore, the son of William Hill and Jane Woodside of County Antrim, Ireland, was born December 30, 1856, and died December 25, 1908. He practiced medicine in Baltimore continuously for thirty-three years, but during the years of the small-pox epidemic devoted himself heroically to the suffering poor among whom it was raging, taking the disease himself as an incident to his work. Hill was graduated at the Washington University in 1874 and afterwards at the College of Physicians and Surgeons, Baltimore being then only eighteen years of age. He was an enthusiast in matters of public health, taking special interest in reforms and also was a prolific letter writer on such questions, his articles being marked by originality and force. He was a member of the Medical and Chirurgical Faculty of Maryland. In the last two years of his life he was appointed by the health commissioner of Baltimore City to have charge of the work of exterminating mosquitoes. This he undertook with his usual conscientious and original effort, devoting himself, literally, day and night, for he prepared a series of stereopticon lectures of which he gave over sixty in the evenings during the first winter of his work, after toiling strenuously in the field with his force during the day, directing the draining of pools and the inspection of premises throughout the entire city. The relief from the pests the first summer was appreciated by the people, who attributed to Dr. Hill full credit for his labors. While engaged in his work he was stricken and shortly afterwards died at the Enoch Pratt and Sheppard Hospital.

In 1896 the doctor married Madeline Scott, who died before him, leaving one child, Dorothy M. Hill, who survived him. Hill was an omnivorous reader with an ineffaceable memory making him a living encyclopedia to a large circle of devoted friends. His influence in the community was marked and the force of his personality far-reaching in its effects. Through his suggestions and plan of organization the city of Baltimore secured the National Drainage Congress of 1907. Though often worried by opposition he seemed unable to understand any one thinking of personal risk or reputation when the civic good was at stake.

William J. Ogden.

HILLS, Frederick Lyman (1870-1918), Maine alienist, the son of Dr. Lyman Henry Hills, still practicing in 1918, at the age of 82, in Binghamton, New York, and of Margaret Williams Hills, was born at Schuyler's Lake, Otsego County, New York, October 18, 1870. He was graduated from the Cooperstown High School in 1887, from the College of Physicians and Surgeons, New York, in 1892, and then entered Christ's Hospital, Jersey City, New Jersey, where he saw much obstetrical practice. He next spent a year at the Adams Nervine Asylum in Jamaica Plain, Massachusetts, and soon after was chosen assistant physician to the State Hospital for the Insane at Danvers, in the same state. He became assistant superintendent of the New Hampshire State Hospital for the Insane at Concord, where he proved himself to be a man of rare mental poise.

During his life in Concord, Dr. Hills became interested in the study of tuberculosis, showing in point of fact, incipient tokens of that disease himself, and in company with Dr. Mitchell, of Lancaster, he wrote and delivered many public addresses on this disease, illustrated with maps and charts, and at the request of the Governor, he chose Glen Cliff as the situation for the New Hampshire Sanatorium for Tuberculosis. During this period of public health work he won the Pray prize of $100 given by the New Hampshire Medical Society for the best essay on tuberculosis and its treatment. After taking a suggested rest from his labors at the Loomis Sanatorium at Liberty, New York, working there as resolutely as ever, and taking charge of one of the buildings and its occupants, he returned to Concord as "cured" and resumed his position in the State Hospital, and with it his studies on the insane. In 1906 he was elected super-

intendent of the State Tuberculosis Sanatorium at Rutland, Massachusetts, at that time one of the largest of its kind in the nation, and filled that position with great ability and to the satisfaction of all. Three years later, in 1909, he was chosen superintendent of the Eastern Maine State Hospital at Bangor, and began his labors there at once. That he worked conscientiously and effectively for the rest of his life, all who ever inspected that institution knew full well. Enthusiastic by nature, and with widely founded administrative experiences gained in years before, he brought this hospital to a level which compared favorably with any other in the United States. Here he not only studied the causes and the possible cures for insanity, but he invented and developed educational industries for those afflicted, such as carpentry, weaving of rags, entertainments for the Fourth of July and Christmas, agriculture, gardening, and the art of greenhousing plants and flowers.

His writings are: "One Hundred Cases of Insanity Tabulated"; "What Must I Do to Keep Sane?"; "Psychoses Following Surgical Operations"; and "Psychiatry, Ancient and Modern," the last so attractive as to be accepted by the "Popular Science Monthly." The paper on "Operations" is particularly good, showing the history of twenty-five patients, all undergoing operations on the uterus, its appendages or the apendix vermiformis without previous symptoms of insanity, yet all exhibiting explosive insanity afterwards. In a paper on the "Causes of Insanity," mention is made of heredity, alcohol, drugs, infectious diseases and the bad housing of people with debilitated bodies. He was very skilful in psychiatry in its multitudinous moods and forms and especially in diagnosis. He welcomed visitors to his many hospitals asking them to look about for themselves and he answered their questions; he was as one might say, an extremely well-balanced physician; not brilliant for a while with a light going out suddenly, but possessing a mind of steady, long-enduring serenely-burning flame.

In 1896 he married Miss Josephine Gilbert of Pittsford, Vermont, and was survived by her and by a daughter and a son.

He died in New York, from pneumonia, July 20, 1918.

JAMES A. SPALDING.

HIMES, Isaac Newton (1834-1895), a prominent physician of Cleveland, Ohio, was born at Shippensburg, Pennsylvania, December 4, 1834. He was educated in the University of Pennsylvania and in Jefferson College, at Canonsburg, Pennsylvania. From the latter institution he received in 1853 the degree of A. B. and in 1856 that of M. A. His medical education was acquired in the University of Pennsylvania and in the College of Physicians and Surgeons, New York City, graduating from the latter in 1856. In 1861 Dr. Himes began the practice of medicine in Chillicothe, Ohio, but the outbreak of the Civil War attracted him to military service, and he filled the position of an assistant surgeon until about the close of the war. Two years were then spent in study and travel in Europe, and on his return to the United States private business claimed his time for several years, and one year was spent in San Francisco. In 1871 he settled in Cleveland and resumed the practice of medicine, being at once elected to the chair of physiology and pathology in the Cleveland Medical College, a position he held for ten years. On the reorganization of this college in 1881, when it became the medical department of the Western Reserve University, Dr. Himes was elected to the chairs of morbid anatomy and orthopedic surgery. The following year he was again transferred to the chair of pathology, in which position he continued in active service until his death. He was also for many years visiting physician to the City Hospital (later Lakeside Hospital) of Cleveland. Dr. Himes was a member of the Ohio State Medical Society and was at the time of his death president of the Cleveland Society of Medical Sciences.

A man of exceptional education and attainments, Dr. Himes made but few communications to the medical journals of his day. Among these we may refer only to a "Report of Progress in Physiology and Pathology," "Columbus Medical Journal," vol. xv (1885) and "Remarks and Cases Connected with Medical Examinations for Life Insurance."

He married, in 1878, Mrs. Mary Vincent Reid, daughter of John A. Vincent, of Cleveland.

He died of cardiac disease in Cleveland, April 1, 1895.

An excellent portrait of Dr. Himes was presented by his widow to the Cleveland Medical Library Association, of which he was an original and zealous member.

HENRY E. HANDERSON.

HINGSTON, William Hales (1829-1907), surgeon of Montreal, was the first son of

Samuel James Hingston and his second wife, Eleanor McGrath, of that city. He was born June 29, 1829, at Hinchinbrook, near Huntingdon, Quebec. His father was lieutenant-colonel of militia, a native of Ireland. The boy was educated at the local grammar school, conducted by John—afterwards Sir John—Rose, and at thirteen went to the College of the Sulpicians in Montreal. He was obliged to leave school to seek employment and was apprenticed to a druggist. In 1847 he entered McGill University and received an M. D. in 1851, afterwards going to Edinburgh and studying under Simpson and Syme; to London where he entered at St. Bartholomew's Hospital, and to Dublin where he worked with Stokes, Corrigan and Graves. A visit to Paris, Berlin, Heidelberg, and Vienna completed his travels, and he returned to Montreal in 1853. The following year there was an outbreak of cholera, and it was during that epidemic Dr. Hingston laid the foundation of a practice which he preserved and developed until the day of his death. In 1860 he was appointed to the staff of the Hôtel Dieu. His first operation was a resection of the elbow-joint, that was new in Europe at the time, and had not been done previously in Canada. In 1872 he was the first to remove at one operation the tongue and lower jaw. He was a great surgeon when greatness in surgery consisted in courage, decision, and rapidity in operation, but no surgeon trained in that hard school has ever been able to master the meticulous routine of modern asepsis. Dr. Hingston never entirely acquired the technic; indeed he was never fully convinced of its importance.

Sir William was a Roman Catholic in religion, a gentleman by nature, and spoke French as well as English. Consequently he was high in the councils of the church and an important person in the various medical interests which that body controls in Quebec. In 1882 he became professor of clinical surgery in Victoria University where he had been giving clinical lectures without an appointment since 1860. Five years later he became dean, and occupied the chair till the union of Victoria and Laval in 1891. From that time till his death he occupied the chair of clinical surgery in Laval. He was three times president of the Montreal Medico-Chirurgical Society, and in 1892 delivered the address in surgery before the British Medical Association; in 1900 he was made honorary fellow of the Royal College of Surgeons (London). In 1898 he delivered the Shattuck Lecture before the Massachusetts Medical Society.

Sir William Hingston had also a public career. He was mayor of Montreal in 1875, and was appointed to the Senate in 1896. The previous year he had been created knight bachelor. In addition he had large financial interests and acquired a considerable fortune. He was well known outside of Canada and moved with freedom in the larger world, always impressing bystanders with a sense of ease, dignity and kindliness.

Sir William married Margaret Josephine, daughter of the late Hon. D. A. Macdonald, lieutenant-governor of Ontario, and had four sons and a daughter. The eldest son studied for the priesthood in the Society of Jesus; the second son, Donald, became a doctor on the Hôtel Dieu staff. The father died in Montreal, February 19, 1907, in the seventy-eighth year of his age, the immediate cause of his death a gastro-enteritis induced probably by ptomaine poisoning.

ANDREW MACPHAIL.

HIRST, John Cooke (1875-1925), Philadelphia gynecologist and obstetrician, was born August 20, 1875, the son of William Lucas and Lydia Barton Hirst. He was educated in Europe as a boy and graduated in medicine from the University of Pennsylvania in 1897, studied abroad, and returned to practice gynecology and obstetrics. He was assistant professor of gynecology in the postgraduate medical school and assisted his brother, Barton Cooke Hirst, professor of obstetrics, in the medical school of the University of Pennsylvania. He also functioned on the National Board of Medical Examiners.

Among his contributions are "A Manual of Gynecology," 1918, and "A Manual of Obstetrics," 1919.

He died after a long illness, October 4, 1925.

HITCHCOCK, Alfred (1813-1874), surgeon of Fitchburg, Massachusetts, prominent during the civil war, was born in Westminster, Vermont, October 17, 1813, and died in Fitchburg, March 30, 1874. He was educated at Phillips Andover Academy and at Dartmouth Medical School, where he received his M. D. in 1838. Going on to Pittsfield he took a second M. D. from the Berkshire Medical Institution in 1843 and even then, not being satisfied with his sheepskins, got still a third at the Jefferson Medical College in 1845. Meanwhile Middlebury College had conferred

an A. M. on him in 1844. Settling in practice in the town of Ashby, Massachusetts, he removed to the nearby city of Fitchburg in a short time. Between 1847 and 1855 he was a member of the governor's council and during the war a special agent of the state to superintend the care and transportation of the wounded. According to Dr. S. D. Gross (A Century of Amer. Med., Phila. 1876, p. 176) Dr. Hitchcock performed the operation of esophagotomy successfully for the removal of a foreign body in 1867, this being among the early operations of the kind; he designed a stretcher, a surgical chair and a splint and remodeled several surgical instruments.

He was a member of the state medical society from 1839 until his death, delivering the annual discourse in 1869 on the topic: "Organic and parallel relation of some of the practical truths and errors of Christianity and medical science." We may suppose that the oration was founded on his publication: "Christianity and Medical Science," which appeared in 1867.

His son, James Ripley Wellman Hitchcock, was a graduate of Harvard in 1877, changing his name to Ripley Hitchcock. He attended lectures at the College of Physicians and Surgeons, New York, and adopted literature as a profession, settling in New York. He published many articles on etching, also the "Western Art Movement" (1885).

HITCHCOCK, Edward (1828-1911), Massachusetts educator, was the son of Edward Hitchcock (1793-1864), geologist, president of Amherst College, and of his wife, Orra White. The first American ancestor of the Hitchcock family was Luke Hitchcock, who settled in the Massachusetts Bay Colony in 1640. Edward was born at Amherst, May 23, 1828, and was educated at Williston Seminary and at Amherst College where he graduated in 1849. He received an M. D. from Harvard Medical School in 1853 and then taught chemistry and natural history at Williston Seminary until 1861. At this time he was employed by his father in geological work connected with the geological survey of the State of Vermont and assisted in the preparation of the report. From 1861 until his death, a period of fifty years, Dr. Hitchcock held the chair of hygiene and physical education at Amherst. He was a member of the United States Sanitary Commission and was in active service for the early part of the Civil War. In 1897-98 he was acting president of the college, and from 1898 to 1910, dean of the faculty. After 1869 he was a trustee of Mt. Holyoke College, and after 1879 a member of the State Board of Health, Lunacy and Charity. Dr. Hitchcock was a pioneer advocate of the physical training of college students; as early as 1852 he published a popular textbook entitled "Anatomy and Physiology," and later, "Anatomy, Physiology and Anthropometry."

He married Mary Lewis Judson of Stratford, Connecticut, in 1853. Their son, Edward Hitchcock, Jr., (1854-1925) devoted himself to physical education and was professor of Physical Culture at Cornell University, 1884-1904. Another son, Dr. John Sawyer Hitchcock, of Northampton, was Director of the Division of Communicable Diseases, Massachusetts State Department of Health.

Dr. Hitchcock died at his home in Amherst, Massachusetts, February 15, 1911.

HITCHCOCK, Homer Owen (1827-1888), Michigan surgeon and gynecologist, was born in Westminster, Vermont, January 28, 1827, and had his general education in the common schools and at Dartmouth College (A.B., 1851; A. M., 1854). After serving as principal of Axford Academy, New Hampshire (during 1852-3), he took one course at Dartmouth Medical College and one at the College of Physicians and Surgeons, New York, receiving his M. D. from the latter in 1855. He then served as house surgeon in Bellevue Hospital, for fifteen months, and began practice in Kalamazoo, Michigan. In 1873 he was president of the Kalamazoo Academy of Medicine; in 1872, president of the Michigan State Medical Society; 1873-78, president of the Michigan State Board of Health.

Hitchcock had a distinguished appearance, about six feet tall, large head, fine blue eyes, strong face, a powerful voice, made more emphatic by a partially controlled habit of stuttering. His early training made him able to think on his feet, and speak with convincing power, and also made him a writer of unusual ability. He will probably be longest remembered for his earnest efforts in the behalf of the establishment and maintenance of the Michigan State Board of Health.

He contributed several papers to the Medical Journals.

On September 16, 1856, he married Fidelia Wellman, of Cornish, New Hampshire, who died in 1874, and by whom he had three children, one became Dr. C. W. Hitchcock. In 1875 he married Kate B. Wilcox, by whom he

had one son. Homer O. Hitchcock died in Kalamazoo, Michigan, December 7, 1888, from organic brain disease.

LEARTUS CONNOR.

Hitt, Willis Washington (1801-1876), a founder of Asbury University, Greencastle, Indiana. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 533.

HOAR, Leonard (1629?-1675), the third president of Harvard University was born in England, about 1629. He came to America with his mother, brothers and sisters. Entering Harvard University he was graduated in 1650. In 1653 he returned to England, where he remained several years as a minister at Wanstead, Essex, and later, in 1671, he received the degree of doctor of physic, at the University of Cambridge. He came back to Boston in 1672, and became assistant to Thomas Thacher (q. v.), pastor of the Old South Church, Boston, Massachusetts. He married a daughter of John Lisle, the regicide. In the summer of 1672 he was elected to succeed Charles Chauncy (q. v.) (1589-1672) as president of Harvard University, taking office December 10 of that year. He was the first to propose the modern system of technical education, by the addition of a workshop and a chemical laboratory to Harvard. The College did not prosper under his lead, a large faction opposed him, members of the board of trustees resigned, and the situation was grave. "As a scholar and a Christian" Hoar was said to be "very respectable," but lacking in the power to govern. He resigned in March, 1675, consumption developed, and he died, November 28, 1675.

HOAG, Ernest Bryant (1868-1924), sanitarian and alienist of Pasadena, California, was born March 23, 1868 in Evanston, Illinois, the son of Thomas Clarkson and Louisa Bryant Hoag. He took his B. S. from Northwestern University Chicago in 1892 and his A. M. and M. D. in 1902 and began to practice in Pasadena, California. During 1904-05 he was city bacteriologist, in 1907-09, medical chairman of the city schools and medical director of the Throop Polyclinic Institute, and from 1909 to 1912, medical director of the Berkeley schools. He was psychiatrist to the Los Angeles Juvenile Court and special lecturer on child problems and criminology in the University of California.

Dr. Hoag issued numerous health pamphlets for schools and was the author of "Elementary Technique in Histology and Bacteriology," 1895, "Health Studies," 1909, "The Health Index of Children," 1910, "Child Hygiene," 1912, "The Delinquent Child as a Social Problem," 1916, "Notes on Crime and Delinquency," 1917, "Health of the Child in School," 1917, "Crime, Abnormal Minds, and the Law," 1923, "Our Fear Complexes," 1923, "The Story of the Hawaiian Islands," 1923, "Racial Studies in the Hawaiian Islands," 1924, and "The New Mental Health," 1924.

In 1896, he married Sarah Blanchard Judd of Evanston, Illinois. He died suddenly of angina pectoris, June 11, 1924.

HOAGLAND, Cornelius Nevius (1828-1898), of Brooklyn, New York, philanthropist and benefactor of medical research, was born November 23, 1828, in Neshanic, Somerset County, New Jersey, the son of Andrew Hoagland. In 1834, the family moved to Ohio, first to Piqua, then to West Charleston, Miami County. At seventeen, he began to study medicine with E. L. Crane; two years later he attended lectures at Starling Medical College, Columbus, Ohio, and in the winter of 1851 entered the medical department of Western Reserve University, graduating in the spring of 1852. In 1854, Hoagland was elected auditor of the County and served four years. At the outbreak of the Civil War, he joined the "Lafayette Blues" as a private and was promoted to be first lieutenant upon reorganization of the company. In October, 1861, he was appointed surgeon to the 71st Ohio Regiment and served until January, 1866. Two years later, he moved to Brooklyn, New York and went into business; he was so successful that he retired in 1876. He had attained financial independence through his interest in the Cleveland Baking Powder Company, of which he was president. With a strong taste for science and believing that bacteriology offered the greatest hope in the advancement of medicine, about 1886 he purchased the site on which the Hoagland Laboratory now stands, erected the building and equipped it, and later set aside a fund sufficient to endow it, the whole gift aggregating about $180,000. Dr. Hoagland was an expert photographer and was especially skilled in photo-micrography, he used these gifts both for the scientific work of the institution and to illustrate popular lectures. He maintained the Hoagland Kindergarten during his life and left it an endowment of

$20,000. He also bequeathed $14,000 to the Brooklyn Eye and Ear Hospital and $7,000 to Antioch College.

On August 10, 1852, he married Eliza Ellen, daughter of Judge David H. Morris of Miami County.

Failing in health, he went abroad but returned home with an advanced hepatic fatty degeneration and chronic myocarditis and died, April 24, 1898, leaving a widow and three children.

Hobbins, Joseph (1816-1894), English physician of Madison, Wisconsin. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 533.

HOCH, August (1868-1919), one of the originators and leaders of the modern scientific movement in psychiatry in this country, was born April 20, 1868 at Basel, Switzerland. His father was a clergyman and director of the City and University Hospital; this early association no doubt inspired his appreciation of medicine and of teaching and research, The son came to America in 1887 and studied medicine at the University of Pennsylvania, whence he followed Osler (q. v.) to Baltimore before the Johns Hopkins Medical School was opened. He was graduated from the University of Maryland in 1890 and remained associated with Osler and Thomas (q. v.) at the Johns Hopkins Hospital until 1893, when he was chosen psychologist and pathologist in the research laboratories planned by Edward Cowles (q. v.) at the McLean Hospital, Waverley, near Boston. With Simon Flexner, he sought further preparation in Strassburg, where he studied brain anatomy with Schwalbe, in Leipzig, psychology with Wundt, and in Heidelberg, where he was a collaborator in Kraepelin's drive into the domain of the medically useful experimental psychology. While abroad, he married Emmy Münch of Basel. In 1895, he returned to take up his research at the McLean Hospital. During a second period of study with Kraepelin in 1897, he worked on histology with Nissl and became more intimately associated with clinical interests. In 1905, he was induced to become first assistant physician of the Bloomingdale Hospital at White Plains, New York, and in 1909 succeeded Adolf Meyer in the chair of psychiatry at Cornell Medical College and as director of the Psychiatric Institute of the New York State hospitals on Ward's Island. A period of study with Bleuler and Jung and von Monakow in 1908 had given him an intimate familiarity with structural and psychoanalytic problems, balanced by an unusually keen sense for intensive clinical study of his patients. Evidences of a familial tendency to arteriosclerosis forced him in 1917 to retire to private work in California, where, after two happy years, he succumbed to an acute suppression of the renal functions on September 25, 1919.

Dr. Hoch published valuable studies on nerve cell changes of the cortex in a case of acute delirium and in a case of delirium tremens (1897), and on the nerve cell changes in somatic diseases (1898). From then on the clinical studies began to predominate: the articles on mania and melancholia and manic depressive insanity in the "Reference Handbook of the Medical Sciences," the unreality feelings (1905), the studies on drug deliria (1906), the manageable causes of insanity (1909), and a most important group of contributions to the study of personality—the constitutional factors in the dementia praecox group, the mental mechanisms in dementia praecox, the relations of personality and psychosis, and the relation of insanity to the psychoneuroses, and finally the posthumous article on involution melancholia, and the book on the benign stupors.

As editor of the "Psychiatric Bulletin" and later as a member of the editorial board of the "Archives of Neurology and Psychiatry," and as an active member of the National Committee for Mental Hygiene, he exerted a wide influence, but even a wider influence as a teacher and as a collaborator and as a keenly appreciated friend of his patients and colleagues.

ADOLF MEYER.

HODDER, Edward Mulberry (1810-1868), of Toronto, Canada was born at Sandgate, England, December 30, 1810. He was the son of Captain Hodder, R. N., and when twelve years of age entered the Royal Navy, as midshipman, under his father. He took only one cruise and left the navy at the end of a year, having a strong desire to study medicine. He received his first education at the Guernsey Grammar School; afterwards at St. Servans, France, and began his medical studies in London, under Mr. Amesbury—very noted at that time as a surgeon—with whom he spent five years. At the end of this period of study he passed the Royal College of Surgeons of England. He then went to Paris, where he spent two years in study and subsequently went to Edinburgh, where he saw

the practice of the then famous teachers of that city. He began practice in London, but stayed there only two years, removing to St. Servans, in France, in 1834. In 1835 Dr. Hodder made a brief visit to Canada, returning to St. Servans at the end of a few months, but, although he continued to practice in St. Servans for three more years, Canada had so possessed his imagination that he determined to live there, and moved to the neighborhood of Queenston, in the Niagara district, where he remained, doing a large and lucrative practice, for five years. In 1843 he removed to Toronto, where he continued to practice up to the date of his death, which occurred on February 20, 1868.

That Dr. Hodder was highly thought of by his fellow practitioners, is evidenced by the positions which were given him. He was elected a Fellow of the Royal College of Surgeons of England in 1854; in 1845 he received the degree of C. M. from King's College, Toronto, and M. D. from Trinity College in 1853, and in 1865 he was elected a Fellow of the Obstetrical Society of London.

In 1850 he established, with Dr. James Bovell (q. v.) a teacher of Sir William Osler, (q. v.) the Upper Canada School of Medicine, which that year became the medical department of Trinity College. For several years Dr. Hodder was a member of the Faculty of the Toronto School of Medicine, but on the revival of his old school, in 1870, he was, by the unanimous wish of his colleagues, appointed dean of the faculty and was re-appointed in 1877, when the act, incorporating the school, passed the Provincial Legislature. This position he held until his death. From 1852 to 1872 he was one of the leading members of the active staff of the Toronto General Hospital, and of the Burnside Lying-in Hospital, and at his decease was senior consulting surgeon to both these institutions and to several others of like character. Although devoted to his professional work, Dr. Hodder found time, in the way of recreation, to gratify his continued love for the water, and was mainly instrumental in forming the Royal Canadian Yacht Club, of which he was commodore for many years, up to the time of his death.

In 1834 he married Frances Tench, daughter of Captain Tench of the Royal Irish Fusiliers. They had a large family.

HODGE, Hugh Lenox (1796-1873). The name of Hugh Lenox Hodge, obstetrician, is associated with the mechanism of labor, with his obstetrical forceps, and with a pessary. Hugh Hodge was the son of Dr. Hugh and Maria Blanchard Hodge, and was born in Philadelphia, June 27, 1796. His father, after heroic efforts to help, fell a victim in the yellow fever epidemic of 1797, and died in 1798, leaving his widow with two boys, Charles, and Hugh. She used fine self-denial to educate them, and at fourteen Hugh entered Nassau Hall, Princeton, and studied medicine afterwards with Dr. Caspar Wistar, (q. v.) matriculating at the University of Pennsylvania, and taking his M. D. there in 1818. Very anxious to go to Europe, he tried to get the money by taking a surgeoncy on a ship going to India, but returned in two years, minus the money, but richer in experience, through work in the cholera hospitals and in the study of tropical diseases. For one year he was physician to the Southern Dispensary and to the Philadelphia Dispensary, then he took Dr. Horner's (q. v.) anatomical class while the latter was in Europe, and was later a lecturer on the principles of surgery at the Medical Institute. In 1828, being well established in practice, he married Margaret E., daughter of John Aspinwall, a New York merchant, and had seven sons.

When Dr. Dewees (q. v.) resigned the chair of obstetrics in the University of Pennsylvania, Dr. Hodge was elected and was also physician to the lying-in department of the Pennsylvania Hospital. He was led to change from surgery to obstetrics by failing eyesight. Year by year his private practice increased and he began to relinquish obstetrics and devote himself almost exclusively to treating the diseases of women, and, following up Dewees' work, in inventing and using pessaries for uterine displacement, devoted himself for years to the discovery of the proper materials and shapes, having hundreds made of various kinds. The case which first attracted his attention to the value of mechanical support was that of a woman, who in 1830 came to the hospital ward with a diagnosis of hepatic disease. The usual treatment, including a course of mercury, left her worse. The resident physician on making an examination, found decided retroversion of the uterus. Hodge introduced one of the then new Dewees' pessaries and to his astonishment the so-called liver complaint was cured and the woman speedily restored to health. Sitting one evening in the university "his eyes rested on the upright steel support designed to hold the shovel and tongs which were kept in position by a steel hook and as he studied its support-

ing curve, the longed-for illumination came and the lever pessary was the result." Afterwards he perfected his discovery by giving the instrument its double curve and making it closed. He also modified the obstetric forceps and Baudelocque's cephalotribe and his cranitomy scissors. Some thirty years' experience of hospital and private practice made his book on "Diseases Peculiar to Women" (1860) particularly valuable. On the resignation of his professorship, he devoted himself to his great work, "Principles and Practice of Obstetrics" (1864), which he dedicated to the memory of James (q. v.) and Dewees, and fulfilled its promise of being "in opposition to the most admired authors." From its philosophical character, as well as its original teachings and illustrations it ranked among the first of its kind, both in America and abroad.

He was led to resign his professorship on account of failing eyesight, a weakness in the optic nerve, which could not be relieved by surgical skill. At last he was unable to read and write, but his will was indomitable. For his great obstetrical work he had to rely on an amanuensis, and such help as his medical confrères gladly rendered. Sixty-seven years old, he did all the professional work which could be done without eyes. The poor and the students could still count upon finding him in a serene mind, tender and sympathetic and with loyal, unswerving trust in God. He generously, at this time, presented the college with his valuable museum, together with his collection of material used in making the one hundred and fifty-nine illustrations in his book. It is kept separate and under the curatorship of the professor of obstetrics.

He was a fellow of the College of Physicians, Philadelphia; professor of obstetrics, University of Pennsylvania, 1835-1863; emeritus professor in 1863; LL. D. University of Pennsylvania, 1871.

The day before his last illness he seemed in his usual health, and was working till late afternoon with professional engagements and preparing an article on "Cephalotripsy." He went to bed perfectly well, but near midnight was seized with heart failure, and died twenty-six hours later, on February 26, 1873.

HODGEN, John Thompson (1826-1882), St. Louis surgeon, was born at Hodgenville, La Rue County, Kentucky, on the nineteenth of January, 1826. His father was Jacob Hodgen; his mother, Frances Park Brown. His early years were spent in the common schools of Pittsfield, Pike County, Illinois, and his collegiate course at Bethany College, West Virginia. In his twentieth year he entered the medical department of the University of the State of Missouri and was graduated in March, 1818, then he was the assistant resident physician of the St. Louis City Hospital from April, 1848, to June, 1849, and demonstrator of anatomy in his alma mater, from 1849 to 1853. He was appointed to the chair of anatomy by Joseph Nash McDowell (q. v.), a position he occupied from 1854 to 1858. From 1858 to 1864 he filled both chairs of anatomy and physiology. In 1864 the Missouri College building, having been seized by the government, and Dr. McDowell, its head, having gone south, Dr. Hodgen transferred his allegiance to the St. Louis Medical College, where he filled respectively the chairs of physiology and of anatomy, and in 1875 assumed the chair of surgical anatomy, fractures and dislocations, and was created dean of the faculty, a position he held at the time of his death. From 1864 to 1882 he taught clinical surgery at the City Hospital.

During the Civil War he served in the capacity of surgeon-general of the Western Sanitary Commission, 1861; surgeon, United States Volunteers, 1861 to 1864; and surgeon-general, State of Missouri, 1862 to 1864. He served as consulting surgeon to the City Hospital from 1862 to 1882; was president of the St. Louis Medical Society in 1872, president of the State Medical Association in 1876, and president of the American Medical Association in 1880.

Quick and clear in apprehension, terse and forcible in expression, he was a powerful debater, whom no sophistry confused, and one who never lost sight of controlling principles, or confounded ideas with facts. In the International Medical Congress of 1876, at Philadelphia, he won substantial honors, and made a record that stamped him as a great man. Hodgen possessed decided mechanical genius, his inventions most worthy of note being a wire splint for fracture of the thigh; suspension cord and pulleys permitting flexion, extension and rotation in fracture of the leg; forceps dilator for removal of foreign bodies from the air passages, without tracheotomy; cradle-splint for treatment of compound fracture of the thigh; wire suspension splint for injury of the arm; double action syringe and stomach pump; hair-pin

dilator for separating the lips of the opening in the trachea, and as a guide to the tracheal tube.

His chief contributions to medical literature were: "Wiring the Clavicle and Acromion for Dislocation of the Scapular End of the Clavicle"; "Modification of the Operation for Lacerated Perineum"; "Dislocation of Both Hips"; "Use of the Atropia in Collapse of Cholera"; "Three Cases of Extra-Uterine Fetation"; "Skin Grafting"; "Nerve Section for Neuralgia"; "Report on Antiseptic Surgery"; "Shock, and Effects of Compressed Air, as Observed in the Building of the St. Louis and Illinois Bridge."

He died in his fifty-seventh year, April 28, 1882, of acute peritonitis, caused by ulceration of the gall-bladder, after a short and painful illness.

He married a Miss Mudd, of Pittsfield, Illinois, who survived him.

AARON J. STEELE.

HODGES, Richard Manning (1827-1896), Boston surgeon, was born at Bridgewater, Massachusetts, November 6, 1827, graduated from Harvard College in 1847 and from Harvard Medical School three years later. After a course in midwifery at Dublin and studying anatomy and surgery in Paris he returned to Boston and began general practice. Starting in 1853 he was demonstrator of anatomy in Harvard Medical School under Oliver Wendell Holmes (q. v.), serving in that position for eight years and preparing the dissections for the class with painstaking care. At the time his dissections were said to be "marvels of beauty and skill". There are specimens in the Warren Museum of the school at the present time that attest the high order of his handiwork. Hodges gained the friendship of the great Henry J. Bigelow (q. v.) early in his career. Bigelow, the leading surgeon of New England, was able to throw many pieces of work in the way of the young assistant, who showed much tact and was soon known as a fashionable and popular physician, whose decided opinions, sensible advice and warm sympathy made him a great favorite. His positive views were not unlike those of his master and drew the two men together. In 1863, on the resignation of S. D. Townsend, (q. v.) Hodges was appointed visiting surgeon to the Massachusetts General Hospital. There he was associated with Bigelow, Samuel Cabot, J. Mason Warren and Edward H. Clarke (q. v. to all) paying especial attention to the instruction of the house staff and being rated as one of the best and neatest of the operators. His writings upon excision of the joints, upon spiroidal fractures and upon other surgical conditions became authoritative. He was the first to point out the frequency of a sinus in the sacro-coccygeal region, to which he gave the name: "Pilo-nidal sinus", from its hairy contents and nest-like shape.

Hodges was elected adjunct professor of surgery at Harvard in 1866 and proved himself of great assistance to Bigelow, who was then perfecting his demonstration of the Y-ligament of the hip joint, published first in 1861, and its practical bearing on dislocations of that joint. Hodges's nervous temperament was not adapted to teaching, each course of lectures proving to be more laborious, so he resigned his adjunct professorship in 1872 but continued as visiting surgeon to the hospital until 1885. He wrote an authoritative account of the great ether controversy, to settle the question to which of the many claimants, Morton, Wells, Long, Jackson, belonged the credit of the discovery of surgical anesthesia, by publishing in 1891 a small book, entitled: "The Introduction of Surgical Anaesthesia." It appeared in the year following the death of his master but must, undoubtedly, have had the approval of Bigelow, who did so much to place before the world the great discovery in its true light. Dr. Hodges acted as "Anniversary Chairman" at the annual dinner of the Massachusetts Medical Society in 1872; he delivered the annual discourse in 1886 on the subject: "Undercurrents of Modern Medicine", read a paper before the society on "Modern Surgery" and wrote a life of Bigelow. He served on the Board of Overseers of Harvard College from 1878 to 1890, was a member of the American Academy of Arts and Sciences and of the Boston Society for Medical Improvement. He retired from active practice in 1891, and died in Boston, February 9, 1896.

Hodges was a punctilious man, active, steady, ambitious, dogmatic and blunt, at times almost to brusqueness, but withal kindly and sincere. He had a self-reliant manner which never left him when needed. He was many things to a large circle of patients and friends.

WALTER L. BURRAGE.

HOFF, John Van Rensslaer (1848-1920), organizer of the first detachment of the hospital corps in the United States army, was born at Mt. Morris, N. Y. April 11, 1848, the

son of Bvt. Col. Alexander H. and Anna Eliza Van Rensslaer Hoff. Dr. Hoff took an A. B. at Union College, N. Y. in 1871, an A. M. in 1874 and his M. D. at the College of Physicians and Surgeons, Columbia, N. Y. in 1874. A second M. D. was conferred on him by the University of Vienna, Austria, in 1886 and the degree of LL. D. by Bucknell College in 1907 and by Union College in 1912. In the year of his graduation in medicine he was appointed assistant surgeon in the army with the rank of 1st Lieutenant. Passing through the different grades he became lieutenant colonel, chief surgeon of volunteers, May 9, 1898 and was honorably discharged on November 5, of the same year, that of the Spanish war. In the year 1902 he became deputy surgeon-general in the army and three years later assistant surgeon-general. It was while serving at Fort Reno, Indian Territory in 1887 that he organized the first detachment of the hospital corps and the first company of instruction hospital corps at Fort Riley, Kansas in 1891. During the war with Spain he was in Porto Rico as chief surgeon to the 3d Corps and in 1900 he held the same position in the China relief expedition. During the Russo-Japanese war he was an observer with the Russian army. Dr. Hoff was an instructor in military hygiene in the General Service and Staff College at Washington (1903-1905) and professor in the Army Medical School for two years previously, at that time being president of the Association of Military Surgeons of the United States. He served as acting editor of the "Military Surgeon" and wrote several articles on military and medical subjects.

On June 22, 1875 Dr. Hoff married Lavinia, daughter of General Hannibal Day, U. S. A. He died at his home in Washington, following an operation for a septic gall bladder, January 14, 1920.

HOFFMAN, David Bancroft (1827-1891), of San Diego, California, was born in Bainbridge, New York, July 25, 1827. He studied medicine in his father's office, and attended lectures at Rush and Jefferson Medical colleges, then he crossed the plains in 1849 and spent two years in California. In 1851-3 he was surgeon on mail steamers from New York to Aspinwall, and from Panama to San Francisco. He then settled in San Diego, California, was coroner and afterwards postmaster there, and represented the County in the legislature in 1861-62. He received the degree of M. D. from Toland Medical College, in San Francisco, in 1864. During the Civil War he served as a field surgeon in the United States Army, and afterward as a contract surgeon, until 1880. In 1868 he was presidential elector; in 1869-73, collector of customs at San Diego; and in 1870-5, United States commissioner in bankruptcy. He engaged in railroad enterprises, and was chosen president of the San Diego and San Bernadino Railroad Company.

He published a "Medical History of San Diego County" (San Francisco, 1864).

Dr. Hoffman died in Helix, California, November 19, 1891.

HOFFMAN, Walter James (1846-1899), ethnologist of Indian tribes, was born May 30, 1846, at Weidasville, Lehigh County, Pennsylvania, the son of Dr. William F. and Elizabeth Weida Hoffman. His paternal ancestors, physicians for several generations, were descended from the Barons Hoffman, hereditary grand marshals of Styria, and his maternal ancestors were early Huguenot settlers in New York. Hoffman studied medicine under his father, was graduated from Jefferson Medical College in 1866, and practiced in Reading, Pa. until, in 1870, he became staff surgeon in the Prussian army, serving near Metz. He devised an improved bullet extractor and later was appointed by the Imperial Ottoman government to supervise the manufacture of the extractor for use in the medical corps of the Turkish army. In 1871 he was appointed acting assistant surgeon, U. S. A. As naturalist and mineralogist to the expedition organized under General Wheeler to explore Nevada and Arizona,—the first party to cross Death Valley and report its meagre resources,—he visited and reported upon all mines in western Nevada, northwestern California, and northern Arizona. When post surgeon at Grant River, Dakota, he studied the myths and languages of the Sioux Indians. In 1873 he was naturalist to the Yellowstone Expedition, detailed to the 7th U. S. Calvary, commanded by General Custis. That autumn he resumed practice in Reading and remained until, appointed in 1877 to take charge of the collection of ethnology and mineralogy under Prof. F. V. Hayden, chief of the U. S. geographical and geological survey of the territories. In 1879 he was assistant ethnologist of the newly organized Bureau of Ethnology. Dr. Hoffman visited nearly every Indian tribe in this country, noting their gesture language and pictograph writings. In 1887 he studied the Ojibwa of Minnesota, the "Grand Medical

Society." He was the first white man to become a member, thus securing the traditions of Indian cosmogony and the genesis of man, the ritual of initiation, and musical notation of songs used at ceremonies, which he published in reports of the Bureau. Among his writings were monographs and reports on natural history, and mineralogy, one on the ethnography and philology of Pennsylvania Germans, as well as "An Annotated List of the Birds of Nevada," 1882, "List of Birds observed at Fort Berthold, D. T.," 1883, and "Bird Names of the Selish, Pah-Uta, and Sho-Shoni Indians," 1885.

Hoffman was a member of many scientific and historical societies and received numerous decorations, diplomas, and medals.

He died in Reading, Pa. November 8, 1899.

HOLBROOK, John Edwards (1794-1871), of South Carolina, anatomist and naturalist, was born at Beaufort, in that state December 30, 1794, the son of Silas Holbrook, a native of Massachusetts, through whom he was descended from old New England stock. His mother was Mary Edwards of South Carolina. His early education was received at Wrentham, Massachusetts, and at Providence, Rhode Island. In 1815 he was graduated from Brown University with the degree of A. B., and in 1818 he took his M. D. at the University of Pennsylvania.

Dr. Holbrook began to practice in Boston, Massachusetts. After a brief stay in that city he went to Europe, and spent two years at Edinburgh, and about two more in England, France and Germany. While in Paris he spent several months studying in the Jardin des Plantes, where he became acquainted with Cuvier, and formed intimacies with such men as Valenciennes, Duméril and Bibron, from whom he imbibed the inspiration of his life.

He returned to America in 1822, and settling in Charleston, South Carolina, practiced there. Here his ability and his irresistible personal charm soon won for him a full measure of success. So delicate and sympathetic was his nature that he never attended an obstetric case, nor performed a surgical operation, if it was possible to avoid it, because of the pain it caused him to witness the sufferings of others.

In 1824 he was active in the establishment of the Medical College of South Carolina, in which institution he lectured on anatomy for thirty years. Unsurpassed as a lecturer, possessing in an eminent degree the faculty of uniting accurate description with a rare grace of expression he made the dull details of anatomy glow with an unsuspected beauty. But his real life work was his "Monograph upon the Reptiles of the United States." This work was completed in 1842, and embraced descriptions and illustrations of one hundred and forty-seven nominal species, few of which "have proved to be other than real species in the present sense of the figure." Dr. Holbrook named twenty-nine new species, most of which are still retained with his specific names, and one was named for him, a western earless lizard—Holbrookia Maculata Approximans.

He subsequently devoted his attention to a companion work on fishes. His original plan comprehended a description of the fishes of South Carolina, Georgia and Florida, but later was narrowed down to the fishes of South Carolina. After the publication of this work was begun, a fire in the "Artist's Building" in Philadelphia interrupted its progress. A new edition was then undertaken with finer and more accurate illustrations, but only a portion was completed when the outbreak of the Civil War terminated Dr. Holbrook's scientific labors.

He was a member of the Royal Medical Society of Edinburgh; of the Royal Society of Northern Antiquarians, Copenhagen; of the Society of Naturforschende Freunde, Berlin; and the Academy of Natural Sciences, Philadelphia.

He was a brother of Silas Pinckney Holbrook (1796-1835), of Medfield, Massachusetts, a popular contributor to the "New England Galaxy" and the "Boston Courier", and editor of the "Boston Tribune," and a comic paper called the "Spectacles". Dr. John E. Holbrook's chief works were "American Herpetology," 5 vols. 4th, Philadelphia, 1842, beautifully illustrated; "American Ichthyology," part ii, New York and London, 1847; "Ichthyology of South Carolina," Charleston, South Carolina, 1855; "Ichthyology of South Carolina," vol. i, Charleston, South Carolina, 1860.

He married Miss Harriott Pinckney Rutledge in 1827. They had no children. He died in his sister's home at Norfolk, Massachusetts, September 8, 1871.

ROBERT WILSON, JR.

HOLCOMBE, William Frederic (1827-1904), New York physician and genealogist, son of Captain Augustine Holcombe and Lucy Bush, of Boylston, Massachusetts, and West Greenby, Connecticut, respectively, was born

April 2, 1827, in Sterling, Massachusetts. He took his M. D. at Albany Medical College in 1850, and then studied in Europe. He was a physican in New York City, and professor of eye and ear diseases in New York Medical College, 1862; later in the New York Medical College for Women and in the Ophthalmological College and Hospital in 1863. He was one of the founders of the New York Genealogical and Biographical Society, 1869. Dr. Holcombe lived for years at 54 East 25th Street, New York, and treated General Grant during his last illness. He also treated Daniel Webster and Charles Sumner. Some ten years before he died he became deaf and through this affliction was compelled to give up his practice as well as his professorship in the various New York colleges.

He was the author of "The Genealogy and History of the Holcombes of America and England," and "Family Records, Their Importance and Value" (1877). He delivered the centennial address of the town of Sterling, Massachusetts, in 1887.

He married Margaret, daughter of Moses Wanzer, a Quaker of Sherman, Connecticut, in 1852.

Dr. Holcombe died suddenly, March 17, 1904, in the Presbyterian Hospital, New York City, after a brief illness from a general breakdown due to old age.

HOLCOMBE, William Henry (1825-1893), writer on homeopathy, of New Orleans, was born in Lynchburg, Virginia, May 29, 1825. His grandfather was the distinguished soldier, Colonel Philemon Holcombe, who ran away from college to join Harry Lee's regiment, and acted as aid-de-camp to Lafayette at the siege of Yorktown. His father was William J. Holcombe, M. D.; a brother, James Philemon Holcombe, was a distinguished lawyer and legal writer.

The subject of our sketch went to Washington College (now Washington and Lee University) for one year, and at the end of that time his parents liberated their negroes, and rejected a property in negroes willed to them by a relative. They moved to Madison, Wisconsin, so the boy, instead of his intended course at Yale University, went to work on a farm. However, he studied with his father, and later entered the University of Pennsylvania and graduated M. D. in 1847 with a thesis on the "Function of Locomotion." He practiced three years in Madison, then moved to Cincinnati (1850-1852); then to Natchez, Mississippi (1852-1855), and to Waterproof, Louisiana, returning to Natchez in 1862, finally to New Orleans, Louisiana, which remained his home.

Holcombe became a convert to Swedenborg and wrote much on the subject; also he was an enthusiast on homeopathy, and was president of the American Institution of Homeopathy (1874-1875). His writings include: "Scientific Basis of Homeopathy" (1852); "Our Children in Heaven" (1886); "The Sexes Here and Hereafter" (1869); "The Other Life" (1869); "Yellow Fever and Its Homeopathic Treatment"; "The End of the World" (1881); "Condensed Thoughts about Christian Science" (3rd edition, 1887).

In 1852 he married Rebecca Palmer of Cincinnati, who was her husband's assistant in his work.

Holder, Joseph Bassett (1824-1888), naturalist of New England and New York. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 539.

HOLE, John (1754-1813), military surgeon was born in Virginia and read medicine with Dr. Fullerton. He was on the medical staff of Gen. Montgomery when the General fell mortally wounded at the storming of Quebec, December 31, 1775.

Responding to the first call for troops in the Revolutionary War he went with the Virginia militia to the general camp near Boston, was comissioned surgeon's mate in the Continental Army, and continued in active service until the close of the war. He fought at Bunker Hill, and was present when Washington assumed command of the army.

After the war he settled in New Jersey, where he married in 1778. In 1790 he went to Cincinnati and began practice in the winter of 1792-3, inoculating for small-pox, the practice having been introduced into Cincinnati and vicinity for the first time. In the spring of 1797 he purchased a tract of land in Washington Township, Montgomery County, Ohio, paying for it with Revolutionary land warrants, built a cabin and removed his family to the new home. In those days anything was more plentiful than money, and produce of all kinds accepted in payment for service, as shown by the following bill:

"I owe Dr. John Hole one pair of leather shoes for a boy child.

"Benj. Robbins."

At the onset of the War of 1812 he was tendered a position on the medical staff of the

army, which failing health compelled him to decline. He died January 6, 1813.

HOLLAND, James William (1849-1922), dean of the Jefferson Medical College, the son of Dr. Robert Chappell and Elizabeth Lewis Turner Holland, was born April 24, 1849, in Nashville, Tennessee. During the cholera epidemic of 1852, Dr. Robert Holland moved his family to Louisville. Here James took his A. B. from the University of Louisville in 1865 and his A. M. in 1868. In the latter year he was graduated from Jefferson Medical College in Philadelphia. Returning to his home in Louisville, he practiced with his father and established immediate connection with the University of Louisville as assistant demonstrator of anatomy. In 1872, he was appointed professor of medical chemistry and clinical neurology and successively became the head of the departments of materia medica, clinical medicine, and practice of medicine and clinical medicine. He moved to Philadelphia in 1885 to take the chair of medical chemistry and toxicology in Jefferson Medical College, a position he held until 1912; from 1887 to 1916, he was also dean of the medical faculty of Jefferson.

Holland became a member of the Kentucky State Board of Health in 1878. In 1880, he was the editor of the "Louisville Medical News". He was president of the Kentucky State Medical Association and of the Association of American Medical Colleges and, from 1907 to 1916, one of the Council on Medical Education of the American Medical Association. Among his contributions are "Diet for the Sick," 1880; "Common Poisons and the Urine," (65 pp.) 1888; "The Urine and the Clinical Chemistry of the Gastric Contents, the Common Poisons, and the Milk," 1895 (enlarged and revised, 1900); "Textbook on Medical Chemistry and Toxicology," 1905; and the chapter on urine in the "American Textbook of Practical Medicine" and in Peterson and Haines' "Legal Medicine and Toxicology," and that on mineral poisons in Saunders' "Textbook of Toxicology and Medical Jurisprudence."

Dr. Holland married Mary B. Rupert of Louisville in May, 1877; a son, Rupert Sargent, is an author and lawyer in Philadelphia.

He was of short stature and sandy complexion; his face was kindly and keen and his manner ever cordial.

On February 10, 1922, he died in the Jefferson Hospital.

HOLLAND, Josiah Gilbert (1819-1881), editor, novelist, poet, was a Yankee in every circumstance of his life, and a strikingly characteristic example of the traits that have made the Yankee so great a force in the nation. He was born in Belchertown, Massachusetts, July 24, 1819, and was the only child of seven to Harrison Holland and his wife, Anna Gilbert (of the Gilberts of Hebron, Ct.) who survived to make a record. His ancestors on both sides were of New England descent from the earliest times; and he had the New England spirit, which, when circumstances denied him help, gave him the spur to educate himself; in his boyhood at the district schools in winter and in summer laboring to support his family; then trying to fit himself for college, but balked of that by ill-health, teaching classes in penmanship, essaying daguerreotypy, until at 21 he began at Northampton the study of medicine, and attending the regular course of lectures at the Berkshire Medical Institution at Pittsfield—then a famous school—he was graduated in 1843. Dr. Holland joined the Massachusetts Medical Society in 1844, and at once began the duties of his profession in Springfield. In the practice of medicine he soon found that he was out of his element, and so looked around for an occupation more congenial. That, in his opinion, was journalism, and in 1847, with some backing and promises of subscriptions he began the publication of the "Bay State Weekly Courier",—which he sold out to the "Gazette" six months later. He went to Richmond, Va., and while there was elected superintendent of schools at Vicksburg, Mississippi. Here he made a reputation remembered even yet. Becoming homesick in 1849 he resigned and returned to Springfield where he became an editor of the "Republican" and gave it its great literary reputation. In its columns appeared the celebrated letters of Timothy Titcomb (1857-58). He wrote an authoritative "History of Western Massachusetts"; Charles Scribner, who now became his warm friend, republished the Titcomb letters. He was a most successful lecturer. He wrote the poem "Bittersweet" (1858), and a novel, "Miss Gilbert's Career" (1860), etc. He was one of the founders of "Scribner's Monthly" which brought a new quality into and added a new dignity to American literature. He contributed to it the novels "Seven Oaks," "Nicholas Minturn" and "Arthur Bonnicastle," and wrote notes each month on the "Topics of the Time." When the "Century

Magazine" succeeded "Scribner's" he was its first editor.

He was long a director of music in the North Church, Springfield, and one of the originators of the Memorial church. He married Elizabeth Chapin in 1845; the issue was three children.

Holland moved to New York in 1869 and became the leader in the literary circle there, and here he died of angina pectoris, October 12, 1881, hard at work writing up to the day before his death.

HOLLOWAY, James Montgomery (1834-1905), professor of surgery in the medical department of Kentucky University, was born in Lexington, Kentucky, July 14, 1834. He went with his father, William P. Holloway, at the age of twelve, to Grand Gulf, Mississippi. His medical studies were completed in the University of Louisiana, now Tulane University. After graduating there in 1858 he spent one year as interne at Touro Infirmary and later became a private student with Dr. Warren Stone (q. v.) at the New Orleans Charity Hospital. Dr. Holloway began practice in Madison County, Mississippi, but at the beginning of the Civil War entered the Confederate service as a private, soon after becoming a surgeon with the rank of major. After serving with distinction in this capacity for one year in the field he was placed in control of the hospital service at Richmond, Virginia, where he remained until the close of the war. He then went to Louisville and was appointed professor of anatomy in the University of Louisville, at the end of one year being transferred to the chair of physiology and medical jurisprudence, which he resigned in 1867. Among other appointments he had the professorship of clinical and operative surgery in the Kentucky School of Medicine and also in the Louisville Medical College; also the chair of surgery in the latter institution for eight years, resigning to accept the same chair in the Louisville Medical College and the Kentucky School of Medicine. In 1898 he was professor of surgery in the Kentucky University, medical department, a position he held until his death. In 1885 Centre College conferred upon him the M. A. degree. His most noted writing was a contribution to "Surgery by American Authors," edited by Roswell Park, upon "Diseases of the Veins."

Dr. Holloway gave his practice the closest attention and was renowned for his promptness in meeting all engagements. Although a great sufferer from gout, rarely did it keep him from work, and it was no unusual sight to see him visiting patients with his foot swathed in flannels.

In 1858 Holloway married Annie Warren and had five children, one of whom, Samuel Warren, also became a doctor.

J. GARLAND SHERRIL.

HOLMES, Andrew Fernando (1797-1860), founder of McGill University and first dean of its medical faculty, was born in Cadiz whither his parents were carried as prisoners of war after their vessel bound for Canada was captured by a French frigate. Four years later, the family settled in Quebec and subsequently in Montreal. At fifteen, Andrew was articled as a pupil to Dr. Arnoldi; about 1814, he left for the University of Edinburgh and was graduated M. D. in 1819, having obtained his diploma as surgeon the previous year from the Royal College of Surgeons. In 1818, he was also admitted to membership in the Royal Physical Society of Edinburgh becoming an Extraordinary Member just before his journey home. With a fellow student, John Stevenson, Holmes found time to visit the schools and hospitals of Dublin, London, and Paris. He brought back with him the fruits of untiring labor in natural history pursuits, an extensive herbarium of the flora of Edinburgh and a rich mineralogical and geological collection—the nucleus of the present large "Holmes Collection of Minerals" in the Peter Redpath Museum, and began practice in Montreal in 1820, in the leisure hours of those early years gathering and attaching data to an herbarium of some five hundred plants, representing the complete flora of the district that is also in the Redpath Museum. In 1827, he was a founder of the Natural Historical Society of Montreal, became corresponding member, curator, and finally president, and catalogued its mineralogical collection.

In 1822, the Montreal General Hospital opened with Holmes on its staff. In response to the great need of a good medical school, the unchartered Montreal Medical Institution, organized by Robertson, Caldwell, Stevenson, and Holmes, became the medical faculty of McGill University in 1829, with Holmes teaching chemistry and materia medica. In 1842, Holmes succeeded Robertson as professor of the practice and principles of medicine and two years later, as head of the faculty; in 1854, he was made its first dean. The library owes its existence to his foster-

ing care, and the pathological museum he so cherished contains specimens of rare value presented by him. He was actively interested in all professional associations and during 1853-56 was president of the College of Physicians and Surgeons of Lower Canada.

Among his writings are his graduating thesis, "De Tetano," "Intrauterine Crying of the Child," "Fleshy Tubercle of the Uterus," "Asiatic Cholera in Montreal," "A Case of the Employment of Chloroform."

He died suddenly of fatty degeneration of the heart, October 9, 1860.

Dr. Holmes was a slight, dark man, rather under medium height, somewhat stooping, and of a quiet, retiring manner. A striking characteristic was his strong religious feeling recognized and respected by all his friends. The Holmes Gold Medal, awarded for the highest aggregate of marks obtained in the medical course, was established in his honor, in 1864.

MAUDE ABBOTT.

HOLMES, Christian Rasmus (1857-1920), ophthalmologist and otologist of Cincinnati, leader in medicine in the Ohio valley, was born October 18, 1857, in Vejle, Denmark, the son of Christian Rasmus and Karen Mickelson Holmes, During early education in Denmark and Germany, his bent was toward civil engineering. Upon the death of his father, he came with his mother to Cincinnati, Ohio, and in 1886 was graduated from the old Miami Medical College. After a year's internship in the Cincinnati Hospital, he established practice and later became the partner of Joseph Aub (q. v.), succeeding to the large practice of the latter who shortly died. In 1895, Holmes opened a private hospital and continued in charge until 1919. He was ophthalmologist and otologist to the Cincinnati Hospital, 1888-99; professor of otology in the Miami Medical College, 1890-1904; professor of ophthalmology in the Lauro Memorial Medical College and the Presbyterian Hospital, 1892-1903, also professor of otology and dean of the University of Cincinnati after 1904. In 1892, as a member of the City Hospital staff, he realized the need of a new hospital and henceforth devoted his energies to this important objective. He spent ten years of arduous labor as well as his earnings in visiting and studying the hospitals of the United States and Europe; the result is the great Cincinnati General Hospital. The merger of the Medical College of Ohio and the Miami Medical College into the University of Cincinnati in 1909 was largely brought about through his untiring efforts and in 1914 he was appointed dean of the new institution. By the charter which he helped to frame the medical department of the hospital became a part of the university whose trustees have the sole right to elect the staff and supervise the nursing department,—a vital proviso under evil political conditions. He also secured large funds for the erection of the medical college on a tract just west of the hospital, enabling these two inseparable factors in medical education to function in unison.

Dr. Holmes was commissioned Major in the Medical Reserve Corps in 1917, and placed in charge of the eye, ear, nose, and throat department at Camp Sherman, Chillicothe, Ohio, where he remained until the cessation of hostilities. He contributed largely to literature on the question of hospitals and their relation to medical education, as well as to the literature of his specialty. He was vice-president of the American Medical Association in 1902-03, chairman of the section on laryngology and otology in 1904-05 and on ophthalmology in 1905-06, and president of the American Academy of Ophthalmology and Oto-laryngology in 1901-02, of the American Ophthalmological, Rhinological, and Otological Society in 1908-09, and of the Cincinnati Academy of Medicine.

On October 26, 1892, he married Bettie Fleischman of Cincinnati; three sons were born to them. His death followed an operation for appendicitis, at the New York Post-Graduate Hospital, on January 9, 1920.

HOLMES, Edward Lorenzo (1828-1900), founder of the Illinois Charitable Eye and Ear Infirmary, Chicago, was born January 28, 1828, at Dedham, Massachusetts, graduated from Harvard College at the age of twenty-one and then taught in the Latin School of Roxbury, Massachusetts. He graduated in medicine at Harvard in 1854, later serving as interne in the Massachusetts General Hospital. After spending two years in Vienna he took up the practice of ophthalmology and otology in Chicago. He was a founder of the Illinois Charitable Eye and Ear Infirmary, and the head of its surgical staff until his death. He was also a founder of the Presbyterian Hospital and later one of its surgeons. In 1860 he became lecturer on ophthalmology and otology in Rush Medical College, and was elected to a full professorship in 1867, in 1890 being elected president of the college,

retaining this position until he resigned from the faculty on his seventieth birthday. He was a member of the American Ophthalmological Society for many years.

One of the pioneers of ophthalmology in the West, he exerted a powerful influence there. He died of pneumonia in Chicago, February 12, 1900.

HARRY FRIEDENWALD

HOLMES, Horatio Reese (1856-1896), the leading pioneer gynecologist of the northwestern States, was born in Polk County, Oregon, July 30, 1856, the son of Horatio Nelson Viscount and Nancy Porter Holmes. He was the youngest of five brothers. His ancestors came from the north of Ireland. He was graduated from the medical side of Willamette University, Oregon in 1877; from the Long Island College Hospital in 1880, and afterwards attended post-graduate schools in New York City and Harvard University. He held membership in the American Gynecological Society, British Gynecological Society, British Medical Association and Oregon State Medical Society, being president of the last named. His practice was exclusively gynecology and obstetrics, and from 1894 till death he was professor of gynecology at the Willamette University and visiting gynecologist to the Portland Hospital.

His chief characteristic was his earnest interest in his work, and his putting aside all other business to equip himself for it.

His wife was Olivia Ernestine Swegle of Salem, Oregon, whom he married in 1877. They had one son, Guy Paul.

In the autumn of 1895 Holmes and his associates felt compelled to resign from the Portland Hospital staff; a heated discussion followed and Holmes was attacked and shot in three places by a physician who sustained the management. It was probably in consequence of injuries received at this time that intestinal complications arose, necessitating an abdominal operation while he was in a bad state of health. He never rallied, and died from the operation, on October 21, 1896.

He was the author of various gynecological articles in the Transactions of the Oregon State Medical Society, 1892-3; "Ventral Fixation in Displacements of the Uterus," "Pacific Medical Record," February, 1893; "First Symphysiotomy on the Pacific Coast," "New York Journal of Gynecology and Obstetrics," July, 1893; "A Year's Work in Surgical Gynecology, including Thirty-one Celiotomies without a Death or Stitch-hole Abscess," "Medical Sentinel," January, 1894; "A New Pelvic Drainage Tube," "Medical Record," March 1893; "Ventrofixation in Extreme Anterior Displacement of the Uterus," "Journal of American Medical Association," August 11, 1894; "Viburnum Prunifolium," idem, October 27; "Gonorrhea as an Etiological Factor in Diseases of Women," address before the Oregon State Medical Society, June 12, 1895.

HOWARD A. KELLY.

HOLMES, Oliver Wendell (1809-1894), anatomist, discoverer of the contagiousness of puerperal fever, as well as poet, wit and author, was born in Cambridge, Massachusetts, August 29, 1809, and died there October 7, 1894, the son of Abiel Holmes, pastor of the first church in Cambridge. The genealogy of the Holmes family dates from Thomas Holmes, lawyer of Gray's Inn, London, in the sixteenth century, and the first Holmes who came to this country was John, one of the first settlers of Woodstock, Connecticut, in 1686. The mother of Oliver Wendell Holmes was Sarah Wendell, a descendant of Thomas Dudley, governor of Massachusetts Bay from 1634-40 and from 1645-50. When Oliver was fifteen he was sent to Phillips Academy in Andover, and afterwards entered Harvard College, from which he was graduated with the famous class of 1829. Throughout his course he held a good record in scholarship and was also socially popular. After graduation he spent one year in the law school, and then turned to medicine, studying in the Harvard Medical School under Dr. James Jackson (q. v.) and his associates, for two and a half years, and before taking his medical degree spending three years in Europe, in the hospitals and lecture-rooms of Paris and Edinburgh. He received his M. D. in 1836, joined the Massachusetts Medical Society, and began to practice in Boston. In the same year he won the Boylston Prize Essay for a dissertation on "Intermittent Fever in New England," and in the following year, two prizes for dissertations on the "Nature and Treatment of Neuralgia," and the "Utility and Importance of Direct Exploration in Medical Practice." His literary talents kept him from devoting himself as completely as he might to the practical side of his profession, while his boyish spirit, his jokes and his verses tended to make patients turn to more serious, if less gifted practitioners.

For three years he was one of the physicians to the Massachusetts General Hospital. In 1838 he was appointed professor of anatomy at Dartmouth College, and held this chair in 1839 and 1840. It obliged him to be in Hanover during August, September and October. In 1842 he published two essays on "Homeopathy," which still rank as the most brilliant exposition given by an opponent of homeopathy. In 1843 he published his essay on the "Contagiousness of Puerperal Fever." This essay may justly be rated as a truly great contribution to medical science. Upon it rests Holmes' chief claim to a permanent reputation in medicine. In it he pointed out puerperal fever as frequently due to contagion conveyed by the hands of the physician from one mother to another, or from a case of erysipelas to the child bed. His views were opposed by the leading obstetricians of his day, but have since come to be generally recognized. The essay was published several years before the extended researches of Semmelweiss on the same subject, who likewise met with opposition in Europe before his views were adopted. The rules for physicians engaged in obstetrics devised by Holmes are still eminently practical and valuable.

In 1840 Holmes married Amelia Lee Jackson, a daughter of Charles Jackson, formerly judge of the Supreme Court. Soon after, he resigned his professorship at Dartmouth College, in order to devote himself more strictly to practice. During the summer months, however, he continued to deliver lectures before the Berkshire Medical Institution at Pittsfield, Massachusetts, and lived there. He also engaged in teaching at the Tremont Street Medical School, where courses supplementary to those of Harvard Medical School were given. About this time he edited, in conjunction with Dr. Jacob Bigelow (q. v.), an American edition of Marshall Hall's text-book on the "Theory and Art of Medicine."

In 1847, when thirty-eight, Holmes was elected to the newly established Parkman professorship of anatomy and physiology, at the Harvard Medical School. The Hersey professorship, which had previously been held by John Warren and John Collins Warren, was transferred to Cambridge, and Jeffries Wyman (q. v.), was elected to fill the chair. Holmes held the Parkman professorship for thirty-five years, until 1882, when he resigned. In 1871 a new professorship of physiology was created, and the Parkman professorship became limited to anatomy. Holmes was dean of the Medical School from 1847-53, and as such was always accessible to students, ever ready with kindly counsel and disposed to be lenient.

He became very popular as a lecturer on anatomy, and noted for the witty allusions with which he enlivened his five weekly lectures, delivered at one o'clock, an hour assigned him because it was the last of the five or six continuous hours of lectures which the students had to attend, and he alone of the lecturers could hold their attention at this time. Both Dr. D. W. Cheever (q. v.) and Prof. Thomas Dwight (q. v.) have given entertaining accounts of Holmes as a teacher of anatomy: "It was near one o'clock," says Dr. Cheever, "and the close work in the demonstrator's room in the Old Medical School in North Grove Street becomes even more hurried and eager as the lecture hour in anatomy approaches. Four hours of busy dissection have unveiled a portion of the human frame, insensate and stark, on the demonstrating-table. Muscles, nerves and blood-vessels unfold themselves in unvarying harmony, if seeming disorder, and the 'subject' is nearly ready to illustrate the lecture. . . . The room is thick with tobacco smoke. The winter light, snowy and dull, enters through one tall window, bare of curtain, and falls upon a lead floor. The surroundings are singularly bare of ornament or beauty, and there is naught to inspire the intellect or the imagination, except the marvellous mechanism of the poor dead body, which lies dissected before us like some complex and delicate machinery whose uses we seek to know." "To such a scene enters the poet, the writer, the wit, Oliver Wendell Holmes. Few readers of his prose or poetry could dream of him as here in this charnel-house, in the presence of death. The very long, steep, and single flight of stairs leading up from the street below, resounds with a double and labored tread, the door opens, and a small, gentle, smiling, man appears, supported by the janitor who often has been called on to help him up the stairs. Entering, and giving a breathless greeting, he sinks upon a stool and strives to recover his a s t h m a t i c breath . . . ." "Anon recovering, he brightens up and asks, 'What have you for me to-day?' and plunges, knife in hand, into the 'depths of his subject'—a joke he might have uttered. Time flies, and a crowd of turbulent Bob Sawyers pours through the hall to his lecture-room, and begins a rhyth-

mical stamping, one, two, three, and a shout, and pounding on his lecture-room doors. A rush takes place; some collapse, some are thrown headlong, and three hundred raw students precipitate themselves into a bare and comfortless amphitheatre. Meanwhile the professor is running about, now as nimble as a cat, selecting plates, rummaging the dusty museum for specimens, arranging microscopes, and displaying bones. The subject is carried in on a board; no automatic appliances, no wheels with pneumatic tires, no elevators, no dumb-waiters in those days. The cadaver is decorously disposed on a revolving table in a small arena, and is always covered, at first, from curious eyes, by a clean white sheet. Respect for poor humanity and admiration for God's divinest work is the first lesson and the uppermost in the poet-lecturer's mind. He enters, and is greeted with a mighty shout and stamp of applause. Then silence, and there begins a charming hour of description, analysis, simile, anecdote, harmless pun, which clothes the dry bones with poetic imagery, enlivens a hard and fatiguing day with humor, and brightens to the tired listener the details of a difficult though interesting study." "And how he loved anatomy! as a mother her child. He was never tired, always fresh, always eager in learning and teaching it. In earnest himself, enthusiastic, and of a happy temperament, he shed the glow of his ardent spirit over his followers, and gave to me, his demonstrator and assistant for eight years, some of the most attractive and happy hours of my life."

During that autumn, writes Prof. Dwight, his successor in the chair of anatomy (q. v.), "I frequently recited to Dr. Holmes, and saw the great patience and interest with which he demonstrated the more difficult parts of the skeleton. In November began the dreary season of perpetual lectures, from morning till night, to large classes of more or less turbulent students." "To make head against these odds, he did his utmost to adopt a sprightly manner, and let no opportunity for a jest, escape him. These would be received with quiet appreciation by the lower benches, and with uproarious demonstrations from the 'mountain,' where, as in the French Assembly of the Revolution, the noisiest spirits congregated. He gave his imagination full play in comparison, often charming and always quaint. None but Holmes could have compared the microscopical coiled tube of a sweat-gland to a fairy's intestine. Medical readers will appreciate the aptness of likening the mesentery to the shirt ruffles of a preceding generation, which from a short line of attachment expanded into yards of complicated folds. He has compared the fibers connecting the two symmetrical halves of the brain to the band uniting the Siamese twins." "One would think, from Dr. Holmes's wonderful facility of expression, that lecturing year after year on the same subject, the lectures would have been as child's play. But I am convinced that this was not so. "You will find," said he to me at the time that I succeeded him," "that the day that you have lectured, something has gone out from you." To his sensitive organization I imagine that the trials incident to the tired, and in the early years more or less unruly class, were greater than his friends suspected. I remember once his telling Dr. Cheever and myself how exceedingly annoying it is to the lecturer to have any one leave the room before the close. I often marveled at the patience he displayed."

Holmes at an early period took an interest in the microscope. He was one of the early microscopists, and was a very good one. The instrument was not among the tools of the instructing physicians when he was studying in Paris, but soon afterwards it came into general use. He brought one home with him from Europe. It fascinated him, as indeed it did many another. He had a great taste for everything ingenious, and playing with this new machine devoured many an hour. He was forever taking his own to pieces and putting it together, and trying all sorts of experiments with it, both as to the mechanism itself, and as to the subjects of examination. How well I recollect the intense absorption with which he would thus pass long hours—hours which were not wasted, for "he was no mean authority on this subject in his day," says Dr. Cheever.

While a popular teacher, Holmes can scarcely be designated a scientific anatomist, since no discoveries, either in the field of microscopic or in that of macroscopic anatomy, are to be attributed to him. The nearest approach to a contribution to histology was a paper which he read at a meeting of a medical society in 1851, in which he described some cells at the ends of long bones. He was, however, always ready to give lessons in the use of the microscope, before its value was generally appreciated. The mechanical skill which he showed in this aided him in inventing a stereoscope for hand use, which was much esteemed. When reforms were inaug-

urated in the Harvard Medical School, after President Eliot entered upon office, Holmes, although he believed in them at heart, was timid about radical changes, submitting to, rather than actively supporting, them.

Holmes was well versed in standard historical medical works. He presented his private medical library, a collection of 1,000 volumes, to the Boston Medical Library, of which he was president at its inauguration in 1875 and for thirteen years. He describes these books as so dear to him that "a twig from some one of my nerves ran to every one." The collection, nearly complete and containing many first editions, is now specially guarded in a case in Holmes Hall, the main reading room, named for the library's first president and ornamented by his bust and portrait. In 1860 he published an address on "Currents and Countercurrents in Medical Science," and in 1861 incorporated with this his papers on "Homeopathy" and "Puerperal Fever," and several addresses to medical students, and in 1882, a volume of "Medical Essays," containing a few of those published in "Currents and Countercurrents" and some others. In 1874 appeared a sketch of the "Life of Jeffries Wyman," and in 1891 a "Tribute to Henry J. Bigelow, M. D."

As a practitioner, Holmes was opposed to overdosing. He believed in the self-limitation of disease. "From the time of Hippocrates," he states, "to that of our own medical patriarch, there has been an apostolic succession of wise and good practitioners, who place before all remedies the proper conduct of the patient." The misuse of drugs he expressed well by saying that if all drugs in the Pharmacopœia, with a very few exceptions, were thrown into the sea, it would be all the better for mankind, and the worse for the fishes.

Holmes began writing graceful verse and prose when in college, and continued actively productive till the close of his life. To his wit and skill as a writer is due his chief reputation, but this side of his life cannot be adequately entered on here.

After his resignation from the Harvard Medical School in 1882, he devoted himself to literary pursuits. In 1886, in company with his daughter, he made a trip to Europe, where he received much attention, and was given honorary degrees at Oxford, Cambridge and Edinburgh. On his return to America he lived quietly in Boston and at his summer home at Beverly Farms, until the end came.

In the "Boston Medical and Surgical Journal," October 11, 1894, vol. cxxxi, and in the catalogue of the Surgeon-general, Washington, D. C., will be found lists of his writings.

CHARLES R. BARDEEN.

Holston, John G. F. (1809-1874), professor of anatomy in Georgetown University School of Medicine, personal physician to President Grant. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto, 1920, pages 545-546.

HOLT, Luther Emmett (1855-1924), of New York, leading specialist of his generation in the diseases of children, was born in Webster, New York, March 4, 1855, the youngest son of Horace and Sabrah Curtice Holt. He graduated in arts at the University of Rochester in 1879. To make possible the study of medicine, he taught for a year at the Riverside Institute in Wellsville, New York, and then entered the Buffalo Medical College; without waiting to graduate he took advantage of an opportunity to work in the New York Hospital for the Ruptured and Crippled and to attend the College of Physicians and Surgeons (Columbia University). Here he served as student assistant, forming a close and lasting association with Dr. Virgil P. Gibney, the surgeon-in-chief; this experience probably determined the direction of his interests. After graduating in 1880 and serving for a year as interne in Bellevue Hospital, he elected the diseases of infancy and childhood as a life work. Dr. Holt was professor of pediatrics at the Polyclinic Hospital for eleven years and at the College of Physicians and Surgeons for twenty. He was at various times connected with the Northwestern Dispensary, the New York Infant Asylum, the Foundling Hospital, and the Nursery and Child's Hospital. In 1889, he became visiting physician to the Babies Hospital and later physician-in-chief. In the autumn of 1923, he went to China to give a course of lectures in the Pekin Union Medical College. While in Pekin his health gradually failed and he died of myocarditis on January 14, 1924, in his sixty ninth year.

Dr. Holt was a diagnostician of rare accuracy and acumen and had a thorough knowledge of pathological anatomy. His influence upon his specialty was profound; to him, to Jacobi, and to Rotch is due the development of pediatrics in this country,—combatting disease in the young and laying a foundation for the improvement of the

health of the race. His keen interest in the broader health problems continued to the end for after resigning his chair at Columbia he devoted the majority of his time and energy to the American Child Health Association.

As a medical speaker and teacher Holt was preeminent. He was logical and clear and his contagious enthusiasm gripped his audience. His diction was simple, avoiding vexing nonessentials and reaching instinctively for the heart of his subject. His many widely circulated writings exhibited the same qualities. He taught the whole medical profession pediatrics by his book on "The Diseases of Infancy and Childhood," our first really complete and authoritative work; he also taught the laity the value of nutrition and the care of children by his ubiquitous manual for mothers and nurses. Occasional publications dealt chiefly with problems of nutrition, a subject to which he always harked back. The original studies which he stimulated and published contributed largely to the literature of the subject.

Holt's capacity for work was enormous. He was tireless and as keen a critic of his own work as of that of others. He was, moreover, a wise counsellor and so was called upon to take part in many public movements. He was a trustee and vice-president of the New York Academy of Medicine, a trustee of the University of Rochester, an adviser to the New York Department of Health, and, from its beginning until his death, secretary of the Rockefeller Institute for Medical Research. He served as a member of the Red Cross Medical Conference at Cannes in 1919. He was a charter member of the American Pediatric Society and twice its president. The University of Rochester conferred the LL. D. upon him and Columbia and Brown universities, the Sc. D. Dr. Holt was a great physician and consultant, an inspiring teacher, and a useful and public-spirited citizen.

JOHN HOWLAND.

HOLTEN, Samuel (1738-1816), Massachusetts physician and statesman was born in Danvers, Massachusetts, June 9, 1738. Illness in youth prevented a collegiate education, so young Holten was apprenticed to Dr. Jonathan Prince, of his town, and made such rapid progress that he began practice at the age of nineteen, in the town of Gloucester. There he stayed for two years, returning to Danvers to practice for the succeeding sixteen years, until when he became so engrossed in his public duties, 1775, that it was no longer possible to give sufficient time to medicine. The town of Danvers elected Dr. Holten a representative to the General Court, in 1768, and from this time he held public office. In 1775 he was a member of the Provincial Congress at Watertown, and was one of the committee of safety, and a member of the examining board for the medical department of the Continental Army, then forming at Cambridge. The following year, Dr. Holten was appointed judge of the court of general sessions of the peace, and also justice of the Quorum, an office he held for forty years.

A delegate from Massachusetts to the federal convention of the United States in 1777, he became a member of the Congress, and affixed his ratifying signature to the constitution, also he was elected president of the Congress, a high honor. For more than a year he was the only physician in that body. Dr. Holten's next public work was to assist in the organization of the Massachusetts Medical Society, in 1781. He was an incorporator, and the early records of that organization bear evidence that his parliamentary experience was of value in directing its affairs, both as vice-president and as "counsellor". He attended the early meetings of the society and of its council composed of only a few members, and presided at the second meeting of the society, in 1782.

James Thacher, who knew him personally, says of Dr. Holten: "His form was majestic, his person graceful, his countenance pleasing, his manners easy and engaging, his address courtly, his talents popular, his disposition amiable and benevolent, and he possessed good intellectual powers." One can understand why he was elected eight years as a representative in the General Court, five in the Senate, twelve in the council, five in the Congress under the confederation, and two under the federal constitution.

He died January 2, 1816, at the age of seventy-seven.

WALTER L. BURRAGE.

HOLTZ, Ferdinand Carl (1843-1908), ophthalmologist of Chicago, inventor of the well-known Holtz's operations for entropium, ectropium, trichiasis and trachoma, was born at Wertheim, Baden, Germany, July 12, 1843. His early education he received in the Lyceum at Wertheim, his medical training at Heidelberg (1863-66) and Berlin (1866-67). His medical degree was conferred at Heidelberg in 1865. The teachers who chiefly influenced him at Heidelberg were Helmholtz,

Simon and Knapp; at Berlin, Graefe, Virchow, and Langenbeck. After a tour of study to Vienna, Paris, London, Edinburgh, Glasgow and Dublin, he came to America and settled in Chicago in 1869. He was ophthalmic surgeon at the Illinois Eye and Ear Infirmary from 1876 until his death. On the resignation of Dr. E. L. Holmes from the chair of ophthalmology and otology in the Rush Medical College, Dr. Holtz was appointed in his place, and this position, too, he held for many years. For a time he was professor of ophthalmology at the Chicago Polyclinic, and he was associate editor of the "Journal and Examiner." His more important writings may be found in the "Archiv fur Augenheilkunde, Zeitschrift fur Ohrenheilkunde" and in the medical journals from 1876 to 1882.

Dr. Holtz was a man of middle height, thick and stocky, with bushy hair and florid complexion; German to the core, versatile, contentious, sincere and hot-tempered. He was, withal, very unassuming and modest, and extremely helpful to all the younger men who were trying to succeed in ophthalmology with whom he came in contact. He was a hater of shams and quackery, and was thoroughly aroused and vehement whenever the subject came up. He was naturally inventive, and, even as he lectured to the students, would strike out one original idea after another. Dr. Seth Scott Bishop, of Chicago, declares, "I have never known a more constructive mind." And, similarly, Dr. Franklin Coleman: "In the plastic surgery of the eye, I know of no one who introduced so varied a number of operations as Dr. Holtz."

In 1873 he married Emma, daughter of A. Rosenmerkel, of Chicago.

Dr. Holtz died March 20, 1908.

THOMAS HALL SHASTID.

HOLYOKE, Edward Augustus (1728-1829), first president of the Massachusetts Medical Society, centenarian, was born in Marblehead, Massachusetts, August 1, 1728, and died in Salem, March 31, 1829, thus living to the great age of one hundred years and eight months, lacking one day. His ancestor, Edward Holiock, as it was spelled in the records, emigrated from England and was a Freeman in Lynn, Massachusetts, in 1638. His father, Edward Holyoke, minister at Marblehead, who was born in Boston and graduated from Harvard College in 1705, was elected president of the college in 1737 and presided over its destinies for thirty-two years, until his death in 1769. Edward Augustus' mother, Margaret Appleton of Ipswich, a second wife, was descended from John Rogers, the first Smithfield martyr. Edward Augustus was the eldest son and the second of eight children. When nine years old, his father moved to Cambridge to take up his duties of president of the college, and here the boy received his education, finally graduating from the college with the class of 1746. In 1747 he began the study of medicine with Dr. Berry of Ipswich, and remained with him nearly two years, settling in Salem in 1749, to pass the rest of his life there in the practice of medicine. At first patients were few and far between, and he found it hard to gain a livelihood. In the course of time, however, it was said that there was not a single house in town to which he had not been called at some time, as physician. In all the affairs of life, Dr. Holyoke was most methodical and industrious, and during busy days he would snatch up a book to occupy a few moments of leisure, between visits. Because he found that his patients were in the habit of summoning him after he had gone to bed at night, he acquired the custom of sitting up late, and, so one biographer says, of rising late in the morning, these hours—seven in summer and eight in winter—being specified as late. It is recorded that during a professional life of nearly eighty years he was never once at a greater distance than fifty miles from Salem, his longest journey being a trip to Portsmouth in 1749, when he was absent five days. When he was married in 1759, he was away from Salem for a week, while following the custom prevalent at the time, of "sitting up for company," in other words, with his bride, receiving the congratulations of their friends. Dr. Holyoke is reported to have said to a professional brother that this was "very tedious and irksome"

Essentially a family practitioner and not ambitious for public distinction, he found time for a good deal of reading of the medical literature of the time, probably in the long evenings after days of active practice, and he was one of the original incorporators of the Massachusetts Medical Society in 1781, called the first meeting under the terms of the charter from the legislature, was elected its first president, and served from 1782 to 1784. He was again president in 1786-7, refusing a re-election. His activity in reporting cases and meteorological observations added much to the life of the society during its early years. His practice was based on four drugs, mercury, antimony, opium and quinine, his

prescriptions being put up under his own inspection, either by himself or by his pupils. He did little surgery and no major surgery, and during his entire practice is said never to have witnessed the amputation of a limb. As preceptor to thirty-five medical students, he was a prominent factor in medical education, before the days of medical schools.

Dr. Holyoke was the first person to receive from Harvard College the honorary degree of M. D.—in 1783—and in 1813 Harvard conferred upon him the degree of LL. D. He was president, at various times, of the American Academy of Arts and Sciences, the Salem Athenaeum, and the Essex Historical Society.

He was below the middle height in stature, and was tough and wiry in build. In college he was interested in the athletic sports of the day. A silhouette published in the "Boston Medical and Surgical Journal" pictures him later in life. In demeanor he was described as "dignified, mild, placid and agreeable."

His health was good until the last years of his life, when he suffered from occasional fainting spells. In a long letter to John F. Watson, Esq., of Germantown, written on his hundreth birthday, he says: "My health is good. That is, I have a good appetite and sleep as well as at any period of my life,—and thanks to a kind Providence, suffer but little pain, except now and then pretty severe cramps,—but my mental faculties are impaired,—especially my memory for recent events."

He was twice married, first to Judith, daughter of Benjamin Pickman, who with her only child died in 1756; and second to Mary, daughter of Nathaniel Viall, a Boston merchant. They had twelve children. Mrs. Holyoke died in 1802, and all but two of the children died before their father. A son, Samuel, became a musician, and at the age of fourteen composed the hymn "Arnheim." He was the author of several works on music.

Dr. Holyoke was a constant observer of the external rites of Christianity, and habitually gave much time to theological inquires, especially during the last forty years of his life, so that toward the end he derived much solace from his well founded religious convictions, and from the devotion of an unmarried daughter.

WALTER L. BURRAGE.

HOMANS, Charles Dudley (1826-1886), Boston surgeon, brother of John Homans, ovariotomist (q. v.), was born at Brookfield, Massachusetts, December 5, 1826, graduated from Boston Latin School, and from Harvard College in 1846, and from Harvard Medical School in 1849; he practiced in Boston, after completing his medical education in Paris. When the Boston City Hospital was opened in 1864, Dr. Homans was appointed one of the six visiting surgeons, and served the institution until his death at his summer home at Mt. Desert, Maine, September 2, 1886. From 1884 to 1886 he was president of the Massachusetts Medical Society; at the time of his death he was president of the board of trustees of the Massachusetts Charitable Eye and Ear Infirmary, and held the same office in the Massachusetts Humane Society, being also a trustee of the Massachusetts School for the Feeble-Minded. During his presidency of the Massachusetts Medical Society, and through the efforts of a committee of the society, the first Massachusetts State Board of Health was formed. By direct descent, he was a member of the Society of the Cincinnati, his grandfather having been a surgeon at the Battle of Bunker Hill and throughout the Revolutionary War. During the Civil War, Charles Homans served as surgeon, during the Peninsula Campaign. Of his work at the City Hospital, his confrère, Dr. W. Cheever (q. v.), said: "Dr. Charles D. Homans at thirty-eight years of age brought to the surgical staff a good surgical training and proclivities and a remarkable common sense. He remained in service twenty-one years. He did a great deal of surgery in the hospital. He was always on hand, and very punctilious in his duties."

His health was undermined by a broken leg, an infected operation wound, and finally, the end came by gall-bladder disease.

Dr. Homans married Eliza, daughter of the Rev. Samuel K. Lothrop, a most remarkable woman, of whom Anthony Trollope said he would rather listen to her brilliant conversation for an hour, as she sat knitting, than take out to dinner the most gifted woman in Europe. Always standing erect, well costumed, alert, she went out to India to meet her daughter, the wife of an Anglo-Indian, when seventy-two years old, entirely alone.

Their son, John Homans 2d, was born in Boston, March 15, 1857, graduated from Harvard in 1878, and from Harvard Medical School in 1882, was house surgeon at the Massachusetts General Hospital, studied abroad, and practiced general medicine in Boston. A single man, member of social clubs, he had a great executive ability and a rare gift in managing men. His friends, and he had many, knew him as "Young John" to distinguish him from his uncle. To his enthu-

siasm and persistent labor was due, in a large measure, the gathering of the funds for the erection of the building of the Boston Medical Library at 8 The Fenway, dedicated a year before his death. A member of the executive committee of that organization for the last ten years of his life, he worked early and late to advance its interests, making the Library more democratic, acting as chairman of the house committee, and helping to build and to maintain a dignified home for the medical profession of Greater Boston. As president of the trustees of the Massachusetts Charitable Eye and Ear Infirmary, a position also held by his father, he was instrumental in erecting a new building. Other positions he held were: director of the Home for Aged Men and of the Asylum Farm School for Indigent Boys, secretary Massachusetts Cremation Society, president Massachusetts Emergency and Hygiene Association, assistant secretary Massachusetts Humane Society. He died of heart disease, May 4, 1902, at the age of forty-five.

WALTER L. BURRAGE.

HOMANS, John (1836-1903), a pioneer ovariotomist in New England, was born in Boston, November 26, 1836. His grandfather, of the same name, was a graduate of Harvard College, 1772, and an army surgeon during the War of Independence. His father, also John, was a graduate of Harvard College, 1812, the Medical School, 1815, and practiced medicine in Worcester, Brookfield and Boston, being president of the State Medical Society, 1859-1862.

John Homans the third, was graduated from Harvard College in 1858, and received his M. D. from her Medical School in 1862. The same spirit which inspired his grandfather in 1776, impelled him, at the outbreak of the Civil War, to offer his services to the government. He was at that time house surgeon in the Massachusetts General Hospital, and had not yet taken his medical degree, although entitled to it. In January, 1862, he was commissioned assistant surgeon in the United States Navy, and served on the gunboat "Aroostook" during the search for the disabled United States steamship "Vermont," in Hampton Roads, and later on the James River, during McClellan's campaign. He was at the battles at Fort Darling, Virginia, and at Malvern Hill. In November, 1862, he was given a commission as assistant surgeon in the regular army, and was at New Orleans, and later, on the staff of Gen. Banks, took part in the disastrous Red River expedition. Those of his friends who were fortunate enough to have heard his informal accounts of that ill-advised expedition and of the search for the "Vermont" will not soon forget them. As side-lights upon much that passes for history, they were instructive as well as entertaining. Subsequently he was ordered to Washington, and held various surgical appointments in connection with the Army of the Shenandoah. He was surgeon-in-chief of the first division of the Nineteenth Army Corps, was present at the battles of Winchester and Cedar Creek, and ultimately became medical inspector on the staff of Gen. Sheridan. He resigned from the army May, 1865, after an eventful career of a little over three years, and immediately went to Europe for study and travel, spending most of his time in Vienna and Paris.

In November, 1866, he returned to Boston and began to practice, being appointed successively surgeon to the Boston Dispensary, the Children's Hospital, and in August, 1868, to the Carney Hospital, South Boston. His second ovariotomy was done there in April, 1873, and he became consulting surgeon in 1880. It was here that he did many ovariotomies and demonstrated that the operation was not as serious as imagined. He developed an antiseptic technic and trained the sisters in charge of the operating-room with great care. Later he transferred his activities to St. Margaret's Hospital, in Louisberg Square on Beacon Hill, where came for operation patients with ovarian tumors from all over New England and the provinces. Many times Dr. Homans paid the patient's expenses out of his own pocket. Between 1872 and 1900 he performed six hundred and one ovariotomies. He was among the first to open the abdomen for abscess of the appendix. It was considered a great honor by the medical student of the time to be selected as one of his operative assistants at St. Margaret's. As an operator he was fearless and painstaking though somewhat excitable when in a tight place. Trouble for the assistants was sure to follow when he began to hum "I Dreamt That I Dwelt in Marble Halls." He was no respecter of persons and would have his joke, no matter what happened. Homans was surgeon to out-patients at the Massachusetts General Hospital from 1879 to 1882, and visiting surgeon from 1882 to 1889, when he was retired on account of age limit.

He did comparatively little writing, his publications being "Three Hundred and

Eighty-four Laparotomies for Various Diseases," 1887, and various papers for the medical journals. Homans was clinical instructor in the diagnosis and treatment of ovarian tumors in the Harvard Medical School after 1881, and member of the American Surgical Association.

He died in his home in Boston, February 7, 1903, in his sixty-sixth year, after a short illness, leaving a widow, three sons and three daughters. One son of the same name became a surgeon in Boston.

WALTER L. BURRAGE.

HOMBERGER, Julius, a well known American ophthalmologist of early days, an eccentric character, and the first ophthalmic editor in the United States, was born in Germany, date and place unknown. He lived for a time in Paris, was assistant to Julius Sichel, seems to have resided also at Würzburg (where he published a tiny pamphlet entitled "Spinal Curvature"), removed to America, and settled in New York City in January, 1861. In that year he was made one of the two New York representatives to the supplementary committee on the organization of the University Society of Ophthalmology. The following year he founded "The American Journal of Ophthalmology," the first ophthalmic journal in the United States. It was published in New York City, appeared bi-monthly, and contained some original articles, but was mostly composed of letters, notes and queries, together with abstracts and translations of European articles which had been already printed. Volume I appeared complete, but volume II attained to its second number only. For the following fifteen years there was no journal of ophthalmology published in the entire United States. Then "The American Journal of Ophthalmology," the second of its name, was founded by Dr. Adolph Alt of St. Louis, who, according to Dr. Edward Jackson, writing in the present (the third) of the periodicals to bear the specific title, "Journal," did not know that the name had ever been used before.

After the demise of his journal, Dr. Homberger, who had given many signs of eccentricity even in the pages of his periodical, grew more and more peculiar. He began to make extravagant claims for his skill, advertised extensively, and, at length, in 1868, was expelled from the American Medical Association. He then removed to New Orleans. Dr. Homberger, in answer to the act of the association, claimed to have resigned from membership in 1866, and that the association, therefore, had no jurisdiction over him in 1868. In fact, he published at New Orleans, in 1869, a pamphlet (which is now among the rarities of American ophthalmic literature) entitled "Batpaxomyomaxia: A Fight on Ethics."* In this "Battle of the Frogs and Mice," Homberger claimed that he had resigned from the American Medical Association in 1866, and his resignation had been mislaid; therefore, the association had no power to expel him, and that such advertising as he did was sanctioned by usage. A few years later he became insane, and, according to a private letter to the writer from one of the doctor's old and intimate friends—Mr. Salomon Marx of New Orleans—was confined in "The Louisiana Retreat," where, in the course of time, he died. The date of his passing cannot now, it seems, be ascertained.

THOMAS HALL SHASTID.

*Such is the actual title of the pamphlet. What was meant, of course, was Batrachomyomachia, i. e., Battle of the Frogs and Mice. The mistake was by no means due to ignorance on Homberger's part, but the Greek letter rho being the same in form as the English P, and the Greek chi being the same in form as the English X, our author must, inadvertently, in the act of transliterating from Greek to English, simply have brought these two Greek letters over unchanged. Thus, BATPAXOMYOMAXIA, instead of BATRACHOMYOMACHIA.

HONYMAN, Robert (1752-1824), Revolutionary surgeon and physician of Virginia, was born in Scotland about 1752 and educated at Edinburgh University, from which he received his medical degree and entered the British Navy, but resigned and emigrated to America, settling in Louisa County, Virginia, in 1774. When the Revolution began he espoused the cause of his adopted country and fought as a private, being soon promoted to the rank of regimental surgeon. After the war he resumed his work, an extensive one, in Louisa and Hanover counties, and continued to practice until his death.

He is said to have been a profound student and scholar, and a great reader, and to have possessed a marvelous memory. He read more and remembered more of what he read than any man in Virginia. At the age of sixty he is said to have begun study of Italian, as he desired to read that also. He was stern in deportment and violent and demonstrative in his resentments. If any one questioned or complained of his bill under no circumstances would he visit him again. The following extract from his will, which is recorded at Hanover Court House, is of interest: "I also give and bequeath to my son my thermometer,

my diploma of doctor of physic, and also a human rib, which will be found in a small trunk in my chest, with my earnest request that he will carefully keep the said rib, which is of James V., King of Scotland, and transmit it carefully to his descendants."

He married Mildred Brown, a woman of rare beauty and accomplishments, and was the progenitor of some distinguished men.

He died in 1824, leaving a large fortune amassed by his practice, and is said to have written and published numerous articles.

ROBERT M. SLAUGHTER.

Hood, Thomas Beal (1829-1900), dean of the faculty of Howard Medical School, Washington, D. C. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920. page 551.

HOOKER, Worthington (1806-1867), professor of theory and practice in Yale Medical School, author, was born in Springfield, Massachusetts, March 3, 1806, and died in New Haven, Connecticut, November 6, 1867. He was graduated at Yale in 1825 and received his medical degree at Harvard in 1829, when he settled in Norwich, Conn., and practiced his profession. From 1852 until his death he was professor of the theory and practice of medicine in Yale. In 1864 he was made vice-president of the American Medical Association, and as a member of committees made several important reports. He was the author of a series of scientific books for the young and of several professional works, including "Physician and Patient" (New York, 1849); "Homeopathy; an Examination of Its Doctrines and Evidences" (1852); "Human Physiology for Colleges and Schools" (1854); "Rational Therapeutics" (1857); "The Child's Book of Nature" (1857), and "The Child's Book of Common Things" (1858).

HOOPER, Franklin Henry (1850-1892), Boston laryngologist, son of Robert C. Hooper, was born in Dorchester, Massachusetts, on September 19, 1850. He was educated in Europe and matriculated at Harvard Medical School in 1876. Afterwards he spent several years in European clinics and in Vienna, specially at that of Schroetter, making laryngological studies. On returning to Boston he was immediately appointed assistant in throat diseases at the Massachusetts General Hospital and afterwards aurist at the Boston Dispensary, becoming eventually professor of laryngology at the Dartmouth Medical College and instructor in the same specialty at Harvard Medical School.

In addition to his recognized ability as a diagnostician he owed much to his bold use of anesthesia in the removal of adenoids. His famous experiments upon the innervation of the larynx, with special reference to the functions of the recurrent laryngeal nerve, made his work of special value. ("Effects of Varying Rates of Stimulation on the Action of the Recurrent Laryngeal Nerves," 1888.) A list of his writings may be found in the "Boston Medical and Surgical Journal," 1892, vol. 127.

The disease from which he himself suffered began on his tongue in 1884, and in 1891 there appeared small epithelial growths. A portion of the tongue was removed but in 1892 the glands of the neck became affected and he died after much suffering, cheerfully borne, on November 22, 1892.

HOOPER, Philo Oliver (1833-1902), pioneer alienist, of Arkansas was born in Little Rock, Arkansas, October 11, 1833, and received a literary education in his native city and in Nashville, Tennessee. He entered the Jefferson Medical College in Philadelphia and was graduated in 1856. At the opening of the Civil War five years later, he joined the Confederate Army as medical director of General Albert Pike's command, and when the war ended he returned to Little Rock and resumed the practice of medicine. He became president of the Arkansas State Medical Society and president of the faculty of the Medical Department of Arkansas Industrial University and its dean from its organization until 1886, when he resigned to become emeritus professor of the practice of medicine.

Hooper devoted much attention to mental and nervous diseases, and largely through his efforts the Arkansas State Hospital for mental and nervous diseases was established: he was president of the first board of hospital trustees, pending the erection and equipment of the hospital and was later superintendent for ten years. In 1893 he resigned and spent a year in California. In 1897 the superintendency of the asylum was vacant and he was called upon to fill the position once more. He was a member of the American Medico-Psychological Association, the American Medico-Legal Society and the Mississippi Valley Medical Association. In 1882 he was first vice-president of the American Medical Association, when the meeting was held at St.

Paul, and he was a member of its board of trustees and president for many years.

He married Georgia Carol of Alabama in Arkansas in 1859. Three sons and two daughters were born, four of whom survived him.

He died July 29, 1902, near Sayre, Oklahoma, while en route to California.

HOOPER, William Davis (1843-1893), army surgeon, consultant, of Virginia, was born on August 28, 1843, at "Beaver Dam," Hanover County, Virginia—now historic ground, the locality having been the scene of one of the most desperately hard fought battles of the "seven days fights around Richmond," that of Mechanicsville or Ellison's Mills. His father dying when he was only seven years of age, his mother removed to Richmond, where he was educated in the schools of that city. He then found employment in the drugstore of Mr. Hugh Blair, of Richmond, where he acquired an excellent knowledge of chemistry and pharmacy. On the outbreak of the Civil War he entered the army (Confederate) as a hospital steward and was assigned to duty in the dispensary at Camp Lee, afterwards Howard Grove Hospital, a position for which his experience particularly well fitted him. While thus serving he began to study medicine as a government student in the Medical College of Virginia, at Richmond, and, graduating with the highest honors, received the prize offered for the best original essay, in the spring of 1865. At the close of the war, within a few weeks after his graduation in medicine, he settled in Liberty, now called Bedford City, in Bedford County, Virginia. He possessed a thorough knowledge of medicine and surgery, and was quick, almost unerring, in diagnosis, making him a high authority, and calling into requisition his services as a consultant in distant parts of the state. In 1873 he went abroad and traveled in Europe, visiting many of the largest hospitals in England and on the Continent, adding much to his store of professional knowledge. In June, 1875, he repeated his visit to Europe.

He married in June, 1875, Miss Kelso, of Bedford County. They had only one child, a son, who died before his father. In December, 1892, the latter was for the fourth time attacked by "grippe," and never really recovered. In June he was taken suddenly ill, his strength failed very rapidly and he died on July 31, 1893.

He made numerous contributions to medical literature, which are to be found in the Transactions of the Medical Society of Virginia and in the "Virginia Medical Monthly."

ROBERT M. SLAUGHTER.

HOPKINS, Lemuel (1750-1801), eminent consulting physician, renowned for his skill in treating tuberculosis, a satirist and poet of some repute in his day, was born in Salem Society (now Naugatuck) Connecticut on June 19, 1750, the second son of Stephen Hopkins, Jr., and Patience, his second wife. Of his boyhood we know nothing save that he was of a slender constitution and was then troubled with a "cough, hoarseness, a pain in the breast and the spitting of blood." On his mother's side he was descended from a consumptive parent and family and he had that form of body which had been observed to indicate "a predisposition to consumption." After being given a good classical education by his father, who was a farmer in easy circumstances, he began the study of medicine under the distinguished Dr. Jared Potter (q. v.) of Hallingford. Subsequently he removed to Litchfield in the same state, and studied under Dr. Seth Bird. In 1776 he began practice in that town and served for a short time during this year, as a volunteer soldier in the Revolutionary Army. He removed to Hartford in 1784, where he resided until his death. In Hartford he soon made a name for himself. He employed "the cooling treatment in fevers, in the puerperal especially, and wine in fevers since called typhus"—methods which were then thought madness and some of his cases became the subject of much newspaper discussion.

With large features, bright staring eyes and long ungainly limbs, which gave him an uncouth figure, were coupled marked eccentricities of character and very brusque manners, yet with it all he won the confidence and friendship of his patients. He kept at this time a medical school or a "room full of pupils" as he called his students, and among them Dr. Elisha North (q. v.) of Goshen and New London probably became the most prominent.

His great specialty was tuberculosis, which is charmingly considered in the two manuscript treaties on "Consumption" and on "Colds," which are now in the writer's possession. They revealed a knowledge far ahead of that time and prove Hopkins to be a rival with Rush for honors in treating the great white plague. He believed this disease was curable in its early stages and sometimes in the far advanced, and lamented the fact that

physicians were apt to treat this disorder with a dull formal round of inert or hurtful medicines. Fresh air and good food were factors employed in his treatment of these cases. He appreciated the fact that a neglected cold might bring on this disease.

On account of his associations with a little coterie of literary men who were designated as "the Hartford Hits," his name became familar in the household especially in his native state, as a man of letters. This group, composed of Hopkins, Joel Barlow (Barlow later allied himself with the party of Jefferson), Timothy Dwight, David Humphreys, John Trumbull, Richard Alsop and Theodore Dwight, were strongly Federalistic in their principles and fervent in their sentiments, before the adoption of the Constitution, in favor of a strong centralized government. They were ardent supporters later of Washington's administration and strove to win the adherence of others by ridiculing the Democrats and their measures in poems which had great popularity in the newspapers of that period and were subsequently published in book form. Possessed of keen dry wit, Hopkins was peculiarly well fitted for these tasks. His other literary productions are seen especially in the poems "The Hypocrite's Hope," "The Cancer Quack" and "Ethan Allen," which may be consulted in Everest's "Poets of Connecticut" or Smith's "American Poems." Hopkins was an honorary member of the Massachusetts Medical Society (1790-1801); in the year 1784 he had received the honorary degree of M. A. from Yale. He was one of the founders of the Connecticut Medical Society.

On March 24, 1801, he was very sick indeed with his cough and was "bled repeatedly notwithstanding the opposition of his friends, yet lived to resume somewhat his practice." Some days after, he was brought home ill from a patient's house, and April 14 he died.

WALTER R. STEINER.

HORN, George Henry (1840-1897), entomologist, was born in Philadelphia, April 7, 1840, the oldest son of Philip Henry and Frances Isabella Horn. His paternal grandfather came to America in 1798 from Prussia. His grandmother was born in Carroll County, Maryland. His father, Philip Henry Horn, born in Baltimore in 1812, went to Philadelphia about 1830, and after studying in the College of Pharmacy, established himself in a drug business at the southwest corner of Fourth and Poplar Streets, where our worthy Dr. George Henry was born, lived and practiced medicine. Horn went to the Central High School of Philadelphia in 1853; soon after finishing here, in 1858 he entered the Medical Department of the University of Pennsylvania, where he received his M. D., March 14, 1861. Among his teachers were William Pepper, Sr., Joseph Leidy, Samuel Jackson, and Hugh S. Hodge. Horn practiced medicine for a living and locally was well known as a successful obstetrician, but his heart was ever in his zoological work, begun while yet a medical student.

He was of medium height, with bushy dark whiskers; slender and keen, with a nervous manner, a boundless energy, a most retentive memory, and thoroughly independent and self-reliant in his judgment and opinions, in many respects much like his contemporary, Edward D. Cope. He never married and he never made a profession of any faith, seeming to lose interest in religion and a life beyond in his devotion to entomology.

His first scientific paper was, "Descriptions of three new species of Gorgonidae," published in the Proceedings of the Academy of Natural Sciences of Philadelphia. Horn soon found, however, his niche for life in the Entomological Society of Philadelphia, later the American Entomological Society, of which he became a member in 1860. Dr. John L. Le Conte (q. v.), the coleopterologist, presiding genius of the Society, soon became Horn's warm and life-long friend. Horn's first paper read here was entitled, "Descriptions of New North American Coleoptera in the Cabinet of the Entomological Society of Philadelphia," presented December 18, 1860, describing seven new forms.

In 1862 during the Civil War he went to California and in March, 1863, was commissioned assistant surgeon of the Second Cavalry of the California Volunteers; the service terminated in 1866. While in the west he still energetically pursued his collecting bent, finding the rare "Amphizoa insolens" in California, also visiting Arizona. He returned to Philadelphia in 1866 and was elected president of the Entomological Society; December 26th he presented some of the results of his four years in the west, beginning a series of papers on Coleoptera that was continued for over thirty years. The year 1874 saw him in Europe visiting the Entomological Societies of London and Paris. Again in 1882 and 1888 he visited Europe in the summer months, meeting Westwood in Oxford, and David Sharp. In 1888 he met Dohrn in Stet-

tin, and attended the meetings of the Paris Society as an honorary member. He refers with pride to the fact that he had thus been able to see more genera of Melolonthidae (Scarabs) than anyone. Although made professor of entomology in the faculty of biology of the University of Pennsylvania in 1889, when Edw. D. Cope was also chosen to fill the chair of mineralogy and geology, he never gave instruction under this election.

Difficulty in hearing began in 1895 with other evidences of feebleness; the 26th of October, 1896, saw him for the last time at the meetings of the Entomological Society. Stricken with paralysis in December, 1896, he died November 24, 1897.

Horn's life was, as it were, engrafted into Le Conte's (1883), and Le Conte's collection formed the fruitful basis of Horn's extended and more intensive work. He added to the "Mihis" some 1582 new species, and defined and reconstructed genera, doing his best work on the Carabidae (carnivorous beetles) and the Silphidae (burying beetles). The writer recalls particularly some gossip current at the Academy of Natural Sciences, where he was a frequent youthful visitor, to the effect that Horn had overhauled Le Conte's long list of type specimens with a resultant reduction of great numbers to the level of varieties; Dr. Horace Jayne (q. v.), an enthusiastic collector, asserted that some of Horn's finest work was done in connection with the mouth pieces of the Rhyncophera (weevils). He had an excellent artistic hand in conjunction with his work. Horn is praised by his French reviewer (Prendhaume de Borre at the Belgian Entomological Society) as a man of greater breadth of view than many of the current "parish entomologists." His most general work was the "Classification of the Coleoptera of North America" (1883), said by Prof. Smith to represent the ripe experience of Le Conte, the broader student of nature, with the critical accurate knowledge of technical details characteristic of Horn. Horn was profoundly influenced by Darwin. In 1882 he published a paper on variations in Cicindela (tiger beetles), a warning to those who hasten to describe new species based on color differences. His last note in October, 1886, deals with some of that interesting and beautiful order, the North American Buprestids. A specialist in the narrower sense of the word, he did good work by combining the study of American with European forms, and by adjusting the classifications. As David Sharp says, "he felt a genuine interest in his work and was therefore master of the patience indispensable for any satisfactory study in entomology."

His collection of Coleoptera and his entomological library of about 950 volumes went at his death to the Academy of Natural Sciences.

His biography has been written by Philip P. Calvert, and a list of his entomological writings and an index to the genera and species of Coleoptera described and named is furnished by Samuel Henshaw, in the Transactions of the American Entomological Society, vol. xxv.

HOWARD A. KELLY.

Horner, Gustavus B. (1761-1815), of Virginia, Surgeon's mate in The Revolution. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 555.

HORNER, William Edmonds (1793-1853), Philadelphia anatomist, was the son of William and Mary Edmonds Horner and was born on June 3, 1793, in Warrenton, Fauquier County, Virginia. His grandfather, Robert Horner, was a merchant who had emigrated from England to Maryland before the Revolution, and had later moved to Virginia. Several of Horner's relatives on both sides of the family were physicians. Horner was a delicate child, so light in weight that "his rude companions would frequently snatch him up unceremoniously, greatly to his annoyance, and, in spite of his struggles and resistance, run off with him in bravado to display their greater strength." When twelve years old, Horner went to school in Warrenton under Charles O'Neill, clergyman. The teacher was neither deep nor thorough and in consequence, Horner was more or less hampered in his subsequent career. In 1809 Horner began to study medicine under Dr. John Spence (q. v.), an Edinburgh graduate, and during this period attended two sessions at Pennsylvania University. In his studies he showed a special partiality for anatomy. In 1813 he continued his medical studies in Philadelphia. In July 1813, a year before taking his M. D., Horner was commissioned surgeon's mate in the Hospital Department of the United States army. In the following September he was attached to the ninth Military District north of the Highlands, New York. Samuel Jackson (q. v.) gives an interesting picture of Horner at this period: "Let us pause and survey his position at

this time. He had just reached his twentieth year, of slender form (his weight about one hundred pounds), his pay, some thirty or forty dollars per month, and rations. He has donned his uniform, made after the regulation of the surgeon and physician-general, Dr. James Tilton (q. v.), of Delaware. Whatever may have been the professional excellences of the surgeon and physician-general, his sartorial qualifications were not very brilliant. The dress was coal-black, which, from the readiness it shows dirt, was found in the service of the hospital and camp the most unfit that could have been selected. "The coat was single-breasted with standing collar, a gold star on each side, short-waisted and pigeon-tailed; the nether garments were tight. Picture the slight frame of the new-fledged surgeon's mate thus arrayed."

Horner joined the army on the Niagara frontier September 25, 1813. He at once had orders to take charge of the transportation of seventy-three invalids from Lewistown to Greenbush. There was considerable difficulty in transportation, and while on the Mohawk near Little Falls the boats used in transporting the invalids grounded. After delivering up his command at Greenbush, Horner went to Philadelphia, attended the medical course at the University during the winter and graduated in April, 1814. He then returned to the Niagara frontier as surgeon. He had severe experiences during the campaign, for the attack on Fort Erie, on the fourth of July, and the battle of "Chippewa," on the fifteenth, filled the wards of the hospital with wounded. Between sixty and seventy fell to the share of Dr. Horner. The battle of Bridgewater, on the twenty-fifth of July, in which the British were defeated, swelled his list to one hundred and seventy-five wounded and sick. Notwithstanding his incessant occupation with very inadequate assistance in dressing the wounded and prescribing for the sick, he kept notes and records of his cases, many of them of great interest. The results were published in the "Medical Examiner" in 1852.

After the conclusion of peace, Horner resigned from the army and went to Warrenton, Virginia, where he practiced for a short time. After some indecision as to what to do, he finally decided to remove to Philadelphia. He had received a small legacy from his grandmother, which he converted into cash before he left. On arriving at Philadelphia in the winter of 1815-16 he attended lectures at the university and devoted much time to reading works on medicine and to dissection. His enthusiasm for anatomy had meanwhile attracted the attention of Caspar Wistar (q. v.), at that time professor of anatomy at the University of Pennsylvania. In March, 1816, Wistar offered Horner the position of dissector, at a salary of five hundred dollars. The offer was at once accepted. The connection formed with Wistar ripened into personal friendship and warm regard. On the death of Wistar in 1818, John Syng Dorsey (q. v.), nephew of Philip Physick (q. v.), was appointed to the chair of anatomy. Dorsey appointed Horner as his demonstrator and placed the dissecting class with all its emoluments in his hands. Dorsey died soon after his appointment and the chair of anatomy passed to Dr. Physick. Physick continued Horner as demonstrator on liberal terms, and in 1820 he was made adjunct professor of anatomy and appointed professor when Dr. Physick resigned in 1831.

He devoted himself closely to his teaching, to the development of the museum of anatomy, started by Wistar, and to scientific study. He also established a medical practice of considerable magnitude, and was a successful surgeon. During the cholera invasion of 1832, Horner was made a member of the Sanitary Board of the city. He made a special study of the lesions produced by cholera in the mucosa of the intestines and showed by means of microscopic study of specimens injected with water that especially severe injuries are suffered by the epithelial layer. He published an account of his method of study and the results in the "American Journal of the Medical Sciences" in 1834. He was one of the first medical men in the country to make practical use of the microscope. Horner's chief attention, however, was given to the study of anatomy rather than of pathology. He was untiring in the preparation of specimens and at his death his collection is said to have rivalled those of some of the better museums in Europe. He bequeathed all his specimens, together with his instruments and apparatus connected with the dissections to the medical department of the university, a donation valued at some eight or ten thousand dollars. It formed the larger part of the collection known as the Wistar and Horner Museum, subsequently housed in the Wistar Institute of Anatomy at Philadelphia.

Horner's chief claim as an original investigator rests upon the discovery of the muscle which he called the "tensor tarsi," (1824) frequently called the muscle of Horner. He

was led to this discovery because the common account of the apparatus for lachrymation did not seem to him to explain fully the phenomena of that function. He accordingly sought for and found a special muscle situated on the posterior surface of the lachrymal ducts and sacs. His discovery was accepted as such by a number of European anatomists, but others pointed out that the muscular apparatus described by Horner had previously been described by others, though not exactly as Horner described it; several indeed have denied the existence of the muscle as an independent structure. He is, in any case, justly entitled to credit for calling attention to the structure and pointing out its physiological bearings. Horner's original articles on the subject appear in the "London Medical Repository" for 1822 and in the "American Journal of the Medical Sciences" for 1824. Horner also investigated the anatomical basis of the peculiarly intense odor of the negro and found that the glands of the axilla in the black race exist in much larger numbers and are much more greatly developed than in the white. ("American Journal of the Medical Sciences," vol. xxi, p. 13.) Horner in addition made contributions on the musculature of the rectum and on a fibroelastic membrane of the larynx which he called the "Vocal or Phonetic Membrane."

As a teacher, "Dr. Horner was not fluent, nor had he any pretensions to elocution, but he was a very excellent teacher of anatomy. His plan was, to a certain extent, novel. He composed a text-book, which was a most complete but concise treatise on "Anatomy." "It was written in strict reference to the course of study pursued in the University of Pennsylvania, and was kept in as compendious a state as possible, so that there should be no unnecessary loss of time in reading it."

Horner was throughout life deeply religious. In 1839 he united with the Roman Catholic Church, and in 1841 was active in the establishment of St. Joseph's Hospital. He labored against considerable physical disabilities, as he suffered from an affection of the heart. In 1840 he visited Europe in company with Joseph Leidy (q. v.), and returned much benefited in health. He soon, however, began to suffer again. Finally, in January, 1853, he had to abandon his lectures. Jackson gives an interesting account of Horner's fortitude while awaiting the end. "He was lying on a couch; Dr. Henry Smith and myself sitting on each side. Dr. Horner was suffering some pain, a new symptom that had just commenced. He demonstrated with his finger the different regions of the trunk, enumerating the organs they contained, and the state of each, and indicated the exact seat where he then suffered the most. This was done with the interest and earnest manner of a demonstration to his class. I was so struck with it as to call the attention of Dr. Smith to this display of the 'ruling passion strong in death.' 'Look! here is the anatomist dissecting his body—making a post-mortem before he is dead.' The remark so amused Dr. Horner that he laughed heartily, in which we joined him. At the end he said: 'Well, I have not had so good a laugh for a long time.' This occurred on the third day before his death." The direct cause of death on March 13, 1853, was an enteroperitonitis.

In 1820 Horner married Elizabeth Welsh of Philadelphia, and his family life was very happy. Dr. Horner's chief writings were: "Edition of Wistar's Anatomy," Philadelphia, J. E. More, 1823; "The United States Dissector or Lessons in Practical Anatomy," first edition, 1826, fourth edition edited by Henry H. Smith, Philadelphia, 1846; "A Treatise on Pathological Anatomy," 1829, three editions published; "A Treatise on the Special Anatomy of the Human Body," published in two volumes, 1826, eighth edition, Philadelphia, 1851; "A Plate of the Fetal Circulation" (about 1828). Also he contributed numerous articles to various medical journals, especially to the "Philadelphia (American) Journal of the Medical Sciences."

CHARLES R. BARDEEN.

HORR, Asa (1817-1896), meteorologist, astronomer, botanist, of Dubuque, Iowa, was born in Worthington, Ohio, September 2, 1817; the family name was spelled "Hoar" originally. He received his M. D. at the Cleveland Medical College in 1846, and began to practice at Baltimore, Ohio, but in 1846 removed to Galena, Illinois, and in 1847 moved to Dubuque, Iowa, which was his home the remainder of his life. He was intensely interested in botany, mineralogy, astronomy and meteorology, and with Professor Lapham of Milwaukee was the inventor of the present method of forecasting the weather for the United States weather reports. He established a private astronomical observatory at Dubuque in 1864 and "was the first to determine accurately the longitude of that city" (Appleton). He was a meteorological observer to the Smithsonian Institution for twenty years. Jointly with John M. Bigelow

he published a "Catalogue of the Plants of Franklin County, Ohio." During the Civil War he was examining surgeon to the U. S. recruiting service and in 1875 was made examining surgeon to the United States Pension Bureau. He was president of the Dubuque County Medical Society; a founder of the Iowa Institute of Science and Arts (1868), and elected its president in 1869; president of the St. Paul, Minnesota, Academy of Natural Sciences, and of the Wisconsin Academy of Sciences in 1871; of the American Association for the Advancement of Science in 1872; of the American Public Health Association in 1875. He was one of the hundred American and English shorthand writers chosen to make improvements in phonography.

In 1841, at Baltimore, Ohio, Dr. Horr married Eliza, daughter of Jonathan Sherman, of Worthington, Ohio; in 1868 he married Mrs. Emma F. Webber of Pittston, Maine.

He died at his home in Dubuque, June 2, 1896.

HORR, Oren Alonzo (1834-1893), prominent physician of Lewiston, Maine, first saw the light in Waterford, Maine in October, 1834, was educated at three academies, and graduated from Bates College in the class of 1858. He studied medicine at the Medical School of Maine, then in New York, and returned to the Medical School of Maine, from which he was graduated in 1861. He first practiced in Norway, Maine, married Elizabeth Kingman, and in 1863 moved to Minot. In September of that year he was appointed assistant surgeon of the one hundred and fourteenth United States Negro Regiment, and went with it to Texas, remaining there through the war. While with his regiment he made great advances as a surgeon, and became an adept in autopsies. Hard work brought on poor health, but by 1870 he was practically well and began again practicing at Lewiston, Maine, where he stayed for the rest of his life. Doctor Horr was long an active member of the Maine Medical Association, an earnest supporter of the Central Maine Hospital. In 1886 he made a prolonged stay in Europe, investigating recent advances in medicine. In a short biography it is difficult to characterize so popular a physician. He was a constant attendant at medical meetings, a keen debater, and a first rate clinician. His medical papers were instructive, well built, well thought out and tersely written. Few men could write better than Dr. Horr upon "Croup," "Extirpation of the Ovaries," and "Plaster of Paris in Surgery" ("Transactions Maine Medical Association," 1879.) In the midst of his career he was cut short, May 28, 1893, by septicemia, contracted from an autopsy in a criminal case.

JAMES A. SPALDING.

Horsfield, Thomas (1773-1859), botanist of the island of Java, keeper of the museum of the East India Company at London, England. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 558-559.

HORTON, George Firman (1806-1886), Pennsylvania physician, geologist and genealogist, was born in Terrytown, Pennsylvania, January 2, 1806, son of Major John Horton and Deborah Terry. He came of pure English ancestry, the first American paternal ancestor emigrating to this country from England in 1638 and settling in Southhold, Long Island, in 1640; on his mother's side Richard Terry came from England in 1635 and settled in Southhold in 1640. His mother was one of the inmates of Forty Fort after the Battle of Wyoming (the episode on which Thomas Campbell based his poem "Gertrude of Wyoming"). Young Horton was educated at the common schools, then at Rensselaer Polytechnic Institute (at that time Rensselaer School), where he was graduated in 1827. He began to study medicine under Dr. Samuel Hayden and in 1828-1829 attended lectures at Rutgers College, and began to practice at Terrytown in 1829; later an honorary M. D. was given him by Geneva Medical College. He was a member of the American Anti-Slavery Society and an advocate of temperance. He was an organizer of the Bradford County Medical Society (1849), and was president of the Medical Society of the State of Pennsylvania (1862). For twelve years he was treasurer and town-clerk of his township; postmaster from 1830 to 1850; one of the auditors of Bradford County, 1836-1838; and in 1872-1873 served as a delegate to the Constitutional Convention of Pennsylvania.

Reports of cases were published in the "Transactions of the Pennsylvania State Medical Society"; he wrote a "Report on the Geology of Bradford County" (1858); "The Horton Genealogy" (1876).

Dr. Horton married Abigail, daughter of William Terry. They had eight children. He died at Terrytown, December 20, 1886.

HORWITZ, Phineas Jonathan (1822-1904), projector and constructor of the Naval Hospital in Philadelphia, was born in Baltimore, Maryland, March 3, 1822, and educated at the University of Maryland and at Jefferson Medical College. In 1847 he entered the U. S. Navy as assistant surgeon and during the Mexican War was in charge of the Naval Hospital at Tobasco. From 1859 until 1865 he was assistant to the Bureau of Medicine and Surgery and became chief of the Bureau in 1865-9. He was promoted to surgeon April 19, 1861, commissioned medical inspector March 3, 1871, medical director, June 30, 1873, and was retired with relative rank of captain in 1884. His office as assistant to the Bureau of Medicine and Surgery during the war involved the adjustment of all pensions that accrued to the wounded and the widows and orphans of the killed in the Navy; the tabulation of medical and surgical statistics and the general management of all financial matters pertaining to the office. Dr. Horwitz projected and constructed the Naval Hospital in Philadelphia. The history of this institution presents one of those anomalies so common in the past history of the Navy. The law establishing special hospitals for the treatment of the sick of the Navy provided that at one or more of them an asylum should be maintained for the superannuated or infirm of the Navy and for those permanently disabled by reason of wounds. The building purchased for this double purpose was the old Pemberton mansion on the Schuylkill River near the high road leading into the city from the south and it was first of all a naval hospital and so used for seven years as prescribed by law and replaced the hospital previously established in the Navy Yard. It was purchased by Surgeon Thomas Harris, U. S. Navy, by order of the Secretary of the Navy, in 1826, at a cost of $16,000.00. In 1883 the special building to be used as an asylum was completed and some of the legitimate hospital patients were moved into it as it was proposed to use it for both classes of beneficiaries. The asylum was first under the cognizance of the Bureau of Medicine and Surgery but in 1849 was transferred to that of Yards and Docks and later passed to the Bureau of Navigation.

The Civil War entailed a need for increased hospital facilities and in March, 1864, Congress appropriated $75,000 for an extension of the Asylum to be used for hospital purposes. The following year an additional appropriation of $100,000 was secured for "accommodation for the sick, wounded and otherwise disabled at the Naval Asylum." The building was not completed until 1868 and as the demands made by the war were then greatly reduced it was prophesied that it would, in time, be turned over to the Asylum proper. Such has not been the case and between 1908 and 1918 the buildings have been constantly renewed and enlarged. In 1918, by order of the Secretary of the Navy the Naval Hospital, Philadelphia, was removed from the jurisdiction of its offspring, the Naval Home (or Asylum), and the medical officer commanding it is now under the commandant of the whole Naval District.

Dr. Horwitz's work as assistant to the Bureau during the Civil War and later as Chief of the Bureau of Medicine and Surgery was of signal value to the medical department and to the service at large.

For years Doctor Horwitz had been a sufferer from chronic rheumatism and his death, September 28, 1904, at Bar Harbor, Maine, was due to myocarditis with valvular complications.

W. C. Braisted.

HOSACK, Alexander Eddy (1805-1871), New York surgeon. The elder Hosack (David Hosack) (q. v.) seems to have been so anxious for his little son, Alexander Eddy, to become a student that it is said he "neglected no opportunities that could afford facilities to enlighten his mind." Unfortunately the boy Alexander, born in New York City on April 6, 1805, was at nineteen "so enfeebled in constitution by close application to books" that his attention for some time had to be turned to the restoration of health. Dr. Aydlott and a Mr. McFarland "watched over the early mental growth" of Alexander and by 1824 he had recovered health and graduated M. D. at the University of Pennsylvania with a thesis on "Senile Catarrh." For the following three years he stayed in Paris, working under Dupuytren, returning to New York with a keen interest in his work and a mind well calculated to weigh fairly all new theories. He introduced Syme's operation for exsection of the elbow into the United States. In 1833 he invented an instrument for the purpose of rendering the operation for staphylorrhaphy more complete and was rewarded by universal praise from his confrères. Hosack operated twenty-three times for stone; tied the two carotids for encephaloid tumor and in one instance cut the portio dura. He gave special attention to the re-

moval of tumors in the urinary passages of the female and in one case amputated the urethra with signal success and a permanent cure. For many years he was attending surgeon at the Marine Hospital and was a principal organizer of Ward's Island Hospital. He died in Newport, R. I., March 2, 1871. One fact is worthy of record: He was the first in the city of New York to anesthetize with ether, his first experiments being an amputation, removal of stone, and removal of two breasts. Among his contributions of value to the literature must be named: "Observations on the Uses and Advantages of the Actual Cautery," 1831; "A Memoir on Staphylorrhaphy," 1833; "On Sensitive Tumors of the Female Urethra," 1839; "Three Operations for Encephaloid Tumors of the Antrum and Superior Maxillary Bone"; "Twenty-three Cases of Lithotomy by a Peculiar Operation"; "Anaesthesia with Cases, being the First Instance of the Use of Ether in New York."

HOSACK, David (1769-1835), eminent physician, botanist and mineralogist of New York, was one of those who live for tomorrow, who doggedly advocate and carry out reforms for which they themselves get neither thanks nor profit. He brought the same keen interest to bear on a new view of disease as on a new plant for his botanical garden. He was born on August 31, 1769, at number 44 Frankfort Street, New York, the son of Alexander and Jane Arden Hosack, the eldest of seven children. His father came from Moray, Scotland, served as an artillery officer under Gen. Sir Jeffrey Amherst in America and was present at the capture of Louisburg. His mother was of English-French descent. When about thirteen young David went to school under the Rev. Alexander McWorter of Newark, New Jersey, then for a short time to Dr. Peter Wilson of Hackensack, and finally, in 1786, to Columbia College, New York, beginning to study medicine with Dr. Richard Bayley, a New York surgeon, in 1788, graduating A. B. from Princeton in 1789. He attended lectures in the medical department of the University of Pennsylvania, and took his M. D. from the Pennsylvania Medical College in 1791.

His next important steps were his marriage to Catherine Warner of Princeton, and removing to Alexandria, Virginia, because he thought it would become the capital of the United States. But the call of a metropolis was too strong and he came back in 1792 and in that same year, seeing the necessity for studying in the European hospitals, he left his wife and baby with his parents and spent two years in Edinburgh and London, meeting Robert Burns and all the celebrities of that day, listening to learned divines on Sunday and getting all he could during the week from men like Munro, Black, Gregory and Duncan in Edinburgh, in London consorting mainly with those who, like himself, were genuine botanists. In the winter of 1793-94, Hosack heard Schmeisser, a pupil of Warner, lecture on mineralogy. This was the first course ever given in this subject in London. Hosack at once began to collect minerals which he brought to America in 1794. His was the first mineralogical cabinet ever seen on this side of the Atlantic. The collection was exhibited for many years in New York and in 1821 was given to Princeton College.

During his winter in London, by the concurrence of Sir Joseph Banks and other scientists, his "Observations on Vision" was published in the Transactions of the Royal Society and the author thanked. He took full advantage of his stay, doing anatomical dissections under Dr. Andrew Marshall and studying chemistry and mineralogy and visiting the hospitals. A tedious journey of fifty-three days in the "Mohawk," varied only by an outbreak of typhus on board, brought him again to New York, where he settled down to practice, helped somewhat by friendships made on board. The professorship of botany in Columbia College was offered him in 1795, and in the autumn of that year he and the other young doctors had plenty of opportunity to distinguish themselves because yellow fever of a malignant type broke out. Also at this time he took care of Dr. Samuel Bard's (q. v.) patients for a while, and so well that a partnership was offered and accepted, a great compliment to Hosack.

Having lost his wife and child, he married on December 21, 1797, Mary, daughter of James and Mary Darragh Eddy, and had nine children. Success attended him, particularly in his observation and treatment of yellow fever. He became a strong advocate of the doctrine of contagion and was the first to pursue sudorific and mild treatment in this disease. Such faith was put in his judgment that he was often asked by the board of health to investigate diseases.

He was an excellent botanist and mineralogist; the author of three volumes of "Medical Essays," of numerous articles in the medical journals and of memoirs of Hugh Williamson

and DeWitt Clinton. His love of botany induced him to found the Elgin Botanic Garden in 1801—about twenty acres of land at Hyde Park on the Hudson, having at one time under cultivation nearly 1,500 species of American plants besides exotics. Douglas, the botanist, named the "Hosackia bicolor" after him. Hosack also founded the Humane Society—one branch for the recovery of persons nearly drowned and another for the relief of the indigent poor; the City Dispensary was remodelled, and he instituted medical lectures to policemen. It was a matter of wonder to his friends how he managed to do as much, but Hosack knew the value of odd moments and always read or made notes when a little spare time came. The "Medical and Philosophical Register" (1810) was started and also edited by him in conjunction with John W. Francis (q. v.), and he succeeded in completing his mineralogical collection begun in Edinburgh and presented it to Princeton College.

Dr. Hosack felt that after fifty years of practice he would be justified in retiring to his country house at Hyde Park, Dutchess County. He had married his third wife Magdalena, widow of Henry A. Coster, and with her kept up a fine old-fashioned hospitality, welcoming alike famous men and shy ambitious students. Three times, in spite of his busy life and large family, he adopted into his household and trained several poor but clever young men, one of them being Delale, who became superintendent of the Jardin des Plantes, Montpellier, France. In December, 1835, he seemed to have a presentiment of coming illness, apoplexy or paralysis, and began to try to write with his left hand. On the eighteenth he had an apoplectic stroke from which he never rallied and died on the twenty-second at the age of sixty-four.

Although Hosack originated no new surgical procedures, he was an excellent surgeon and introduced several desirable operations from Europe. Up to this no American had tied the femoral artery for aneurysm. Hosack did this in 1808, and introduced the method of treating hydrocele by injection as early as 1795. In operating he insisted upon the importance of leaving wounds open to the air in order to check hemorrhage—a method advocated later by Astley Cooper and Dupuytren.

Dr. Hosack held the chairs of botany and of materia medica in Columbia College, in 1796, resigning both in 1797. He was professor of surgery and midwifery in the College of Physicians and Surgeons of New York, 1807-26. Union College conferred its LL. D. on him in 1818.

His writings embraced a wide range of subjects, and the list fills two columns of the Catalogue of the Surgeon-General's Library at Washington, D. C.

HOUGH, Benjamin Franklin (1822-1885), of Lowville, N. Y. physician, historian, statistician and "father of American forestry," was born in Martinsburg, New York, July 20, 1822. His father, Horatio Gates Hough, fifth in descent from an English ancestor who emigrated to America in 1619, was born in Meriden, Connecticut. He moved to Southwick, Massachusetts, thence to Constableville, New York, where he settled as the "first physician of the county." In 1805 he removed to Martinsburg in the same county and died there on September 3, 1836. He was of a philosophical turn of mind as shown by his writings, as well as an excellent physician. His biographer, portraying the scenes of those early days, wrote of him, "How often has he been seen traveling on foot with saddle bags on his shoulders, making his way through the woods by the aid of marked trees to some distant log house, the abode of sickness and distress!"

The younger Hough was graduated from Union College in 1843 and from Cleveland Medical College in 1848. He practiced medicine in Somerville, New York, 1848-1852, devoting spare moments to a study of the local history of the region and to its botanical and mineralogical exploration. His discovery of a new mineral which was named after him—"Houghite"—commemorated his name in that field of science. He was a man of splendid physique as may be inferred from the following incidents mentioned in his autobiography. After recounting his visit to a locality rich in choice minerals he writes, "I found myself loaded with forty or fifty pounds of treasures with which I walked back over the twenty-five miles I had come!" In another place he mentions walking all night a distance of forty-five miles to his home. He moved from Somerville to Brownville, New York, and thence to Albany, and in 1860 to Lowville, in the same state, where he made his home the rest of his life; though duties often called him elsewhere. He retired from the practice of medicine when he left Somerville that he might devote his whole time to his research and literary work, but returned to

it when he felt that his services were needed as a surgeon in the Civil War, where he served in the 97th Regiment, New York Volunteers. He kept abreast of the medical profession, however, until the last, and was an active member of the Lewis County Medical Society.

His writings were numerous and varied, beginning with a catalogue of the plants of Lewis County, New York, in 1846, and soon followed by successive histories of St. Lawrence, Franklin, Jefferson and Lewis Counties; he was called "the pioneer author of county histories of New York." He seemed indefatigable in his work and prosecuted it with such enthusiasm as generally to prefer it to ordinary means of recreation. When reproached for such constant application he was wont to answer, "I seek repose in labor." He then explained that it was his habit to have three or more wholly distinct manuscripts in progress at the same time, and these in different rooms. When tiring of work upon one he would go into another room and take up another subject. There, amid fresh surroundings, with his thoughts running in a new channel, he would apply himself with as much vigor as though a nap had intervened. A writer once said of him: "There has probably been no son of New York whose bibliographical record shows so varied and valuable a contribution to the literature of the state." A bibliographical list of his writings appears in the 99th Annual Report of the University of New York.

He was superintendent of the first complete census of the State of New York in 1855 and again in 1865. When comparing the census returns of these two periods he was impressed by the evidence of a waning timber supply in localities. He reasoned that such a condition carried out over a long period would lead to deplorable results, and with pen and voice he tried to awaken public appreciation of the subject. Finally, in 1873, he delivered an address before the American Association for the Advancement of Science on "The Duty of Governments in the Preservation of Forests," In this address he suggested that a committee be appointed to memorialize Congress on the importance of this subject and it was done, he being appointed chairman of the committee. It proved to be a notable occasion, as it was the incipiency of the forestry movement in America and resulted in the establishment of the Division of Forestry of the Department of Agriculture. Dr. Hough has since been looked upon as "the father of forestry in America." He was appointed the first chief of the new Division of Forestry and continued active in its service during the remainder of his life. He visited Europe in its interests and issued comprehensive reports. In reviewing one of these reports an officer of the Würtemberg Forest remarked: "It awakens our surprise that a man not a specialist should have so mastered the whole body of American and European forestry and legislation."

In 1885 the legislature of New York invited him to frame a bill, which afterwards became a law, for the preservation of the Adirondack forest. It was while engaged in that work in Albany that he became ill with pneumonia, practically the first sickness of his life. He returned to his home in Lowville apparently convalescent, but his illness had proved too severe and he passed away June 11, 1885.

He married, in 1849, Mariah Ellen Kilham, who survived him, with two daughters and four sons.

ROMEYN B. HOUGH.

HOUGH, Jacob B. (1829-1897). Jacob B. Hough, physician and chemist, was born in Carmargo, Pennsylvania, June 23, 1829. Receiving his early education at Lebanon Academy, Lebanon, Ohio, he went on to the Medical Department of the University of Michigan where he was graduated in 1865. He became professor of chemistry at the University, but in 1873 settled in Cincinnati, Ohio, as an analytical and consulting chemist, also accepting the chair of chemistry and toxicology in Miami Medical College (1873-79).

"He was a very capable chemist . . . also a biologist who did much original work, especially in connection with spontaneous generation" (Juettner). He read a paper on "New Methods of Experimentation in the Problem of Spontaneous Generation" before the American Medical Association in 1873. Other writings were: "Chlorinated Anaesthetics"; "First Phases of Living Forms"; "Practical Medical Chemistry"; "Detection of Poisons"; "Report of Analysis of School-Room Atmospheres" (in the 10th annual report of the Cincinnati Health Department, 1876); "A Guide to Chemical Testing," 102 pp. (1877).

Dr. Hough married Mary Eva Evans, of Warren County, Ohio; their son, Dr. Charles A. Hough, was a physician living at Lebanon, Ohio. The father died at Lebanon in 1897.

HOUGH, John Stockton (1845-1900), of Philadelphia and Trenton, medical bibliographer and writer, was of Quaker descent. His ancestor, Richard Hough, a follower of William Penn, came to this country in 1683 and was a member of the Supreme Council of Pennsylvania. John Stockton Hough was born December 5, 1845, at Yardley, Bucks County, Pennsylvania, the eldest son of William Aspy Hough and Eleanor Stockton, daughter of John Stockton of Princeton, New Jersey. He received his preliminary education at Eastman's National College. In 1864 he entered The Polytechnic College of Pennsylvania at Philadelphia, from which he graduated with the degree of Bachelor of Chemistry in 1867. While attending the Polytechnic College he seems also to have been in attendance at the Medical Department of the University of Pennsylvania, for he received his M. D. from that institution in 1868. During the year 1868-69 he was resident physician at the Philadelphia Hospital ("Blockley"). Returning to the Polytechnic College he took his master's degree in chemistry in 1870. From this time until 1874 he practiced medicine in Philadelphia.

Dr. Hough devised various surgical instruments while in practice in Philadelphia and also between 1868 and 1886, wrote various papers on subjects connected with hygiene, biology, speculative physiology, social science, vital statistics and population which were published in the "American Naturalist" and in the leading medical periodicals; the fourteen titles and places of publication are given in the Index Catalogue of the Surgeon-General's Office, First Series, vol. xiii, 1892. In 1889 he published at Trenton, New Jersey, "Incunabula Medica" and in January, 1890, he issued the first number of "Bibliotheca Medica Historico-literaria et Bibliographica," a weekly periodical devoted to the bibliography and history of the literature of medicine. This number was devoted to Peyligk and Hundt. Apparently he did not receive sufficient encouragement to continue the publication and it died with the initial number, and American medical literature was thereby the loser. For these publications Dr. Hough collected a library of several thousand titles.

In January, 1874, he married the daughter of William Wetherell. She died in Florence, Italy, the same year, leaving an infant daughter. In 1887 Dr. Hough married for his second wife, Edith, daughter of Edward Reilly.

He died at Ewingville, near Trenton, N. J., May 6, 1900. The following year his valuable collection of books was purchased by the library of the College of Physicians of Philadelphia, through the courtesy of Mr. Robert Hoe. Some of the duplicates relating to biography, history, law, religion and medicine, together with a number of incunabula, were sold by the College to the library of the University of Pennsylvania, while others were sold to various dealers; eventually a number of the medical biographies and bibliographies came into the possession of the author of this sketch. The marginal notes and additions to the works on medical bibliography in the handwriting of Dr. Hough show that he was more than a mere collector of old and curious medical works; he was a profound student of books and of the times in which they were written.

WILLIAM SNOW MILLER.

HOUGHTON, Douglas (1809-1845), a scientific explorer, was born in Troy, New York, September 21, 1809. His American progenitors migrated from Bolton, Lancashire, England, and settled in Boston, Massachusetts. His father was a lawyer in Troy, New York, but in 1812 he moved to Fredonia, Chautauqua County, New York, where Douglas's early education was obtained at home and in Fredonia Academy. In 1829 he was graduated from Rensselaer Polytechnic Institute, Troy, New York, and 1829 assisted the professor of chemistry and natural history in the same school. Meantime he had been studying medicine under Dr. White and in 1831 was licensed to practice by the Chautauqua County (New York) Medical Society. On the recommendations of Prof. Eaton he gave a course of scientific lectures in Detroit. This made him hosts of admirers and friends, so that he settled in Detroit and began medical practice with unusual success. He practiced dentistry as well as medicine and surgery. The writer saw a tooth filled more than fifty years before by Dr. Houghton, as good as when filled. In 1831-32, as physician to H. R. Schoolcraft's expedition to the headwaters of the Mississippi and the copper region of Lake Superior, Dr. Houghton gathered materials for two reports to the Secretary of War. One gave a list of species and localities of the plants collected; the other discussed the existence of copper deposits in the geological basin of Lake Superior. These reports gave him a wide reputation as a scientist of unusual ability. In 1837 a small appropriation was made for a geological survey of Michigan and Dr. Houghton made state geologist, also

in 1839, professor of chemistry, mineralogy and geology in the University of Michigan, being the second professor appointed. (He never taught regularly in this chair, Dr. S. H. Douglas doing the work.) In Michigan there have been named after him a city, a county, a lake, and in Detroit a public school. Dr. Houghton is described as five feet five inches tall; feet and hands small and delicately formed; a large, well-developed head; prominent nose; eyes blue, sheltered under light but massive eyebrows, bright and at times merry.

He married on September 11, 1833, Harriet Stevens, of Fredonia, New York, who with two daughters survived him.

On October 13, 1845, writes a friend named Peter McFarland, Dr. Douglas Houghton left Eagle Harbor, Lake Superior, in an open sail boat, for a camp about ten miles distant that contained a geological surveying party to which he desired to give instructions ere leaving for the winter. His work kept him in the camp till after dark when a storm threatened, proving to be snow accompanied by a very high wind. There were four rowers, the doctor holding the rudder, his faithful dog, Meemee, a black and white spaniel, being at his feet. The violence of the storm increased and the waves rolled higher and higher; on rounding a point they could see the light at the harbor. "Pull away, my boys, we shall soon be there; pull steady and hard." But an enormous wave capsized the boat and all went under. The doctor was raised from the water by his trusty friend Peter McFarland. "Cling to the keel, doctor," he cried. "Never mind me," said Houghton, "go ashore if you can; be sure I'll get ashore all right without aid." Very soon the boat was righted and all clambered on board, but another large wave capsized it again. They were now but two hundred yards from shore, but all were about exhausted from cold and fatigue. Two of the five men managed to reach shore, but three, including Dr. Houghton, sank and did not rise.

LEARTUS CONNOR.

HOWARD, Edward Lloyd (1837-1881), of Baltimore, physiologist and medico-legal expert, was born in that city January 14, 1837. His mother's father was Francis Scott Key, who wrote the "Star Spangled Banner," and his father's father was Col. John Eager Howard, who distinguished himself at the Battle of Cowpens during the Revolution. The boy received a liberal training at home by means of private tutors, in 1857 began to study medicine under Dr. Charles Frick (q. v.), later attending the University of Maryland, where he took his medical degree in 1861. Excited by the great riot in the streets of Baltimore, which occurred on April 19, 1861, Dr. Howard at once, enrolled himself as a private in the Maryland Guard. All through the war he served on the Confederate side, first as a combatant, then as a surgeon. When Lee surrendered at Appomattox Court House, Dr. Howard was paroled and returned to Baltimore.

In 1868 he was appointed lecturer on anatomy in the Baltimore College of Dental Surgery and in 1869 professor of the same subject. A year later, in connection with Dr. Thomas Latimer, he founded the "Baltimore Medical Journal." In 1872 he was appointed lecturer on physiology in the Baltimore College of Physicians and Surgeons, and in 1873 professor of anatomy and clinical professor of nervous diseases in the same institution. He relinquished these chairs in 1874 for the chair of physiology. Always a deep student of matters connected with legal medicine, he was, in 1872, appointed secretary of the section on "Psychology and Medical Jurisprudence" of the American Medical Association. He wrote a few papers on medico-legal subjects, the most important of which is "The Legal Relations of Emotional Insanity" (1874). He was appointed, in 1874, a committee of one to engineer the passage of a law establishing a state board of health in Maryland, a feat he accomplished successfully in the same year.

Dr. Howard was a fluent and copious talker, and was fond of society, in which he was very popular. At the same time, he was a hard student, a profound and original thinker. As a writer he could hardly be excelled, and it is a cause of regret that he wrote so very little. His friends all speak of a "fatal habit of procrastination" which caused him to be forever putting off much work of a medico-literary character. He was a lover of nature, of music, and of poetry.

Dr. Howard came to his death by drowning, September 5, 1881.

THOMAS HALL SHASTID.

HOWARD, Henry (1815-1889), Canadian alienist and ophthalmologist, author of the earliest text-book on the eye to be issued in the Dominion of Canada, was born at Nenagh, County Tipperary, Ireland, December 1, 1815, and received his early education in his native

the latter in 1838. After practicing in Dublin receiving the degrees of M. D. and M. R. C. S., the later in 1838. After practicing in Dublin for a very short time, he emigrated to Canada in 1841. For a time he engaged in general practice on Amherst Island, Upper Canada, then at Kingston. At length he removed to Montreal, where he practiced treatment of the diseases of the eye, ear, nose and throat exclusively. From 1845 until his death he contributed a number of articles on the eye, ear, nose and throat to the "Dublin Medical Journal." He also wrote at some length and rather frequently for the "British American Journal of Montreal." About 1860 he wrote a brochure entitled "The Physiology of Insanity, Crime and Responsibility." In 1861 he was appointed medical superintendent of the Lunatic Asylum, of Fort St. John's, Lower Canada. With very inadequate buildings, he maintained the hospital until 1875, when it was closed and the patients transferred to Longue Pointe. There he continued as superintendent, being clothed with additional powers as a result of an act passed by the Canadian Parliment in 1885. He died in office, March 28, 1889.

The following is extracted from Dr. Howard's obituary notice in the "Canada Medical Journal:" "Advancing years never took from him the keen interest in scientific matters which he had pursued with such zest as a younger man and nothing gave him such pleasure as to take part in the discussions of our Medical Societies, or privately with his younger medical friends. At such meetings the familiar figure of the stately old doctor, with flowing patriarchal beard, will long be missed. His kindly wit, free from all tinge of malice, his animated discourse, his thorough honesty of purpose and his manly straightforwardness made him respected and beloved by all who knew him."

A few years previous to his death he was elected president of the Montreal Medico-Chirurgical Society, a position he filled with great credit to himself and the society. One of Dr. Howard's sons was a graduate in medicine at McGill University in 1872, another was a member of the Provincial Cabinet of Manitoba.

The chief ophthalmic writing of Dr. Howard was his text-book, entitled, "The Anatomy, Physiology, and Pathology of the Eye," London and Montreal 1850. The style of the book is simple and clear. The arrangement of the matter throughout the volume is no less excellent, and, in a word, this little book of Henry Howard's constituted a very auspicious beginning for Canadian ophthalmography. In 1882 he published "The Philosophy of Insanity, Crime and Responsibility."

THOMAS HALL SHASTID.

HOWARD, Herbert Burr (1855-1923), Boston administrator, builder of hospitals, and an insanity expert, was born March 24, 1855, at Fitchburg, Massachusetts. He was the son of Luther Grant and Sarah Burr Howard. After graduating from the Worcester High School, he attended Harvard, attaining his A. B. in 1881 and his M. D. in 1884. With the exception, thereafter, of two years spent in private practice at Idaho Springs, Colorado, his professional life was given over to public service. Just after the investigation of what is now the State Infirmary at Tewksbury, Massachusetts, by Governor Benjamin F. Butler in 1891, he was appointed superintendent there and remained until 1897. While he was resident physician of the Massachusetts General Hospital (1897-1908), the hospital was largely reconstructed under his supervision, many new buildings being added. As superintendent of the new Peter Bent Brigham Hospital, he incorporated in the plans many ideas from his study of hospitals abroad. In 1919, he retired. During the 90's he assisted in the investigation of the system of town care of the insane in Massachusetts and was a leader of the movement which caused the Commonwealth to take full charge of all the state hospitals for the insane. He was appointed a member of the First Massachusetts State Board of Insanity in 1898 and served continuously until 1913, acting as chairman from 1908. He was also a trustee of the State Colony for the Insane at Gardner and chairman of the Board of Trustees. In 1909 and 1910, he was president of the American Hospital Association, and in 1913, chairman of the hospital section of the American Medical Association. Dr. Howard was also a consultant in the construction of several other hospitals in the United States and Canada.

On October 1, 1886, he married Dr. Margaret Emily Pagelsen of Boston, then superintendent of the New England Hospital for Women and Children in Roxbury. A son, Charles P. Howard, was a lawyer of Boston, and a daughter, Sarah Ernestine Howard, followed the profession of her parents.

Since retiring, Dr. Howard lived at Reading, Massachusetts. He had suffered from heart disease for several years. On March 6, 1923, while motoring home from Florida,

he fell unconscious beside his car near Lynchburg, Virginia, and never revived from the heart attack. He was a kindly, sympathetic, lovable man, with an intense devotion to his work.

HOWARD, Richard H. L. (1809-1854). Richard H. L. Howard, a prominent physician and teacher of Columbus, Ohio, was born in Andover, Vermont, in the year 1809. The details of his early education are unknown, but he took his medical degree from the Berkshire Medical Institution, at Pittsfield, Massachusetts, in 1831. Removing to the West, he first settled in Windham, Portage County, Ohio, but after a brief stay in this place, removed to Elyria, in Lorain County, where he practiced for about eight years. In 1844 he went to Columbus, Ohio, and in that city remained until his death. In 1847 Dr. Howard accepted the chair of surgery in the Willoughby Medical College, then just removed to Columbia, and when this college was merged into the Starling Medical College he retained the same position in the new institution. On the death of his colleague, Dr. John Butterfield (q. v.), in 1849, Dr. Howard succeeded to the editorship of the "Ohio Medical and Surgical Journal," which he continued to conduct with eminent success until 1853, when signs of failing health compelled him to resign his editorial duties.

He was president of the Ohio State Medical Society in the year 1850, and was always interested in the progress of the medical profession. He is said to have been the first physician in Columbus to devote his entire time to surgery, and the first in Central Ohio to employ chloroform for purposes of anesthesia. An introductory lecture before the medical class of the Starling Medical College in 1849 is the only product of Dr. Howard's pen which his biographer has been able to discover.

He died of double pneumonia in Columbus, January 16, 1854.

HENRY E. HANDERSON.

HOWARD, Robert Palmer (1823-1889), was dean of the medical faculty of McGill University from 1882 until his death in 1889, and began his studies in the faculty with which his name was so intimately associated in the year 1844, graduating four years later. In 1856 he was made professor of clinical medicine, and on the death of Dr. A. F. Holmes (q. v.) in 1860, became professor of the theory and practice of medicine, a chair which he continued to occupy until his death. In 1856 he was elected physician to the Montreal General Hospital and was twice president of the Canadian Medical Association, president of the College of Physicians and Surgeons of Quebec, and vice-president of the Association of American Physicians. Thus all the honors in the gift of the profession came to him; but they indicate only slightly the place which he held in the hearts of his students during the thirty-years period of his teaching. His great merit is that from the beginning of his influence over McGill Medical Faculty, he was, and continued to be, an ardent believer in experimental methods in medicine, and lost no opportunity of encouraging research in pathology and physiology. It was under his fostering care that McGill Medical School attained to its greatness. Dr. Howard had an aptitude for the practice and teaching of medicine. His lectures and clinics are yet remembered. He was of a grave demeanor, but won from his students affection and admiration. Their interests were near his heart and he strove for their welfare in personal matters as well as in the wider field of education. In all legislation touching medical training, he was forward and labored earnestly to obtain a General Medical Council for Canada. Howard was one of the first among the older physicians to make a systematic record of his cases and of the conditions observed in them. He was the first to lecture on appendicitis. His store of knowledge was made public freely. His contribution upon "Rheumatism" in Pepper's "System of Medicine" is a good indication of his range of knowledge and style. In William Osler's "Practice of Medicine" frequent mention is made of his cases, and the book is dedicated to him.

ANDREW MACPHAIL.

HOWARD, William (1793-1834), physician and civil engineer, was born December 16, 1793, in Baltimore, Maryland, the fourth son of John Eager Howard. He studied medicine in the hospitals of Paris and in Edinburgh and took his M. D. from the University of Maryland in 1817. The following year, he was demonstrator of anatomy in his alma mater and in 1820 became adjunct professor of anatomy; later he accepted the chair of natural philosophy in the academic department. Howard was more interested in medicine as a science than as a profession and practiced it but little. He was also a civil engineer

and at one time was in the United States Topographical Engineers. The maps he drew of the environs of Pittsburgh, Pennsylvania, and of Baltimore harbor, were in use up to recent times. On April 9, 1822, he took out the first patent in America for a special locomotive, described in, "Specification of a Patent for Locomotive Engines or Carriages propelled by Steam on Rail or other Roads, demonstrating the improved Locomotive Carriage, granted to William Howard, U. S. Civil Engineer, Baltimore, 1828." One of his favorite recreations was mountain climbing, and in 1819, he made the first American ascent of Mont Blanc, the loftiest summit of the Continental Alps; two years later, he published his experience in a "Narrative of a Journey to the Summit of Mont Blanc, made in July, 1819" (2nd ed. 1856).

Dr. Howard married Rebecca Ann Key, May 14, 1826. He died in Baltimore on August 25, 1834.

HOWARD, William Lee (1860-1918), of Baltimore, was an eccentric, irresponsible character whose native ability was wasted in a desultory, rambling life, and in neglect of those codes which society has erected as safeguards to the perpetuity of the race. A writer of books on sex subjects, and a pamphleteer, he was held in more esteem by the laity than by the profession. He was born in Hartford, Connecticut, November 1, 1860, son of Mark Howard and Angeline Lee. His early education was had under tutors in England and France, then he went to Williston Seminary, to Columbia University and to Oxford University (England). He studied medicine at the College of Physicians and Surgeons, New York, and later graduated M. D. at the University of Vermont, in 1890. In the lust of adventure he left college to go on a whaling voyage, occupying two years, and returned to study, only to leave again as second mate on a ship bound for Africa. In 1880-1881 he was in Iceland; from 1863 to 1889 he studied at Bonn and Göttingen, at the École de Médecine, Paris, and at the University of Edinburgh.

Howard was sent by the "New York Herald" with the rescue party to look for the "Jeannette" which sailed from San Francisco Bay in 1879 in search of the North Pole. The ship was wrecked and the party exposed to great hardships. Again he went to Siberia for the "Herald" in 1883, and later he was its correspondent in the Soudan Campaign. He visited Albert Moll and Charcot, and in 1891 settled to practice in Baltimore, professing to specialize in nervous diseases, and laying stress on hypnotic suggestion. In 1906 he left Baltimore to spend his latter years at his home, "Mossfell," Westboro, Massachusetts, where he died March 11, 1918.

His works include: "The Perverts" (1892); "Plain Facts on Sex Hygiene" (1910); "Sex Structure of Society" (1914); "How to live Long" (1917).

HOWARD A. KELLY.

HOWARD, William Travis (1821-1907), of Baltimore, gynecologist, was the son of William A. Howard, an architect, and was born in Cumberland County, Virginia, on January 12, 1821. As a boy he went to Hampden Sidney and Randolph Macon colleges, then he studied medicine under the eccentric genius, John Peter Mettauer (q. v.), the doctor who is reputed never to have left off a tall stovepipe hat on any occasion. Howard was graduated from Jefferson Medical College in 1842, and settling first in North Carolina, moved in 1866 to Baltimore to become professor of physiology in the University of Maryland, taking, in 1867, the chair of diseases of women and children, and becoming emeritus professor in 1897. He was also, for many years, visiting surgeon to the Hospital for the Women of Maryland, consulting surgeon to the Johns Hopkins Hospital and the Hebrew Hospital.

Although best known as a gynecologist, he never lost his interest in general medicine, and in this field his attainments were of a very high order. For the younger men, he was a most valuable consultant, aiding them with his acute diagnostic powers and broad knowledge of therapeutics. He was a diligent and thoughtful student, all his life keeping ahead of the times. He invented a modification of Tarnier's forceps and also the Howard speculum. The University of Maryland gave him her LL. D. in 1907. He was a founder of the American Gynecological Society and its president in 1884, occupying the same positions with regard to the Baltimore Gynecological and Obstetrical Society, and being president of the Medical and Chirurgical Faculty of Maryland in 1902. His chief papers were: "Rupture of the Uterus with Laparotomy," 1880; "Encysted Tubercular Peritonitis which Presented the Characteristic Phenomena of a Unilateral Ovarian or Parovarian Cyst," 1885; "Two Rare Cases of Abdominal Surgery," 1885.

He died after a few days' illness from the effects of ptomaine poisoning, at Narragansett Pier, on July 31, 1907.

Howe, Appleton (1792-1870), early physician of South Weymouth, Massachusetts. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia 1912, pp. 17 and 18.

HOWE, Elliot Calvin (1828-1899), physician, mycologist and musician, was born February 14, 1828, in Jamaica, Vermont. He was educated at Lansingburg (N. Y.) Academy and was devoted, even as a schoolboy, to fossils, animals, plants, music and chemistry. These early inclinations became confirmed tastes and were the chief interests of his later life. He also studied physiology and medicine in New York City, eking out his income by writing articles and reporting for the "New York Tribune. When he had his medical degree he went to Troy to practice, "giving such attention as he could to music, physiology and botany." The harmonies of nature apparently attracted him more than disease, for he became a teacher of these three sciences in Charlotteville (N. Y.) Seminary. There was a large swamp near the school and in it Howe found the beautiful American "Jacob's Ladder." The Charlotteville Seminary, being accidentally destroyed by fire, Howe took the same professorships in Fort Edward Institute, where he vigorously studied mycology, and, incidentally, the charms of a fellow teacher, Emily Z. Sloan, who became an "Howeana" and blossomed thenceforth besi e him.

After thirteen years of active medical work in Yonkers, New York, he went to Lansingburg and found sufficient employment in botanical excursions, and in studying local flora. He became a member of the Torrey Botanical Club, and got in touch with fellow workers by letter and by the exchange of specimens. In 1894 he published, with Dr. H. C. Gordinier, the Flora of Rensselaer County, a record of the Phaenogams and Vascular Cryptograms, recording 1,345 species and varieties. He also wrote the descriptive article on the New York species of "Carex" (48th State Museum Report), describing a new species, "Carex Seorsa," and two new varieties, "C. lenticularis merens," Howe and "C. Emmonsii distincta," Howe. He claimed the hybrid character of "Carex Sullivantii," Boott ("Botan. Gaz.," February, 1881), now generally admitted.

In 1892, seven years before his death, he lost the use of his limbs, and became a helpless, but cheery invalid, his wife and sons and daughters all helping to lighten his burden by bringing plants to make his herbarium. Music, too, whiled away many a long hour, and a past generation will remember one of his songs, "The Old Arm Chair," which London took up and sang with America; while the musicians of both armies, during the Civil War, enjoyed "The Wanderer's Dream." This musical mycologist, after seven years of physical imprisonment, was liberated into the larger life on the 2nd of March, 1899.

DAVINA WATERSON.

HOWE, Samuel Gridley (1801-1876), the first to train the blind and deaf mutes in America and to call attention to the need of care for the feeble-minded, was born in Boston November 10, 1801. That was the year which saw the establishment in practice of Jackson (q. v.) and John C. Warren (q. v.), and the new vaccination of Jenner introduced to these shores. There was little wealth in Howe's family, and the little there was dwindled sadly during the war of 1812; for his father, Joseph N. Howe, a ship owner and maker of naval supplies, and it failed him. The unhappy merchant was brought nearly to ruin, and his family grew up in poverty. In spite of this there was money supplied for sending one of the boys to college, and Samuel was selected. He went to Brown University and graduated in 1821, when twenty, an advanced age for graduation in those days. After leaving Brown, he returned to Boston and studied medicine with Jacob Bigelow, at the same time attending the lectures in the Harvard school, and the clinics at the Massachusetts General Hospital, finding as instructors, Jackson, J. C. Warren, Parkman, and Ingalls. Such men could appreciate a promising student, and were foretelling an unusual future for Howe, when suddenly following his graduation in 1824, he astounded them and the Boston community by announcing that he was going to Greece. No one encouraged him, except one eminent man—Gilbert Stuart, the artist, now growing old, who faltered that his heart also was in the venture, if only the times were still young for him. He helped Howe to go, and Howe worked out there through the insurrectionary times when Greece fought against the Turkish rule.

In 1832 he settled down in Boston, and began his best-known work, the education of the

blind. He was fortunate enough to secure the sympathy and support of Dr. John D. Fisher (q. v.), a young man, one year his junior—himself a philanthropist and with a private fortune. With Fisher's aid Howe took up the problem of teaching the blind and began his studies by visiting Europe again, to investigate the Valentine Haüy methods then employed in Germany and France. Howe was no dreamer. He was a man of affairs; a sane humanitarian; a tempered enthusiast. New working machinery was necessary; he created it, instructing his assistants so thoroughly, that later, when the Sydenham School was established in England, a corps of Howe's former pupils were secured as teachers. He invented a novel form of raised letters for the books of the blind; and the first product of his press was a Bible, which was published in 1843—a book half the size, and produced at half the cost, of the Scriptures for the Blind, then recently brought out in England.

To test upon himself continued blindness, he went about for weeks with his eyes bandaged, and used the books for the blind. His best-known subject was Laura Bridgman, the famous blind deaf-mute, whom he found at Hanover, New Hampshire, brought to Boston when she was a child of eight, and educated at the Perkins Institution. Dickens describes the girl. For forty-three years Howe was superintendent of the Perkins Institution for the Blind. He asked but was refused permission to work at the Hartford Asylum, but emerged triumphant from opposition in the founding of the Massachusetts School for Feeble-minded Children.

In 1869 Howe had an experience which took him back to the scenes of his youthful crusade of forty years before. The Cretan insurrection of '66 was becoming an international problem. Greece was taking sides with Crete against Turkey. Howe organized a relief expedition to feed and clothe the destitute people, loaded a ship with supplies, visited Crete, and saved thousands from starvation. Then he visited the Greek mainland, and learned to his delight that he was not forgotten there. He returned with added honors to America, and promptly was called to further public work. There was serious talk of annexing the islands of the sea. Santo Domingo was their first object, and thither went Howe with other forlorn commissioners, by direction of President Grant. The object was a failure, as we know. Howe came home, but went back later to the island, seeking health and forwarding a commercial enterprise. This expedition was a double failure, and our philosopher returned to Boston a broken man. His end was near. Much buffeting and novel strivings do not conduce to a peaceful old age. He died in his seventy-fifth year, on the ninth of January, 1876.

He married Julia Ward, author of the famous "Battle Hymn of the Republic," written in camp in 1861, and sharer in all his philanthropy. When travelling with her as a bride in England, they spent some time at a house where a young daughter, Florence, asked Dr. Howe's opinion as to whether it "would be a dreadful thing" to devote her life to nursing? The Crimean War and Florence Nightingale's work, showed his wisdom in encouraging her. In May, 1910, the two women who met as girls, celebrated respectively their ninetieth and ninety-first birthday.

JAMES GREGORY MUMFORD.

HOWE, Zadok (1777-1851). The Hebrew name for the high priest Zadok meant "just," and Zadok Howe of Billerica, Massachusetts, was well named. As a matter of fact, he was both just and eccentric. For many years his neighbors and associates were unable to learn from him anything of his birth or relatives, and only by chance, in later life, a brother furnished the meagre information as to his bringing up. He was born at Bolton, Connecticut, February 15, 1777; his scanty education was obtained at Foxboro, Massachusetts, where his father, who had been a soldier of the Revolution, died, November 17, 1809. At the age of sixteen, Zadok went to Hartford, Connecticut, where he learned the trade of watch-making; this he followed for several years, and was said to have had a considerable skill at painting. When he began the study of medicine with Dr. Nathaniel Miller of Franklin, Massachusetts, he was relatively old; he completed his medical training at the Dartmouth Medical School in 1809, taking his M. D. at the age of thirty-two. Settling in Concord, New Hampshire, the same year, he practiced until 1814, when he entered into partnership with his former preceptor, Dr. Miller, in carrying on an infirmary for the cure of cancer. This not proving lucrative, Howe moved to Boston in 1817, leaving after a few weeks' stay to go to Billerica, Massachusetts, where the rest of his life was passed. He joined the Massachusetts Medical Society when he settled in Bellerica, becoming orator in 1834,

with an address on "Quackery," and president of the Society in 1847-48, refusing re-election and receiving from the society an address of thanks, at the expiration of his year of service. It is likely that having reached his seventieth year, and perhaps being conscious of a heart affection, he considered it time to lay down the cares of office, for he died within three years, of angina pectoris, March 8, 1851. During Dr. Howe's presidency an attempt was made to have the county societies the basis of organization of the state society, with the result that the present system of a representative governing body, the council, the members being chosen by the county or district societies, was inaugurated.

Dr. Howe was an accomplished surgeon and prided himself "that he never performed an operation when he thought he could do no good." That he was resourceful in expedients, is to be gathered from his treatment of a boy, who, sliding down a hay-mow, had been impaled on a two-inch iron hay-hook. The hook had passed through the abdomen and projected just below the umbilicus. Two hours after the accident, when Dr. Howe first saw him, the boy was in a state of shock and intense pain. It was plain that the hook could not be extracted through the path by which it had entered. Dr. Howe procured a large blacksmith's vise and secured it to the floor and bedstead; the patient was raised and his body supported so that the wooden handle of the hook could be grasped firmly in the vise. Then with a cabinet-maker's fine saw, running in oil, the now immovable handle was cut off next to the vise and the hook removed through the wound of exit. The patient recovered.

Dr. Howe was one of the trustees of the Berkshire Medical Institution in Pittsfield, as attested by the catalogues of that medical school, for the years of 1843 and 1846. His writings numbered twelve titles, the best known being his "Annual Discourse" on "Quackery," already referred to, and a paper on "Fear in Connection with Medicine," read before the Middlesex Medical Association in 1831, edited by Elisha Bartlett and published in 1832.

The doctor at one time investigated the effect of tobacco on longevity, a problem that had been creating much discussion in medical circles. He got the names of the oldest men, living or dead, within a circle of his practice, going back twenty years. Ascertaining how many of these were or were not in the habit of using tobacco, getting his information largely from the storekeepers who sold that commodity, he presented a list of 67 men, from 73 to 93 years of age. Of these 54 were smokers or chewers, 9 were non-consumers of tobacco, and 4 were doubtful or not ascertained. Dr. Howe's comment was, "How much longer these 54 men might have lived without tobacco, it is impossible to determine.

His method of collecting his medical charges was unique, and may have had something to do with his leaving, when he died, thirty-thousand dollars for the erection and maintenance of an academy in Billerica for instruction in the higher branches of English education, the "Howe School." Most of his patients were farmers and had little ready money. At the beginning of each year Dr. Howe prepared notes with receipted bills, and, calling on his patrons, proposed settlement of accounts by their signing these notes, with the result that the notes and interest were of much more value than the customary doctor's disputed bills. During his lifetime no one could find out why he purchased a lot of land in the centre of the town and surrounded it with a fence and trees, many thinking that it was to be his last resting-place. The land was bought twenty years before his death and only when his will was read was it learned that the lot was for the academy.

Dr. Howe was never married, although his biographer tells us that he believed firmly in matrimony and was an inveterate match-maker.

WALTER L. BURRAGE.

HOWLAND, John (1873-1926), pediatrician, was born February 3, 1873 in New York City. His father, Judge Henry E. Howland was a descendant of John Howland of the Mayflower Company; his mother, Sarah Louise Miller, of a well-known New York family, was an accomplished pianist. Phillips Exeter Academy prepared him for Yale where he won distinction as an athlete, participated largely in the social life, edited the college paper, and graduated in 1894. Tennis experts ranked him among the first six players in the country. Eager from boyhood to enter the medical profession, he took his M. D. from the New York University Medical School in 1897 and secured internship at the Presbyterian Hospital. During 1899, he was under L. Emmett Holt (q. v.) at the New York Foundling Hospital. In Berlin and Vienna he studied pathology and clinical medicine and returned in 1901 to follow pediatrics under

Holt, rising rapidly to be head of the children's clinic at Bellevue Hospital, 1908, then the best field in New York City. Two years later, he went to Europe to study under Czerny, preparatory to assuming a post in the reorganized Medical School of Washington University, St. Louis. While with Czerny, Howland formulated his ideas on infant feeding and nutritional disorders of infancy. In 1912, he succeeded Von Pirquet as professor of pediatrics at the Johns Hopkins Medical School, a chair held until death in London, England, June 20, 1926, following an operation for duodenal ulcer. Dr. Howland was survived by his wife, Susan Morris Sanford, whom he married in New Haven, Connecticut, October 12, 1903, and by four children, Katherine, John, Louise and Elihu.

Following a publication in 1904 of a study of the lesions of dysentery, Howland wrote often: first, mainly on the clinical and pathological and, later, on the chemical aspects of disease; notable are his contributions on the effects of chloroform poisoning on the liver, the measurement of the chemical and energy metabolism of sleeping children, acidosis accompanying intestinal intoxication, and sundry articles on tetany and rickets. Later papers particularly concerned the principles governing the deposition of lime salts in the bones. With Marriott, he showed that acidosis in intestinal intoxication is not due to an acetone body; in infantile tetany they found that the calcium of the blood is diminished and treatment with calcium chloride the proper procedure. With Kramer, he proved that rickets is characterized by a diminution of the inorganic phosphorus of the blood, that deposition of lime salts in the body is dependent upon a solubility product relationship between calcium and phosphorus in the circulating fluids, and that cod liver oil is especially efficacious.

Howland was twice honored by being chosen for the Harvey lecture. He was a member of the Board of Scientific Directors of the Rockefeller Foundation for Medical Research, of the Council of Pharmacy and Chemistry, and of many medical and scientific societies, as well as a director of the Russell Sage Institute.

He was an exceptionally gifted and sane teacher, a splendid observer, critical investigator, keen diagnostician, and delightful companion with a fine sense of humor and unusual gift of mimicry, ever retaining his boyhood love for sports.

HOWARD A. KELLY.

HOY, Philo Romayne (1816-1892), who did much for the State of Wisconsin as a natural scientist, was descended from an old Scotch family named Hawey, one of whom fought at Flodden and was sold to an English family but eloped with his master's daughter to Ireland. Three of his male descendants escaped from a difficulty with a public officer by coming over to the United States in 1756, and from these came the father of Philo, Capt. William Hoy, who gave his boy the best local education he could and let him study medicine under Dr. Alexander McCoy. The student was graduated from the Ohio Medical College of Cincinnati and six years later began to practice in New Haven, Ohio, and afterwards in Racine, Wisconsin, first marrying Mary Elizabeth Austin, who died in 1872 leaving three children, Albert Harris, who became a physician; Jenny Rebecca and Philo Romayne.

The new country to which Hoy had come was comparatively unknown so far as its natural resources were concerned, and he went to work to make a complete collection of the flora and fauna, especially of native woods, shells and fossils. He welcomed all the naturalists who came to see him and corresponded with such men as Agassiz, Henry and Kirtland. His collection went to Racine, Wisconsin, the interests of whose college he had done so much to promote.

His name has been perpetuated in making him godfather to some three or four fossils and four fauna (the "arthoceras Hoyi," etc.). There are many American physicians bound up with the natural history of the different States in the same way, though dust has gathered, and few now know aught connected with their names. Hoy was made a member of the Entomological Society of France, and he was also naturalist of a United States Survey and a fellow or member of the leading academies of science in America. He contrived, though continuing an active practice, to gather one of the largest local natural history collections, believing that a local museum attains ever increasing value in view of the destruction of forests and the increase of inhabitants, thus leading to the extermination of many species.

He died suddenly in 1892.

His writings were chiefly in the "Transactions of the Wisconsin Academy of Science." "How did the Aborigines of This Country fabricate Copper Instruments?" vol. iv; "Who built the Mounds?" vol. v; "Who made the Ancient Copper Implements?" vol. v, etc.,

and, in vol. i of the "Geology of Wisconsin," "A Catalogue of Wisconsin Lepidoptera"; "A List of Noctuidæ in Wisconsin," and "A Catalogue of Cold-blooded Vertebrates."

DAVINA WATERSON.

HOYT, Frank Crampton (1859-1901), Missouri and Iowa alienist, was born in Denver, Colorado, November 17, 1859. He was graduated in medicine at the College of Physicians and Surgeons at St. Joseph, Missouri, in 1881, afterwards pursuing a course of study in pathology at the University of Kentucky at Louisville. He founded and edited the St. Joseph "Medical Herald." He had a scholarly mind and a talent for writing, as was shown by the numerous papers which he read before medical societies and his reports as superintendent of the hospitals at Clarinda, Iowa, and Mt. Pleasant, Missouri. In September, 1887, he was appointed third assistant physician in charge of pathology at the state hospital at St. Joseph, Missouri. Here for a period of nearly six years he carried on the work of the pathological department systematically and efficiently, obtaining and carefully studying much valuable material. As a result of these studies he published, subsequently, papers on "Pachymeningitis Hemorrhagica," "Tropho-Neuroses in the Insane," and "The Tropho-Neuroses of Paretic Dementia." In 1893 he was appointed medical superintendent of the Iowa State Hospital at Clarinda, and his administration of the institution was most successful. While in Clarinda he organized an excellent band to furnish out-of-door music in summer and an orchestra for indoor and winter evening entertainment. He also inaugurated a military drill for patients under a competent drillmaster. He also carried on mechanical industries for patients, such as manufacturing clothing, shoes, brushes, brooms, furniture of all kinds, to a greater extent than at other state hospitals of equal size; in addition, farm and garden operations were largely engaged in. In September, 1898, he resigned and removed to Chicago, but was almost immediately recalled to Iowa to assume charge of the Hospital for the Insane at Mt. Pleasant, owing to the death of Dr. H. A. Gilman. His administration at Mt. Pleasant was also successful. He introduced many improvements, such as forced ventilation, electric lighting, new and larger kitchens, an associate dining-room and an ample water supply.

He married in 1883 Miss Mattie Price Garner, of Richmond, Missouri, who, with three children, survived him.

He died suddenly in Kansas City, May 21, 1901.

HUBBARD, John (1794-1869), for three years governor of Maine, and a very active practitioner of medicine, was born at Readfield, Maine, March 22, 1794. He was the eldest son and one of the twelve children of Dr. John Hubbard, a country doctor; he was of a very large frame and had remarkable physical strength in his youth. At the age of sixteen he divided his time between work on the farm and the study of medicine with his father. When twenty, by means of tutoring, he entered Dartmouth College as a sophomore in the class of 1816. After graduating he acted as principal of the Academy at Hallowell, Maine, accepted a teaching position in Virginia, and then entered the Jefferson Medical College in Philadelphia in 1820. Here he received his M. D. in 1822, returning to Dinwiddie County, Virginia, to practice until 1829, when he spent a year in post-graduate study in Philadelphia, finally settling in Hallowell to practice there for the rest of his life.

He led an active life as a practitioner and in 1843 entered politics and was elected to the State Senate. From this time he was in the political life of the state, finally being elected Governor on the Democratic ticket in 1850, 1851, and 1852, the term being extended by constitutional amendment to 1853. He was active in establishing a reform school for juvenile offenders, distinct from the state-prison, and he signed the famous prohibition law, "an act for the suppression of drinking houses and tippling shops," June 2, 1851. Gevornor Hubbard was appointed a special agent of the Treasury Department, to examine the custom houses of the state, in 1857, during President Buchanan's administration, and in 1859 he was made a commissioner under the Reciprocity Treaty of 1854 between the United States and Canada, as to fishing rights, holding the position for two years. He retained his connection with the Democratic party until 1864, when he cast his vote for President Lincoln.

In July, 1825 he married Sarah H. Barrett of Dresden, Maine, and they had one child, a son.

The death of the son, who fell in the first assault on Port Hudson, in May, 1863, was a sorrow that he could never wholly conquer. He resumed active practice after retiring

from the office of governor, generally keeping four horses and riding about the country day and night, often covering 75 miles in a day.

He had a stroke of apoplexy while in his carriage, and died at Hallowell, February 6, 1869.

HUBBARD, Oliver Payson (1809-1900), of Hanover, New Hampshire, was born in Pomfret, Connecticut, March 31, 1809. He studied at Hamilton College for two years and was subsequently graduated at Yale in 1828. After graduation he acted as an assistant to Prof. Silliman (q. v.), who was professor of natural history at Yale, and subsequently married one of his daughters. In 1836 he became professor of chemistry, mineralogy and geology at Dartmouth, and held this chair together with the two professorships of mineralogy and geology, and chemistry and pharmacy until 1866. Then until 1871 he lectured on these subjects and finally again became connected with the faculty of the Dartmouth Medical School and the college as professor of chemistry and pharmacy. He continued in this position until 1883, when he was made professor emeritus. During 1863-4 he was a member of the New Hampshire legislature. He also served as one of the overseers of the Thayer School of Civil Engineering at Dartmouth and was one of the secretaries of the American Association of Geologists and Naturalists in 1844. In 1837 he received the degree of M. D. from the South Carolina Medical College and in 1861 that of LL. D. from Hamilton. He contributed a number of papers to the "American Journal of Science" and in 1880, wrote an interesting book entitled "A History of Dartmouth Medical College and Dr. Nathan Smith, its Founder," Concord, New Hampshire, and Washington, D. C. He died in New York City, March 9, 1900.

WALTER R. STEINER.

HUBBARD, Thomas (1776-1838), of Pomfret, Connecticut, was born in Smithfield, Rhode Island, in 1776. When he was about sixteen years old, owing to the death of his father, an inn keeper, he was obliged to look after the inn for some years, in order to support his mother and her family. Later he studied medicine under Dr. Albigense Waldo (q. v.) and settled at Pomfret, Connecticut, where he spent thirty-four years in the practice of medicine. During that period he became very eminent in his profession and had many young men who received their training as doctors under him. He rode with them all over the surrounding country so that whenever the clatter of their horses' hoofs was heard, the country people used to say: "There goes Hubbard and his hounds." During this period he was several times chosen a representative in the assembly and once a senator. In 1822 he was elected president of the Connecticut Medical Society, serving until 1827. Two years later he accepted the professorship of surgery at Yale and performed this duty there very acceptably for nine years, until his death at New Haven, June 16, 1838. In 1809 he received the honorary degree of M. D. from the Connecticut Medical Society. With a remarkably retentive memory, filled with knowledge obtained from his extensive practice and from wide reading, his lectures at Yale were highly instructive and delivered in a plain and straightforward manner.

WALTER R. STEINER.

HUBBELL, Alvin Allace, ophthalmologist of Buffalo, the son of Schuyler Philip and Hepzibah Farnsworth Hubbell, was born at Conewango, N. Y., May 1, 1846. He studied medicine at Philadelphia and at the University of Buffalo where he received his M. D. degree in 1876. Twenty years later Niagara University conferred its honorary degree of Ph. D. on him. Hubbell began general practice in Buffalo and, when two years out of the medical school operated for intusseption, said to be the fourth operation of its kind in point of priority, in the United States. In 1883 he limited his practice to diseases of the eye and ear. He was appointed ophthalmic surgeon to the Riverside Hospital, the Buffalo Hospital of the Sisters of Charity, the Erie County Hospital, and to the Charity Eye, Ear, Nose and Throat Hospital of Erie County, being a founder and director of the last two institutions. Dr. Hubbell helped found the medical department of Niagara University, in which he was professor of ophthalmology and otology as well as secretary of the faculty. In 1898 he accepted the chair of clinical ophthalmology in the University of Buffalo, becoming professor emeritus in 1911, the year of his death. He invented a number of instruments and appliances, the most important of which was an improved electro-magnet for the extraction from the interior of the eye of foreign bodies which are affected by magnetism. He wrote one of the sections in de Schweinitz's "American Text-Book of Diseases of the Eye", Philadelphia, 1899; "The

Development of Ophthalmology in America from 1800 to 1870", Chicago, 1908. He was associate editor of the "Buffalo Medical Journal" and of the "Ophthalmic Record."

Among his memberships may be mentioned: the Buffalo Academy of Medicine, the Buffalo Medical Union, the Buffalo Ophthalmological Society, the Erie County Medical Society, the Medical Association of Central New York. He was president of the last named association in 1892 and ten years later president of the Medical Society of the State of New York. In 1908-1909 Dr. Hubbell was chairman of the section on ophthalmology of the American Medical Association. Other memberships were: New York Academy of Medicine, American Ophthalmological Society, Pan-American Medical Congress, Eighth International Ophthalmological Congress, at Edinburgh, in 1894 and the Ninth, at Utrecht, in 1899.

Dr. Hubbell was married to Evangeline Fancher, daughter of Captain William and Lydia Mills Fancher, at Leon, N. Y., June 26, 1872. They had one child, a daughter. Dr. Hubbell died of arterio-sclerosis at the Lenox Hotel, Buffalo, August 10, 1911.

HUDSON, Erasmus Darwin (1805-1880), orthopedist of Connecticut and New York, was born in Torringford, Connecticut, December 15, 1805. He was educated by a private tutor at Torringford Academy, and finally received his M. D. from the Berkshire Medical Institution in 1827. He first practiced in Bloomfield, Connecticut, where he joined the Connecticut Medical Society and interested himself in the cause of temperance. He lectured upon this subject in 1828 and from 1837-1849 was an agent of the Connecticut Anti-slavery Society and general agent of the American Anti-slavery Society. During the Civil War he was appointed by the government to fit orthopedic appliances to special cases of gun-shot injuries of the bone, and invented several of these appliances which received awards at the Paris Exposition in 1857 and at the Centennial Exposition in Philadelphia in 1876. In 1850 he removed to New York where he resided until his death, devoting himself to orthopedic surgery. During this period he wrote many papers and three monograms upon this subject, namely, "Resections," New York, 1870, "Syme's Amputation," New York, 1871, and "Immobile Apparatus for Ununited Fractures," New York, 1872. He published numerous reported cases in the "Medical and Surgical History of the War of the Rebellion," Washington, 1870-72. He died in Riverside, Greenwich, Connecticut, December 31, 1880.

WALTER R. STEINER.

HUDSON, Erasmus Darwin (1843-1887), son of Erasmus Darwin Hudson, New York physician, was born in Northampton, Massachusetts November 10, 1843, and died in New York, May 9, 1887. He was graduated at the College of the City of New York in 1864, and at the College of Physicians and Surgeons, Columbia, in 1867. After serving as house-surgeon of Bellevue Hospital he was health inspector of New York City in 1869-1870. Then followed a service as attending physician for diseases of the eye, in the Out Patient Department of Bellevue (1870-1872) and attending physician at the Northwestern Dispensary; from 1870 until his death he was attending physician to Trinity Chapel Parish and to Trinity Home. For ten years (1872-1882) he was professor of the principles and practice of medicine in the Woman's Medical College and professor of general medicine and physical diagnosis in the New York Polyclinic from 1882 until his death. He published: "Diagnostic Relations of the Indigestions," New York, 1876; "Methods of Examing Weak Chests," 1885; "Home Treatment of Consumptives," 1886; and "Physical Diagnosis of Thoracic Diseases," 2d ed., 1887.

WALTER R. STEINER.

HUGER, Francis Kinloch (1773-1855), surgeon of South Carolina in the War of 1812, was born in Charleston, in that state, September, 1773, the son of Major Benjamin Huger and Mary Esther Kinloch. He was sent to England to school when he was eight years old, and returned to Carolina on a brief visit in 1791. He completed his education and studied medicine under the distinquished surgeon, John Hunter, of London, and in 1794 was engaged as surgeon on the Medical Staff of the English Army in Flanders, under the Duke of York. Leaving the army he went to Vienna for further learning and there met Dr. Eric Bollman, a Hanoverian physician, who, in October, 1794, informed him of the plan to liberate Lafayette who was then confined in the fortress of Olmutz, and Dr. Huger volunteered to assist in the rescue. Dr. Bollman, through making acquaintance with the surgeon of the fortress, was enabled to lend French books to Lafayette and to indicate invisible writing. By this means of communication the plot for the rescue was perfected.

While out riding with two guards, on November 8, 1794, Lafayette alighted and gradually drew the officer who had him in charge away from the high road. Suddenly he grasped the hilt of the officer's sword and drew it and the two friends galloped to his assistance. In the scuffle the officer was slightly wounded and Lafayette's coat was stained with blood. Lafayette unfortunately misunderstood the directions of his friends to proceed to Hoff where a servant and horse awaited him. He was arrested at the village of Zagorsdorf as a suspicious person, identified and returned to Olmutz. Dr. Huger was surrounded and captured near the scene of the rescue and treated with the utmost rigor by his captors. Dr. Bollman was arrested at the frontier and both remained in prison eight months. Lafayette was in prison for three years after the event, but was not informed of the liberation of his friends.

In 1795 Huger entered the University of Pennsylvania to complete his medical education and was graduated in 1797 with a thesis on gangrene and mortification. The following year war with France being threatened, he was commissioned a captain in the United States Army, and in 1812 he was commissioned colonel and served in the war against England until 1815. He died in Charleston, February 14, 1855, in his eighty-second year.

In the reception room of the Château Lagrange, the home of Lafayette, on one side of the chimney hung a protrait of Dr. Huger. There is also a memorial medallion in the Medical Laboratory in the University of Pennsylvania.

DAVINA WATERSON.

HUGHES, Charles Hamilton (1839-1916), Missouri neurologist and medico-legal expert, was born in St. Louis, Missouri, May 23, 1839. He came of a Welsh family, an early member of which settled in Ireland; Richard Hughes sailed from Tipperary to America about 1760. Hughes's father was Harvey J. Hughes, his mother, Elizabeth Rebecca, daughter of Zaccheus Stocker, founder of Elizabethtown, Indiana, named in honor of his daughter. Hughes' academic education was received at Grinnell (Iowa) College, and his M. D. was had at St. Louis Medical College in 1859. He served as surgeon during the Civil War, and was mustered out in 1865. In 1866 he was appointed superintendent of the Missouri State Lunatic Asylum, at Fulton, where he remained five years. He was a founder of the Marion-Sims Medical College, St. Louis, and was professor of psychiatry and neurology; was the first president of the faculty, and professor of nervous diseases at Barnes Medical College. In 1876, before the psychiatry section of the International Medical Congress, at Philadelphia, he read a paper on "Simulation of Insanity, by the Insane." He was interested in the Italian contributions to psychiatry and suggested translations which led to a wider knowledge of the Italian School. In 1880 he founded the "Alienist and Neurologist" and became its editor, holding this position until his death. He was a very prolific writer of papers, in his specialty, and of numerous monographs. He was a member of the British Medico-psychological Association, and of several American medical societies.

Hughes married Addie, daughter of Luther Case, of St. Louis, in 1862; after her death he married (1873) Mattie Dyer, daughter of H. Lawther, of Calloway County, Missouri, who died before him.

He died at his home in St. Louis, July 13, 1916.

HULLIHEN, Simon P. (1810-1857), pioneer plastic surgeon and dentist of Wheeling, West Virginia, was born in Point Township, Northumberland County, Pennsylvania, December 10, 1810. His father was Thomas Hullihen and his mother, Rebecca Freeze; his grandfather came from Ireland. Young Simon's early education at the township district school ended at seventeen. When about nine years old he fell through a limekiln and badly burned his heels, putting him to bed for two years, after which he walked on his toes until boots were made from accurate plaster casts which he himself furnished.

He began extracting teeth at his home, and entered practice as surgeon and dentist at Canton, Ohio, in 1832. In April, 1835, he married Miss E. Fundenburg at Pittsburgh, and went to Wheeling, West Virginia, to remain the rest of his life. His M. D. degree was given by the Washington College, Baltimore; he practiced surgery and dentistry exclusively.

Hullihen established a private hospital in Wheeling, and with the co-operation of Bishop Whelan, founded the "Wheeling Hospital"; under the auspices of the Roman Catholic Church, chartered March, 1850, his associate being Dr. M. H. Houston. An item from his notes covering the last ten or twelve years of his life cites these memoranda as to the operations he had performed:

Cataract	200	Times
Cleft-palate	50	"
Antrum cases	200	"
Making new noses	25	"
Making new under-jaws	10	"
Hare-lip	100	"
Cancers	150	"
Strabismus	100	"
Making new lips	50	"
General surgery	200	"

In 1839 he wrote an "Essay on Odontalgia"; in 1844 on Hare-Lip and its Treatment; 1845 "An Essay on the Cleft-Palate and its Treatment"; 1846 "An Essay on Abscess of the Jaws and Treatment"; 1849 "Distortion of the Face and Neck, Caused by Burn, Successfully Treated." He declared that "The dentist must carry upward the standard of his profession and plant it upon the broad platform of medical science." "Hullihen's operation" consisted in the treatment of a nerve cavity exposed by decay by "perforating the fang through the gum and alveolar process into the nerve before packing the metal." He died in 1857 from pneumonia.

HOWARD A. KELLY.

HUN, Edward Reynolds (1842-1880), eldest son of Dr. Thomas Hun (q. v.), was born in Albany, New York, on April 17, 1842, and graduated from Harvard College in the class of 1863, receiving his professional diploma from the College of Physicians and Surgeons in New York City, three years later. After several months of study he went into private practice in Albany, and not long afterwards accepted the position of special pathologist of the New York State Lunatic Asylum at Utica. His experience there led to his publishing a translation of Bouchard's tract on "Secondary Degenerations of the Spinal Cord," which appeared in the "American Journal of Insanity" for January and April, 1896; a paper on the "Pulse of the Insane," in the same journal for January, 1870; a paper on "Hematoma Auris," in the number for July, 1870; and one on "Labioglosso-laryngeal Paralysis," in the issue for October, 1871. He also presented to the Medical Society of the State of New York, at its annual meeting in 1869, a complete, valuable, and well illustrated paper on "Trichina Spiarlis." The large amount of work he did in connection with St. Peter's, the Albany and the Child's Hospitals, the Orphan Asylums and the like, together with his ever-increasing private practice, compelled him to relinquish his connection with the Asylum at Utica. On the reorganization of the faculty of the Albany Medical College, in 1876, he accepted the chair of diseases of the nervous system, which he filled up to the time of his death.

Dr. Hun was an indefatigable worker, never sparing himself night or day in the case of the sick, and the annals of the Albany County Medical Society, together with the never sparing himself night or day in the care papers before mentioned, bear ample evidence of the interest he took in the literary and scientific departments of his profession. He was a member of the New York Neurological Society, and of the Medical Society of the State of New York.

In 1874 he married the daughter of John B. Gale, of Troy. His widow with four children survived him.

In 1876 he was thrown from his carriage, while returning from a professional call in the country, receiving injuries to his head and chest. He was unconscious for several hours, but his convalescence was fairly rapid and apparently complete. After a time, however, his general health began to fail; obscure and ill-defined trouble with his brain followed; and in 1879 he was compelled, temporarily as it was hoped, to give up his practice. In spite of every care there was not the permanent improvement which his friends had hoped, and death came to him quite suddenly in Stamford, Connecticut, March 14, 1880, in the thirty-eighth year of his age.

SAMUEL B. WARD.

HUN, Henry (1854-1924), neurologist, of Albany, N. Y. was born March 21, 1854 in that city the son of Thomas (q. v.) and Lydia Louisa Reynolds Hun. After getting his Ph. B. in 1874 from the Sheffield Scientific School of Yale, where during 1873-75 he was assistant in physics, he studied medicine at Harvard and was graduated in 1879. In 1914, Yale bestowed her honorary M. A. upon him.

He was professor of nervous diseases at the Albany Medical College from 1885 to 1914. Meanwhile, he was president of the board of trustees of the Albany Academy, a member of the board of trustees of the Dudley Observatory, a member of the board of governors of the Albany Hospital, consulting physician to the Albany, Anthony Brady and Albany Hospital for Incurables, and attending physician to the Child's Hospital.

Dr. Hun contributed a number of papers on his specialty to the literature and was the author of "Guide for American Medical Stu-

dents in Europe," 1883, and an admirable "Differential Diagnosis of Nervous Diseases."

He was president of the Association of American Physicians in 1910 and of the American Neurological Association in 1913-14.

He married Lydia Marcia Hand of Albany, April 28, 1892 and they had three children, two sons and a daughter, one of the sons, Henry, becoming a surgeon and working with Dr. Elting, the other a lawyer. When Dr. Hun died, of diabetes on March 14, 1924 he had been at work for three years on a "Survey of the Activity of the Albany Academy". He did not finish a work on psychology which he had had on the stocks for a long time. He was a great physician and a great man.

HUN, Thomas (1808-1896), alienist of Albany, N. Y. was born in that city, September 14, 1808, the only son of Abraham and Maria Gansevoort Hun. His father was a direct descendant of Harmen Thomas Hun who came from Holland to Albany, then known as Beverwyck, early in the seventeenth century. Dr. Thomas Hun's education was received at the Albany Academy and at Union College, where he was graduated with honor in 1826. The University of Pennsylvania gave him her M. D. in 1830 when he settled in his native town, serving in the cholera epidemic of 1832 by organizing a cholera hospital and acting as an attending physician until the close of the epidemic. He went abroad in 1833 and stayed there six years studying medicine for most of the time in Paris. On his return in 1839 he delivered the opening address at the recently organized Albany Medical College and was made professor of the institutes of medicine, a chair he occupied until 1858. When the faculty of this institution was reorganized in 1876 Dr. Hun was chosen dean and continued to act in that capacity for twenty years. He helped organize the Albany Hospital, incorporated in 1848, and was consulting physician, acting in the same capacity at St. Peter's and at the Child's Hospitals. In 1862 Dr. Hun was president of the Medical Society of the State of New York, laying stress in his inaugural address on the curative powers of Nature and combatting some of the popular fallacies of the day concerning the efficacy of drugs in an original and bold manner. During the civil war he acted on a commission to examine candidates for the positions of surgeon and assistant surgeon to the volunteer regiments, being over the age limit for active service in the army.

Dr. Hun came into prominence as an alienist in 1872 when he was appointed by the governor of the state a member of a commission of three to investigate charges against the lunatic asylums of New York State. The report of the commission resulted in the passage by the assembly of the first comprehensive insanity law in 1874, the foundation of all succeeding laws on the subject. Meanwhile he had published in the "American Journal of Insanity," July, 1872, a paper on: "Is Insanity a Disease of the Mind or of the Body", a review of two papers, one by Dr. John P. Gray and the other by Dr. H. B. Wilbur. (q.v. to both) Dr. Hun published also an introductory lecture before the Albany Medical College in 1846, entitled: "Medical Systems, Medical Science and Empiricism", and a memorial sketch of Dr. Platt Williams. Governor Hoffman thought well of his judgment for in 1872, he submitted to the assembly his veto of a bill to regulate the practice of medicine in the state, attaching to it Dr. Hun's criticisms, saying: "They accord generally so completely with my own opinions and are so tersely expressed that I file them with the bill as my reason for not giving it my approval."

Dr. Hun was married to Lydia L. Reynolds in 1841. Of the union there were four sons, two of them being physicians, Dr. Edward R. Hun (q. v.) who died at the age of thirty-seven, and Dr. Henry Hun, (q. v.) the eminent neurologist of Albany. Mrs. Hun died in 1876, and her husband in 1896, being at the time of his death a trustee of the Albany Academy, which he had attended in his youth, and dean of the Albany Medical College, where he had made the opening address.

HUNT, Ebenezer Kingsbury (1810-1889), of Hartford, Connecticut, son of Eleazer and Sybil Pomeroy Hunt, was born in Coventry, in that state, August 26, 1810, and died in Hartford, May 2, 1889. He was descended from Jonathan Hunt, one of the early settlers of Northampton, Massachusetts; was educated in the schools of Middletown, Connecticut and Amherst, Massachusetts, and graduated from Yale College in 1833. He taught for a year in Munson Academy, Massachusetts, was a private tutor in Natchez, Mississippi, spent a summer in the office of Dr. Samuel White in Hudson, New York and took his M. D. at the Jefferson Medical College, Philadelphia, in 1838. After starting practice in Ellenville, New York, he removed to Hartford, Connecticut, and there spent the rest of his life. For thirty years Dr. Hunt was a di-

rector of the Hartford Retreat for the Insane and for forty years was one of the medical visitors to that institution besides serving as acting superintendent on three occasions. He was a member of the state commission to make provision for the criminal insane and on the commission to erect new buildings for the state prison at Wethersfield. For twenty-five years he was physician to the American Asylum for the Deaf and Dumb; he co-operated in establishing the Hartford Hospital and was on its consulting staff. Another interest was the establishing of the Hartford Medical Society; twice Dr. Hunt was president of the Connecticut State Medical Society. In 1848 he translated Esquirol on insanity with annotations; he wrote biographical sketches and papers for the medical journals. The Hartford Medical Society built the "Hunt Memorial Building" in his memory in 1889 from plans prepared by McKim, Mead and White, near Dr. Hunt's home, the building containing a library, an assembly room and laboratories for research work.

Dr. Hunt married Mary Crosby in 1848 and they had four children.

HUNT, Ezra Mundy (1830-1894), of New Jersey, general practitioner, hygienist, sanitarian and medical author, was born January 4, 1830, in Metuchen, New Jersey, son of Holloway Whitfield Hunt, a minister, and Henrietta Mundy. His ancestry was English-Welsh. He received an A. B. and an A. M. (1849), and in 1882 the honorary degree of D. Sc. from Princeton University; LL. D. was received from Lafayette College in 1890. His medical education was obtained at the College of Physicians and Surgeons, New York, which he entered in 1849, graduating in 1852; his preceptors were Abraham Coles (q. v.) and Dayton Decker. He began practice at Metuchen in 1852 and in 1854 became lecturer on materia medica in the Vermont Medical College, the next year declining the chair of chemistry on account of the demands of his practice. In 1864 he was president of the New Jersey Medical Society and secretary of the State Board of Health from 1877, issuing its annual reports; he was president of the American Public Health Association in 1883. He organized the department of hygiene in the State Normal School, and was the first instructor. He wrote many papers on sanitary and medical subjects, among them: "A Physician's Counsels of His Professional Brethren" (1859); "Alcohol as Food and Medicine" (1877). Among his religious writings were "Grace Culture" (1865) and "Bible Notes for Daily Readers" (1870).

In 1853 Dr. Hunt married Emma L., daughter of Ezra Ayres of Rahway, New Jersey; she died in 1867, and in 1870 he married Emma, daughter of Josiah Reeve, of Alloway, New Jersey. He had four children, two of whom became physicians, Ellsworth Eliot Hunt, who died in 1886, and Alonzo Clark Hunt.

Dr. Hunt died at Metuchen, July 1, 1894.

HUNT, Harriot Kezia (1805-1875), an early woman practitioner of medicine in America, was a Bostonian, pedigreed, born and bred, the daughter of Joab Hunt and Kezia Wentworth. She was born in 1805. When her father died in 1827 his estate was found to be encumbered and self-support became necessary. A private school started by Miss Hunt and her sister brought money but she felt it was not her vocation. The care of her sister during a protracted illness drew her attention to medicine; she procured medical books and pursued investigations with the conviction that much of the ordinary practice was blind and merely experimental. In 1833 she entered the family of a Dr. and Mrs. Mott. The doctor left the care of most female patients to his wife; this care Miss Hunt shared, and by the opportunity thus afforded, supplemented theoretical knowledge by clinical observation. In 1835 she opened a consulting-room and assumed the responsibility of practicing without a medical diploma—reprehensible, but a course justified by subsequent events, for when in 1847 Miss Hunt requested permission to attend lectures at the Harvard Medical School —stating "that after twelve years' practice which had become extensive, it would be evident to them that the request must proceed from no want of patronage, but simply from a desire for such scientific knowledge as could be imparted by their professors"—her request was promptly refused. After the graduation of Elizabeth Blackwell (q. v.) at Geneva in 1849, "Miss Hunt thought the times might be more favorable and in 1850 repeated her application at Harvard. In mobile America great changes of sentiment can be effected in three years—five out of the seven members of the faculty voted that Miss Hunt be admitted to the lectures on the usual terms. But, on the eve of success, Miss Hunt's cause was shipwrecked by collision and entanglement with that of another of those unenfranchised to the privileges of

learning. At the beginning of the session two colored men had appeared among the students and created by their presence intense dissatisfaction. When, as if to crown this outrage it was announced that a woman was also about to be admitted, the students felt their cup of humiliation was full and in indignation boiled over in a general meeting. The compliant faculty bowed their heads to the storm, and to avoid the obloquy of rejecting under pressure a perfectly reasonable request, advised the "female" student to withdraw her petition. This she did, and the majesty of Harvard, already endangered by the presence of the negro, was saved from the further peril of the woman. Miss Hunt returned to her private medical practice which, though unsanctioned by law and condemned by learning, steadily increased and with such success that she became widely known."

In 1853 the Woman's Medical College of Philadelphia gave her the honorary M. D. In 1856 she wrote "Glances and Glimpses, or Fifty Years' Social including Twenty Years' Professional Life." She died in Boston, January 2, 1875, leaving in her will a fund of $1000. the income from which was to be expended for the purchase of medical text books for women students in the New England states. The Boston Medical Library became trustee of this fund in 1923.

Hunt, Henry Hastings (1842-1894), physician of Gorham, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 579.

HUNT, John Gibbons (1826-1893), of Philadelphia, physician and microscopist, was born at Darby, Pennsylvania, July 26, 1826, the son of Abram Gibbons Hunt, a farmer, and Massey Jones. He received an M. D. at the University of Pennsylvania in 1850 with a thesis on "Histology of Muscular Tissue." In 1868 he became a member of the Academy of Natural Sciences; in 1884 a fellow of the College of Physicians of Philadelphia; he was professor of histology and microscopy in the Woman's Medical College, Philadelphia, 1872-1890. During the Civil War he was acting assistant surgeon U. S. Army in charge of Summit House Hospital, Philadelphia.

Except for a few articles in the "Cincinnati Medical News" and other journals he wrote little. He was associated with Joseph Zentmayer, our early great manufacturer of microscopic appliances. Professor Harshberger ("Botanists of Philadelphia," page 257) says of Hunt: "As a manipulator of the microscope and preparer of objects he was unsurpassed, but he looked on his skill as only the means to the end—a knowledge of the objects themselves. Having made himself familiar with animal histology, he very early turned his attention to the anatomy of plants of which he acquired an intimate acquaintance. He was one of the very first to apply to plants the methods of staining that were in use for animal tissues, having begun before 1850." He began double staining vegetal tissues in 1853 by methods afterwards published by Dr. Beatty, [George Dobbin Beatty (q. v.)] of Baltimore, whose articles were widely quoted in the journals of this country and Europe.

Hunt was founder of the Biological and Microscopical Sections of the Academy of Natural Sciences; he was Conservator, 1872 to 1880. Dr. Harshberger further says of him that "although master of the most refined technique, he never received a large share of popular recognition on account of his native modesty and reserve."

He married Anna Maria White, daughter of Joseph White of Philadelphia in 1851. They had three daughters who were practicing physicians.

Dr. Hunt died April 29, 1893, at Landsdowne, Pennsylvania.

HUNT, Thomas (1808-1867), of New Orleans, founder of the Medical College in Louisiana, was born in Charleston, South Carolina, May 18, 1808, and died in New Orleans, March 20, 1867. Of good lineage, his early education was under the accomplished scholar Bishop England, his studies being directed to law, but his readings embraced all branches of literature and science. His love of the classics adhered to him through life and his proficiency in Greek was profound. Selecting medicine as his profession, he received his M. D. from the University of Pennsylvania in 1829, then went to Paris, but was soon recalled by the death of his father and entered at once into practice. At the age of twenty-three he lectured on anatomy and operative surgery and taught practical anatomy. When the "Amelia" was wrecked off Folly Island in 1832 he distinguished himself with Dr. Warren Stone (q. v.), a passenger on that vessel, by his treatment and management of the cholera which attacked the unfortunate crew and voyagers. In 1833 he removed to New Orleans, again to face cholera and to render himself prominent in the

warfare against this disease. He was soon elected surgeon to the Charity Hospital, but held the office for a short while as it interfered with larger plans. He entered actively into the enterprise of establishing the Medical College in Louisiana. The introductory lecture on anatomy he delivered in 1834 and the existence and growth of the university were largely due to Hunt. He held the chairs of anatomy and physiology, pathological anatomy and practice, physiology and pathology and special pathology; was dean of the faculty and at the time of his death president of the University of Louisiana, also surgeon to the Marine Hospital, New Orleans.

He wrote a good deal on dermatology, his pamphlets going through three editions; these included: "Practical Observations on Certain Diseases of the Skin generally pronounced Incurable," London, 1847; "Memoir of the Medicinal Uses of Arsenic," 1849.

JANE GREY ROGERS.

HUNT, William (1825-1896), surgeon to the Pennsylvania Hospital, writer, the son of Uriah and Elizabeth Shreve Hunt, was born September 26, 1825, at 106 North Fourth Street, Philadelphia, a descendant of a long line of Quakers, who came to America about 1860. He went, as a boy, to a Friends' School, then began to study medicine under Dr. George B. Wood (q. v.), and was graduated at the University of Pennsylvania in 1849.

Dr. Hunt was elected to the surgical staff of the Episcopal Hospital in 1853, and served here and at the Wills Hospital, until he was appointed attending surgeon to the Pennsylvania Hospital in 1863, finishing his term after a service of thirty years, having inaugurated in 1870 the plan of a six months continuous service. He was an incorporator of the Microscopical and Biological Section of the Academy of Natural Sciences, and he helped to form the "Biological Club" and the "Surgical Club," where members met to display specimens and partake, at first, of such refreshments as crackers, cheese and ale, and later, regular dinners. He wrote a good deal, and was for many years on the staff of the "Annual of the Universal Medical Sciences." and with Dr. T. G. Morton, (q. v.) compiled a "History of Surgery in the Pennsylvania Hospital." The "Pennsylvania Hospital Reports" were edited by him and by Dr. J. M. DaCosta, (q.v.) and he did the same for Holmes's "System of Surgery" (the American edition), besides contributing to the "International Encyclopedia of Surgery." But the writing, the operating and the pleasant entertaining of friends came to an end when he was severely injured by being run over, in 1887, and although he worked at intervals, the results of the accident ended in his death on April 17, 1896, at his home in Philadelphia.

Among his appointments may be noted: resident physician, Pennsylvania Hospital; demonstrator of anatomy, University of Pennsylvania; assistant surgeon, United States Army; surgeon to the Orthopedic Hospital; fellow of the College of Physicians; president, Philadelphia Academy of Surgery; honorary fellow, Americal Surgical Association. Among Dr. Hunt's writings are to be mentioned: "Clinical Notes and Reflections"; "Diabetic Gangrene"; "Ossification of the Crystalline Lens"; "The History of Toxemia"; "Unusual Surgical Cases"; "Traumatic Rupture of the Urethra"; "Surgery in the Pennsylvania Hospital, being an Epitome of the Hospital since 1756," Philadelphia, 1880.

He married, in 1856, Rebecca T., daughter of Richard Price, and had three children, William, George and Margaret.

HUNTER, William (1729-1777), of Newport, Rhode Island, was born in 1729 in Scotland and educated under the elder Monro, at Edinburgh, afterwards studying with great assiduity, both at Edinburgh and Leyden. He came to Rhode Island about 1752, gave lectures at Newport, on anatomy, on the history of anatomy, and comparative anatomy, during the years 1754-56, these being among the first lectures given in New England. He was soon appointed by the colony of Rhode Island, surgeon to the troops sent by them to Canada, and afterwards he returned to Newport. He married the daughter of Godfrey Malbone. Independent of his lectures, his literary contributions in behalf of his profession were principally letters addressed to his London namesakes. He was a most eminently successful practitioner, as well as operator and obstetrician. He was a very handsome man, his manners courtly and amiable, his opinions liberal. His medical library was the largest in New England at his day, and contained most of the standard Greek and Latin authors of antiquity, as well as the modern works of his own time. The latter were mostly dispersed by the accidents of the Revolutionary War; what remained of the former were distributed to individuals and medical institutions by his only son, the Hon. William Hunter. According to the New York

"Medical Repositary," his manuscript lectures were said still to be in existence.

He died at Newport in 1777.

HUNTINGTON, David Low (1834-1899), editor of the Medical and Surgical History of the [civil] war, army surgeon, was graduated in arts at Yale in (1855), and in medicine at the University of Pennsylvania in 1857. In 1862 he entered the regular army as assistant surgeon and served mostly in the West. He was medical officer on the staff of Gen. Grant, medical director of the army of the Tennessee, and accompanied Sherman on his famous march to the sea. Huntington was present in many battles of the war and rendered valuable service at Champion Hills, Vicksburg, Missionary Ridge, Resaca, Dallas and Kenesaw Mountain. After the war he was stationed at different army posts east and west, and from 1875 to 1880 was surgeon in charge of the Soldiers' Home at Washington, from 1880 to 1887, working in the surgeon-general's office. After the death of Otis, Huntington completed the remaining volumes of the well known "Medical and Surgical History of the War." The last volume was published in 1883. During the last years of his military service, Huntington was in charge of the Army Medical Museum and Library. After his retirement in 1898 he travelled in Europe for his health, when death suddenly overtook him at Rome, December 20, 1899.

ALBERT ALLEMANN.

HUNTINGTON, Elisha (1796-1865), mayor of Lowell, Massachusetts, lieutenant-governor of the state, and author of a memoir of the eminent Dr. Elisha Bartlett (q. v.) (1856), was born in Topsfield, Massachusetts, April 9, 1796. He was the son of the Rev. Asahel Huntington, minister of that town for nearly twenty-five years, and of his wife, a daughter of Dr. Elisha Lord of Pomfret, Connecticut. Entering Dartmouth College at fifteen, he was graduated in 1815 and studied medicine with Dr. Bradstreet of Newburyport, later attending the Yale Medical School and getting his M. D. there in 1823. He settled in Lowell the following year and enjoyed a large practice, soon being drawn into the public service. While Lowell was yet a town, Dr. Huntington served on the board of selectmen and on the school committee. After being three times elected an alderman, he filled the office of mayor in 1839, and was re-elected seven times. Having declined to be again a candidate, the "great panic" of 1859 led the citizens to nominate him unanimously, such confidence had they in his ability to manage the city in a time of stress. For one year, 1853, he was lieutenant-governor of the state under Governor Clifford; for two years president of the Middlesex North District Medical Society, and in 1855-57 he presided over the Massachusetts Medical Society. One of his last acts was to attend the fiftieth anniversary of his class at Dartmouth, even though in impaired health. He died at home, December 13, 1865.

HUNTINGTON, George (1851-1916), who described Huntington's Chorea. In 1633, Simon Huntington, of Norwich, England, having sailed with his family for America, died on shipboard; the widow and children landed probably at Saybrook, Connecticut. Abel, a great-great-great-grandson, born in Norwich, Connecticut, February 21, 1777, studied medicine there with Dr. Philemon Tracy, married Frances Lee, the daughter of a revolutionary officer, and settled in Easthampton, Long Island, where he became the leading physician and was among the first to perform lithotomy. He early took advantage of Jenner's discovery and was Presidential Elector, New York State Senator and Congressman during the administration of Andrew Jackson, as well as a member of the committee to revise the constitution of the State of New York. An only son, George Lee, was born in Easthampton, July 15, 1811, studied medicine with his father, was a special student of Valentine Mott (q. v.), and, after receiving his medical degree from the New York University, assisted his father. Mary Hoogland, of New York, a descendant of a fine old Knickerbocker family and a woman of education and force of character, was his wife; two sons chose the medical profession, one of them, Abel, for many years the Medical Director of the New York Life Insurance Company, and George who was born April 9, 1851, at Easthampton, where he was a student at the old Clinton Academy. He studied medicine first with his father and then obtained his degree from the College of Physicians and Surgeons of New York in 1871 with a thesis on opium. After graduation, he went to practice at Pomeroy, Ohio, at the suggestion of a cousin living there, where he met Mary Elizabeth Hackard, the daughter of a judge, whom he married in 1874. They had five children. Since the Pomeroy profession was overcrowded, he returned to New York and settled in La Grangeville; here he re-

mained until 1901 when ill health compelled him to go to Asheville, North Carolina, where also he practiced. In 1903, with health sufficiently restored, he returned to New York and settled at Hopewell Junction. He was the health officer of East Fishkill and visiting physician to the Matteawan General Hospital. In 1910, his health failing, he went to his son Edwin Horton, a physician in Cairo, New York, where he died March 3, 1916.

Dr. Huntington was an artist and musician of ability and a lover of the out-of-doors. Before leaving to practice in Pomeroy, he assisted his father in attending the Easthampton families who were of old New England stock and much intermarried. Among them there prevailed a peculiar nervous affection, long since recognized by his grandfather Abel, the description of which gave Dr. Huntington his place in the annals of scientific medicine. The cases he describes were classified by his father who also carefully revised the manuscript of the original article. This endemic, hereditary, and fortunately rare disease is now known as Huntington's chorea—a major chorea appearing in adult life and progressing with appalling symptoms to its final exodus. It is also known as chronic chorea, chorea of the ages, family chorea, and choreic dementia. Apparently confined to certain families, among whom it is spoken of with horror and only under dire necessity as "that disorder," it often terminates in insanity or suicide.

HUPP, John Cox (1819-1908), of Wheeling, West Virginia, skilled physician and public servant of unusual breadth of view and numerous interests, was born in Donegal, Washington County, Pennsylvania, November 24, 1819, son of John and Ann Cox Hupp. His grandfather was John Hupp, pioneer, who was killed while defending Miller's Block-House in Washington County, Pennsylvania, on Easter Sunday, 1782. His great grandfather was Colonel Isaac Cox, whose activities in the Revolutionary War are well known in Western Pennsylvania. Young Hupp was educated at West Alexander Academy and at Washington College, graduating in 1844; he studied medicine with F. J. LeMoyne and graduated at Jefferson Medical College in 1847, settling to practice in Wheeling, West Virginia, which remained his home the rest of his life. He was a founder of the medical society of the state of West Virginia; in 1870 he brought chloral hydrate to the notice of the physicians of Wheeling. His interest in education led him to make a successful effort to bring free-school privileges to the negro children of his town. He witnessed the cremation of Baron de Palm at Washington, Pennsylvania, September 4, 1876.

His writings include: "Placenta Praevia" (1863); "Vaccination and Its Protecting Powers" (1870); "Chloral in Puerperal Insanity" (1870); "Ruptured Uterus" (1875); "Encephaloid Abdominal Tumor" (1875). He wrote a "Biographical Sketch of Joseph Thoburn, M. D.," at the request of the physicians of Wheeling, in 1865; in 1870 he offered a memorial before the West Virginia Legislature, on the establishment of the office of state geologist, and in 1877 a memorial on the establishment of a state board of health. Dr. Hupp was physician to the Ohio County Almshouse in 1850, and in 1863 was appointed physician to the prisoners of the United States District Court; in 1864 he was physician and secretary to the Wheeling Board of Health; in 1869 he served as secretary of the Section on Practice of Medicine and Obstetrics of the American Medical Association, and was state vaccine commissioner, from the formation of the Commonwealth until 1883.

In 1853 he married Caroline Louisa, daughter of A. S. Todd (q. v.). Dr. Frank LeMoyne Hupp, eminent physician of Wheeling, was their son.

Dr. Hupp died November 19, 1908, of senile myocarditis. HOWARD A. KELLY.

Hurd, Anson (1824-1910), surgeon in the Civil War from Indiana. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 582-583.

HURD, Edward Payson (1838-1899), of Newburyport, Massachusetts, was born at Newport, Canada, August 29, 1838, where his father, Samuel Hurd, was postmaster, justice of the peace and county treasurer. The boy studied at Eaton Academy, at St. Francis College, Richmond, Quebec, and in 1861 entered McGill Medical School, where he was graduated in 1865 with highest honors, winning the Holmes gold medal. For one year he held the position of "dresser" and teacher at McGill, until his marriage, December 1, 1866, to Sarah Elizabeth Campbell, of Newburyport, Massachusetts. For four subsequent years he practiced at Danville, and at Smithfalls in Canada, where he had a large country practice. Two daughters, Kate Campbell and Mabeth, were born in Canada, and for the sake of their education he moved to Mrs.

Hurd's old home at Newburyport, where in 1872 a son, Randolph Campbell, was born. Of these three children the elder daughter and the son became physicians.

In 1883 he was one of the organizers of the Anna Jacques Hospital, and a member of its staff, as long as he lived. His office practice brought him much surgery, as he was harbor physician for many years, and was often obliged to amputate frozen feet or crushed hands, or to sew up long scalp wounds by flickering gas light, assisted only by one of his children. His success was excellent, because he was a quick operator and used plenty of hot water, even before the modern rules of asepsis had been formulated.

For many years Dr. Hurd was city physician; for two years, he was president of the Essex North District Medical Society; a member of the Massachusetts Medical Society, and also of the Climatological Society, and of the Société de Médicine Pratique de Paris, France. After 1882 Dr. Hurd contributed regularly to the "New York Medical Record" and the "Boston Medical and Surgical Journal" and other medical publications. His writings from 1885 until his death in 1899, consisted of translations, for the most part, and may be found in his autobiography in the History of Essex County, Massachusetts.

From 1893 until his death he was professor of pathology and dermatology at the College of Physicians and Surgeons, Boston, and delivered courses of lectures in both these subjects, every year. He never took any vacation, and his recreation consisted in the study of Greek and Latin authors and the French poets. Every Sunday afternoon, when possible, he devoted a couple of hours to reading aloud to a friend, the stirring Homeric poems, or lighter verses from Horace.

He died of pneumonia, February 24, 1899, aged sixty.

KATE CAMPBELL HURD MEAD.

HUSK, Carlos Ellsworth (1872-1916), sanitarian of Mexico, was born December 19, 1872, at Shabbona, Illinois, and died at Laredo, Texas, March 20, 1916. Husk was a corporation and mine surgeon, who became head of the medical interests of a large chain of mining industries in Mexico, a man conspicuous in public sanitary matters, and fearless and aggressive in promoting the public welfare; he finally laid down his life in endeavoring to put out a typhus epidemic. His father, William Husk, was a retired merchant; his mother was Celia Norton. Husk passed through the High School at Aurora, Illinois, and taught in the public schools until 1895. He resigned as principal of the Western High School, to study medicine at the College of Physicians and Surgeons in Chicago, where he was graduated in 1896 and in the same year married Corena B. Kirkpatrick of Waterman, Illinois, who survived him.

His first position was that of company surgeon for the American Smelting and Refining Company at Tepezala, Aguascalientes. He afterwards went to Santa Barbara, Chihuahua, Mexico, and became surgeon-in-chief of the company's smelting interests in 1911. Though an American citizen, he held the position of official municipal surgeon in Santa Barbara, where he gained fame by his original, drastic and effective methods of stamping out an epidemic of malignant smallpox. In Mexico, smallpox, fully erupted, stalks the streets and jostles the crowds, thronging the open air markets in the Plaza; so hopeless is the situation that mothers carry their little children to the bedside of the affected patient to insure catching the disease, to have it over with, so as to avoid the trouble and expense of raising them to die of it later on. Husk, as generalissimo, simply herded all who had smallpox and all the suspects, and segregated and watched them, while they tore down and burned houses, clothing and bedding, in a manner that seemed reckless and appalling to the astonished natives; but no opposition, however sturdy, checked the triumphal march of the vaccination squad; the epidemic was speedily checked, and soon passed into Mexico's long history of similar events.

Husk's warm heart knew no class distinction. He was as devoted to the poor and the illiterate as to the rich. During the bad epidemic of typhus in Mexico in 1916, he helped to organize the scientific expedition for the study and control of the disease, which was financed by the Mount Sinai Hospital of New York City, including on its staff, Doctors Peter Olitsky and Bernard Denzer. A hospital was established in the centre of the affected zone at Matahuala, where the staff experimented upon themselves, and then upon others, with an anti-typhus vaccine; all school children also were inoculated. The most good came from convincing the Mexicans of the imperative necessity for killing the lice. The interiors of all public buildings and schools were sprayed with a mixture of equal parts of hot soapsuds and kerosene and

with these preventive measures, research work went on at the hospital laboratory, the results of which can be partly estimated by the low mortality—only 14 per cent. among the Mexicans. Laboratory studies only served to confirm the growing conviction that the body louse was the carrier of the infection. The germ was isolated from the louse and the disease reproduced in guinea pigs. Husk, as he worked, became infected and developed a fever as high as 104.5° F.; he refused, however, to go to bed, and continued toiling for two days, tabulating results and preparing microscopic specimens, so that the work might go on. He then laid down his tools, and yielded up his life. His services were so appreciated by the Mexicans, that, notwithstanding anti-American riots at the time, a movement was set on foot to erect a monument to him. He was a debonair, gay-hearted, courageous warrior of the scientific war-path, fully aware of all the dangers, and never afraid to face them. In the midst of the great typhus epidemic there was also an outbreak of smallpox, which he handled as skilfully as the previous one.

He was a prolific writer of articles on medical and sanitary problems among the Mexicans, and of other subjects.

H. W. Jackson.

HUSTON, Robert Mendenhall (1795-1864), professor of materia medica in Jefferson Medical College, was born in Abingdon, Virginia, May 19, 1795, son of William Huston and Elizabeth Mendenhall. He entered the Medical Department of the University of Pennsylvania in 1823, and was graduated in 1825, with a thesis on "Hemorrhoids." He practiced medicine, and was professor of obstetrics and diseases of women and children in Jefferson Medical College, 1838-1841; professor materia medica and general therapeutics, 1841-1857. Resigning in 1857, he became professor emeritus; for many years he was dean of the faculty. His publications consisted largely of addresses delivered at Jefferson College; he edited the American edition of Churchill's ". . . Theory and Practice of Midwifery," Philadelphia, 1843. In 1844-1848 he was co-editor of the "Medical Examiner."

In 1819 he married Hannah, daughter of Samuel West, of Chester, a descendant of Benjamin West, Pennsylvania; they had four sons and three daughters.

Dr. Huston died in Philadelphia, Pennsylvania, August 3, 1864.

HUTCHINSON, Edwin (1840-1887). There is a piece of very concrete biography embodied in St. Elizabeth's Hospital at Utica, New York, a biography, in short, of one who, in spite of personal ill-health and short years, was long remembered for his ability as an ophthalmologist and as a founder of the hospital mentioned. The son of Holmes Hutchinson of Utica, he was educated in James Lombard's School, the Utica Academy, and at Yale, afterwards studying medicine in the Long Island College Hospital Medical School, and graduating M. D. from the New York College of Physicians and Surgeons, in 1866. Like most young men at that time he went to the war and was successively surgeon to the third Maryland Volunteer Infantry and the one hundred and thirty-seventh New York Volunteers, taking charge in the latter of Gen. Geary's hospital, under Gen. Sherman, in his famous march through Georgia. At the close of the war he settled down in New York, and became known for his surgery, especially in eye disease, though his right forearm, through an early accident, was almost immovably fixed.

He recognized the need of a hospital for the proper treatment of those who could pay, and those who could not, so, with his friend, Dr. J. E. West, an embryo hospital was established, to grow gradually larger and attract students because of its founder's skill.

In 1886 he married Miss Christine Rosswog. He found time to write valuable articles on his specialities to the "American Journal of Insanity" and the "Transactions of The New York State Medical Society." But during the last four years of his life he had to go south every winter, and succumbed at last to kidney disease, in the hospital he had founded. Only a few days before his death he joined the Roman Catholic church, though reared as a Protestant. "I loved him dearly," writes his biographer, Dr. T. H. Pooley, "for he had an amiability, a tenderness, a love of all things beautiful—rare among men."

HUTCHINSON, James (1752-1793), prominent Philadelphian, a fighter of yellow fever and a victim to that disease, was born in Wakefield, Pennsylvania, January 29, 1752. The son of Randal Hutchinson, a farmer and a member of the Society of Friends, his early education was under the tuition of Paul Preston, a distinguished teacher of the day, and he subsequently attended a school in Virginia. After the death of his father he went to live

with an uncle in Philadelphia, Israel Pemberton by name, and attended the College of Philadelphia, from which he was graduated with first honors. He began the study of medicine with Dr. Cadwalader Evans of Philadelphia, going from his tuition to the Philadelphia Medical College, where in 1774 he received a gold medal as a testimonial of his ability and attainments in chemistry. At this time the entire country was stirred by the approach of the Revolutionary War, and the freedom of Dr. Hutchinson's ideas was such that his conservative uncle thought best to send him abroad; avowedly to study in London, under the celebrated Dr. Fothergill, but really to remove him from the impending contest. His return was hastened by the political events of the times, and he came home by way of France, in 1777, as the bearer of important despatches from Dr. Franklin, to his Government. The vessel on which he sailed was attacked by a British man-of-war, when off the American coast; fearing for the safety of his despatches, he left the ship in an open boat, and landed, under the fire of the enemy. Soon after, the vessel which he had left was captured and everything he had was destroyed; his greatest loss being a medical library collected in England and France. Immediately on his arrival in America, Dr. Hutchinson joined the army as surgeon and became surgeon-general of Pennsylvania, holding that position until peace was declared, he taking a most active and decided part in favor of America. In pursuing this course of action he was well aware of the consequent loss of favor of his uncle, a well-known and influential man, who would have introduced him to an extensive practice among the most wealthy of the Society of Friends. The Friends were inclined to expel him from their society for his breach of their favorite principle of non-resistance, but after he had shown them a letter from Dr. Fothergill, of London, advising him to pursue this course, they reconsidered their decision. He was in the service of the U. S. and of Pennsylvania, from the latter part of 1778 to February, 1781; while Senior Surgeon to the Flying Hospital in the Middle Department, with only six assistants, he inoculated 3496 men at Valley Forge. After the battle of Monmouth, he went to Rhode Island as a volunteer in the expedition against that place under General Sullivan.

When Philadelphia had been evacuated by the British Army, Dr. Hutchinson was made one of the Committee of Safety, and was frequently called to headquarters at times of peculiar difficulties. He was appointed one of the trustees of the University of Pennsylvania by the Legislature, at the early age of twenty-seven, holding the position for ten years; he was given the chair of professor of materia medica and after 1791, of professor of chemistry, by that institution, was elected a member of the Philosophical Society, and made physician to the Pennsylvania Hospital, continuing in all these positions throughout his life. He was the first secretary of the College of Physicians. His abilities as a physician were universally acknowledged. At the time of the epidemic of yellow fever, in 1793, his exertions, day and night, were unceasing, but beyond his strength, and he died of that disease on September 5, 1793.

Dr. Hutchinson was twice married. His first wife was Lydia Biddle, and after her death he married Sydney Evans Howell, both of Philadelphia.

He added a winning address and dignified but charming manners to unquestioned talents and opportunities for acquiring professional distinction and enlarging his field of usefulness, and his untimely death was universally mourned. Charles Biddle states in his autobiography (1883) that Dr. James Hutchinson was "fat enough to act the character of Falstaff without stuffing." His portrait, which is in the Wistar and Horner Museum of the University of Pennsylvania, must have been painted before he attained such proportions, for he appears to be a handsome man of good figure.

HUTCHINSON, James Howell (1834-1889), of Philadelphia; noted for his brevity and correctness in speaking and writing, was born at Cintra, Portugal, where his father was engaged in business. He was brought to the United States at an early age and educated in this country. At the University of Pennsylvania in 1854, he received his B. A. and was graduated in medicine from the same university in 1858, afterwards serving as resident physician at the Pennsylvania Hospital, and then going abroad to study in the schools of Paris and Vienna. While in Europe he devoted much attention to skin diseases, and his friend and biographer, Dr. John Ashhurst (q. v.), states that he was "probably more familiar with modern dermatology than any of his contemporaries." Dr. Hutchinson began practicing medicine in Philadelphia in 1861 and, successful from the first, he acquired a large private practice besides many hon-

orable professional positions. During the Civil War he served for a time as acting assistant surgeon, United States Army, and was one of the physicians to the Children's Hospital, the Episcopal Hospital, and the Pennsylvania Hospital, to which institution his grandfather had also been physician. He was a member and eventually president of the Philadelphia Pathological Society, elected to the College of Physicians of Philadelphia in 1863, and was also a member of his county and state medical societies, and of the Association of American Physicians.

Dr. Hutchinson was noted for the correctness and dignity of his style, saying just what he meant in few but well chosen words, and rigidly avoiding all flowery excrescences and ambiguities of language. He never inflicted upon the profession or the public an independent volume, but he edited—and edited well—two reprints of Dr. Bristowe's "Practice of Medicine"; contributed elaborate articles, which have already become classical, on typhoid, typhus, and simple continued fevers, to the "System of Medicine," edited by Dr. Pepper and Dr. Starr; and was a valued contributor to the "Transactions of the College of Physicians." For more than a year he was the editor of the "Philadelphia Medical Times" in its early days. The skill with which he edited Dr. Bristowe's work was fully recognized by its author who, when the second American edition was about to appear, wrote to Dr. Hutchinson, expressing his "sense of the care and trouble . . . bestowed on the first reprint."

Dr. Hutchinson married Ann Ingersoll, and had six children. One, James P. Hutchinson, after graduating in medicine, devoted himself to the practice of surgery.

FRANCIS R. PACKARD.

HUTCHISON, Joseph Chrisman (1827-1887), surgeon of Brooklyn was born in Old Franklin, Missouri, February 22, 1827, the son of Nathaniel Hutchinson, M. D., a native of Armagh, Ireland; and of Mary Chrisman, of Fauquier County, Virginia. He graduated from the University of the State of Missouri, at Columbia, and in 1848 received his M. D. from the University of Pennsylvania, after a partial course in Jefferson Medical College. In 1849 he married Susan H., daughter of Rev. A. and Martha Cowles Benedict, of Farmington, Connecticut.

For a few years he practiced medicine in Missouri, but in 1853 removed to Brooklyn, with the interest of which, medical, sanitary, and educational, he became closely and actively identified. In 1854 he had charge of the cholera hospital in Brooklyn, and the successful treatment of cholera patients was in a large part due to his skilful and well organized efforts. His constant interest in the medical work of the city was manifested in the various positions of public medical trust held: attending surgeon to the Brooklyn Hospital, surgeon-in-chief of the Orthopedic Dispensary. The numerous hospitals to which he was attached as consulting surgeon show the confidence of their medical officers in him. With all his professional work he found time to contribute to medical literature the results of his clinical observations, in clear, concise and well digested articles, always of a practical character, and bearing evidence of being written from the bedside, rather than from the study. One of the last papers prepared by him was on "Transfusion," read before the New York Medical Association in 1884. He held membership in many societies, local, national, and international, and also added to his labors that of teacher, having held the position of lecturer on the diseases of women, from 1854 to 1856, inclusive, in the University of the City of New York, and from 1860 to 1867, that of professor of operative and clinical surgery in the Long Island College Hospital. From 1873 to 1875 he was health officer of Brooklyn. In 1880 the University of Missouri conferred its LL. D. on him. He was the author of a work on "Physiology and Hygiene for Schools" (1870), long in use throughout the country. He wrote also: "History and Observations on Asiatic Cholera in Brooklyn, New York, in 1854," and "Contributions to Orthopedic Surgery" (1880).

The suffering and distress that are incident to a weak and failing heart and pulmonary edema were borne with a patience and bravery that were the outcome of a life-long self-control and a reliance on power that is more than human; but the end was quite painless. on July 17, 1887, in Brooklyn.

Hyatt, Elijah H. (1827-1898), professor of materia medica and therapeutics, in Columbus, Ohio, Medical College. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920. page 587.

HYDE, Frederick (1870-1887), dean of the medical department of Syracuse University, New York, surgeon, was born at Whitney's Point, New York, January 27, 1807. His

ancestors came from England and settled in Norwich, Connecticut, in 1660; his grandfather, Caleb Hyde, and greatuncles, Elijah, Eliphalet and Ebenezer, took an active part in the Revolution and Caleb Hyde, who had moved to Lenox, Massachusetts, went to live in central New York, where he became major-general of the militia and later a member of the state senate. Caleb Hyde's thirteenth child was Ebby Hyde, at different times farmer, merchant and keeper of a tavern; he was father of the subject of our sketch. Frederick Hyde got what education he could from such facilities as his neighborhood afforded, and before he was fifteen was teaching school, and acquiring knowledge to enable him to study medicine. He began with Dr. Hiram Moe, of Lansing, New York, and continued with Dr. Horace Bronson of Virgil, New York, then, after a course of lectures at the College of Physicians of Western New York, he was able, in 1833, to take out a county license to practice; two further courses gave him a diploma in 1836. He began to practice in partnership with Dr. Miles Goodyear of Courtland, New York, who had graduated with the first medical class of Yale University, and was a man of large influence in his community; his daughter, Elvira, became the wife of Dr. Hyde, in 1838. In 1845 the two physicians opened a private school of anatomy and surgery, and conducted dissections and gave demonstrations before the students. In 1853 Hyde was appointed professor of obstetrics and diseases of children and medical jurisprudence, in Geneva Medical College, and in 1855 he made the agreeable change to the chair of surgery. When Geneva Medical College was transferred to the University of Syracuse, which created a Medical Department, Hyde became dean of the new faculty, and continued his services as professor. He was instrumental in bringing about a graded form of instruction in medicine, and "in securing for medical students primarily, and for the pfotection of the people as a consequence, a higher scale of education and a better type of practitioners" (Wey). His interest in the advancement of medical education was further shown in an address as president of the State Medical Society (1865), when he laid stress on the accountability of physicians to their pupils. He was a member of the American Medical Association, from its organization in 1847; was elected twice to the presidency of the Medical Society of the County of Cortland, and was president of the Medical Association of Central New York. In 1884 he was a delegate to the British Medical Association. He was one of the vice-presidents of the section of Military and Naval Surgery at the International Medical Congress, held at Washington in 1887, and read a paper on "Treatment of Gunshot Wounds in Joints"—he was appointed to the same position in the meeting of the Congress which was held in Berlin in 1890. He was president of the State Normal School at Cortland, and president of the Cortland Savings Bank.

His papers include "Fractures of the Cranium"; "Hernia and its Complications"; "The Taxis in Strangulated Hernia"; "Embolism and Thrombosis"; "Treatment of Wounds with or without Antiseptics"; "Some notes of 267 Cases of Dislocated Hip, occurring in the State of New York."

Dr. Hyde's death was caused by devotion to professional duties; he performed a surgical operation after a railroad accident and remained with his patient several hours, exposed to cold and without food, and returning home, he was immediately called to attend a neighbor. An illness followed from which he failed to rally; he died on October 15, 1887.

A son was Dr. Miles Goodyear Hyde, physician and author 1842-), of Cortland, A. B. and A. M. Yale University, and M. D. Gevena Medical College.

HYDE, James Nevins (1840-1910), Chicago dermatologist, was born in Norwich, Connecticut, June 21, 1840, the son of Edward Goodrich Hyde who was for some years a merchant of New Orleans, Louisiana, and Hannah Huntington Thomas Hyde. He prepared for college at Phillips Academy, Andover, Massachusetts, and entered Yale College from New Rochelle, New York, although after the freshman year his residence was Cincinnati, Ohio. While in college he ranked high, and received a prize in composition, in his sophomore year, and also a prize for a poem. He seems to have had quite a poetical leaning, and his "Parting Ode," written for Presentation Day, has been cherished and remembered for its beauty of form and general excellence. Again, in 1896, on the thirty-fifth anniversary of his graduation, he contributed a fine poem of considerable length, entitled "The Ivy of sixty-one." He received the degree of A. B. from Yale in 1861, and that of A. M. in 1865. Immediately after his graduation in 1861 he began the study of medicine in the College of Physicians and Surgeons,

New York, under Doctor William H. Draper (q. v.); but in the following summer we find him helping in transferring the sick and wounded of McClellan's army to Northern ports, during the Peninsula campaign, and in caring for the wounded in the battles of Malvern Hill and Fair Oakes. He spent ten months in the autumn of 1862, and the following winter, in the hospitals of Washington, and in July, 1863, he was appointed acting assistant surgeon of Volunteers, and ordered to the North Atlantic Blockading Squadron, where he served on several vessels, and was then put in charge of the naval hospital at Newberne, North Carolina. He obtained his commission as assistant surgeon in the regular navy, in October, 1863, and was assigned to the "San Jacinto" and cruised in the Gulf of Mexico during 1864. While on hospital duty at Key West, Florida, an epidemic of yellow fever occurred, in which his two superior officers died, leaving him in charge. His success in fighting the disease was so great that he was the recipient of a special letter of appreciation from the Secretary of the Navy. In the autumn of 1865 he was honored by being commissioned by President Lincoln to join the "Ticonderoga" of the European Squadron, under Admiral Farragut, on its memorable voyage to various European ports, and through the Mediterranean. During his voyage he employed his time to good medical advantage in the countries visited. Returning in 1867, he was made past assistant surgeon, and served for one year at the Clare Naval Hospital in Washington. He resigned from the Navy in 1868, and after taking the second course of medical lectures at the University of Pennsylvania, received his M. D. degree from that school in 1869.

From 1869 until his death, Dr. Hyde practiced the profession of medicine in Chicago, making a specialty of the subject of dermatology, in which he was one of the pioneers. His first appointment was that of lecturer on dermatology in the Rush Medical College, in 1873, a position that he held until 1876, when he was made professor of dermatology in the Northwestern University. In 1879 he was chosen professor of skin, genito-urinary and venereal diseases, in Rush Medical College (now affiliated with Chicago University) and this appointment he held up to the time of his death. From 1902 to 1910 he was professorial lecturer on dermatology at the University of Chicago. In 1881 he received an "ad eundem" degree in medicine from Rush Medical College. Many other medical honors and appointments came to Dr. Hyde during the forty-one years of his active professional life in Chicago. He was attending dermatologist to the Presbyterian, Michael Reese, Augustana and Children's Memorial hospitals, and to the Orphan Asylum of the City of Chicago. For many years he held the position of secretary of the council of administration and of the faculty of Rush Medical College. He served as United States examining surgeon for pensions, and as surgeon of the Wabash, St. Louis and Pacific Railway. He was a member of the American Medical Association; of the Congress of American Physicians and Surgeons; of the Chicago Medical, Chicago Pathological and Chicago Dermatological societies; of the Illinois State Medical Society; of the Society of Medical History of Chicago; corresponding member of the Société Française de Dermatologie et de Syphilographie; corresponding member of the Wiener Dermatologische Gesellschaft; corresponding member of the Berlin Dermatologische Gesellschaft; and honorary member of the Societa Italiana de Dermatologia e Sifilografia.

Dr. Hyde was identified with the American Dermatological Association from its inception, and was twice its president, first in 1881 and again in 1896. He was a regular attendant at its meetings, served on important committees, and presented statistical reports, besides contributing a paper on some subject of interest at almost every meeting. He always took part in the discussions of the society, and was fitly called "a spirited debater" by one of his long-time colleagues. In 1905 he was secretary for America of the Fifth International Dermatological Congress. He contributed more than one hundred special articles on dermatological subjects all of which were elaborated with much patience and care. His monumental work, however, was his "Treatise on Diseases of the Skin," first published in 1883, which ran through eight editions, and was finally double the size of its initial number.

In civil life Dr. Hyde became one of the most eminent citizens of Chicago. He was a prominent member of Christ Church, where he officiated as chorister in the Sunday school, besides teaching a class of boys. He was, for a number of years, one of the directors of the Synod of Chicago, and made several contributions to the "Evangelical Episcopalian," among them a valuable paper entitled "Has the Reformed Episcopal Church the Historic Episcopate?" He presented many papers to the Chicago Literary Club,

on topics other than medicine, and was the author of "Early Medical Chicago," "Historical Strawberries," and "Asleep and Awake." He was a member of the Society of the Sons of the American Revolution, of the Society of Colonial Wars, and of the Society of Mayflower Descendants. He belonged to the University, Literary, Onwentsia, and Saddle and Cycle clubs of Chicago.

He was married on July 31, 1872, to Alice Louise Griswold of Chicago, and had two sons, Charles Cheney Hyde, an attorney-at-law and professor of international law in Northwestern University, and a child of his old age, James Nevins Hyde, Junior, born in 1909. Dr. Hyde died suddenly at his summer residence at Prout's Neck, Maine, on September 6, 1910, at the age of seventy years.

He flooded everything he did with his energy and enthusiasm. From this, it resulted that his writings may sometimes be criticised for an exuberance of diction and fancy, in places where a simple lucid statement of fact would be more pertinent. As a teacher he was most successful, and his dermatological clinic at the Rush Medical College was held in high esteem. His punctuality at this clinic during many years of service was notable in the case of so busy a practitioner. His service in the college faculty was also very active, and he was closely identified with every forward movement for improving the policies and activities of this institution. Dr. Hyde's personality was most engaging, and his influence over his patients and colleagues was thus greatly favored. Apart from his scientific contributions he did much to strengthen the dignity and fair repute of his profession.

JOHN T. BOWEN.

HYNDMAN, James Gilmour (1853-1904), professor in the Medical College of Ohio, was born in Cincinnati, Ohio, September 12, 1853, and died in that city, September 18, 1904. He was the son of William Graves and Barbara Gilmour Hyndman, natives of the north of Ireland, who came to America in their early childhood. Hyndman received his education in the public schools, and graduated from Woodward High School in 1870, when seventeen. He began to study medicine under Dr. James T. Whittaker (q. v.), and in 1872 entered the Cincinnati Hospital as interne and remained in that capacity for two years. In 1874 he graduated from the Medical College of Ohio, Cincinnati, having served as interne. In the same year he began to practice, and in July became assistant editor, and in 1875 co-editor of "The Clinic," a journal then published by the Medical College of Ohio, Dr. J. T. Whittaker being editor. In 1875 he was made physician to the dispensary and assistant to the chair of physiology in the Medical College of Ohio, and among other appointments had that of assistant to the chair of theory and practice, 1875; lecturer on laryngology and physical diagnosis, 1877; professor of chemistry, 1879; chair of laryngology, 1894. He was a most excellent teacher, and for several years he was consulting laryngologist to the German Hospital of Cincinnati. Dr. Hyndman was a ripe scholar and one of the translators of "Ziemssen's Cyclopedia of Medicine."

On June 20, 1883, he married Mary E. Mitchell, daughter of Samuel M. Mitchell of Martinsville, Indiana. They had no children. Hyndman died in Cincinnati, September 18, 1904, of appendicitis.

A. G. DRURY.

INGALS, Ephraim (1823-1900), prominent physician of Chicago, was descended from the Edmund Ingalls who, coming from Lincolnshire, England, with Governor Endicott's colony (landing at Salem, Massachusetts, in 1628), was the first settler of Lynn, Massachusetts. Ephraim was the youngest of nine children and was born in Abington, Connecticut, May 26, 1823. Left an orphan at the age of eight he had to work for his support and in 1837 went to Lee County, Illinois, where a branch of the Ingals family had settled, and worked on a farm for three years. He went to school, but having small means manual labor was combined with study. From 1845 to 1847 he attended Rush Medical College and graduated in February, 1847. He settled at Lee Center, Illinois, and practiced there for ten years, then moved to Chicago meeting with success as a general practitioner. He was associated with Daniel Brainard (q.v.) and De Laskie Miller in running the "Northwestern Medical and Surgical Journal"; he succeeded John H. Rauch (q. v.) as professor of materia medica and therapeutics at Rush Medical College (1859). Although not a brilliant lecturer he was a good teacher, and remained at the college until 1871, when he resigned and was made emeritus professor; he was treasurer of the college part of the time and was active in the construction of a new building; his private practice pressed him and he was sometimes forced to go to a morning lecture without having slept the night before. His broad interest in

the profession led him to suggest building a medical library for the use of physicians at large, but when he learned that the trustees of the Newberry Library had planned for a Medical Library Department, he heartily joined in this effort, and became specially active in advancing the standards of medical education. He believed in a better general education for students who were to study medicine and longer terms of graded instruction in college before graduation.

He strongly advocated that Rush Medical College should become the medical department of the University of Chicago and gave $25,000 to the college when the affiliation was brought about. Ingals was a leading spirit in Rush Medical College which was the object of his chief medical interest, but his generosity went beyond this, for he gave $10,000 toward constructing the laboratory building of the Medical Department of Northwestern University.

Dr. Ingals' daughter, Lucy S., became the wife of Ephraim Fletcher Ingals (q. v.).

INGALS, Ephraim Fletcher (1848-1918), of Chicago, laryngologist, medical educator, was born in Lee Center, Lee County, Ill., Sept. 29, 1848, the second son of Charles F. and Sarah H. Ingals, whose ancestors were early settlers in America. After a common school and seminary education, he went to Chicago and lived with his uncle, Dr. Ephraim Ingals (q. v.), professor of materia medica and therapeutics in Rush Medical College, under whose advice he entered that college as a student, graduating in 1871 with the degree of M. D. From 1871 to 1873 he was assistant professor of materia medica, and in 1874 lecturer on diseases of the chest and physical diagnosis in Rush Medical College, professor of laryngology 1883 to 1890 and of practice of medicine 1890 to 1893. Under various but similar titles he continued his work there until his death, being also comptroller after 1898. He was professor of diseases of the throat and chest in the Northwestern University Women's Medical School, 1879 to 1898, professor of laryngology and rhinology in the Chicago Polyclinic after 1890 and from 1901 lecturer on medicine in the University of Chicago. Other positions, too numerous to mention, were filled by him with much credit. In connection with a large private and hospital practice he was also an active and influential member of many of the most important national societies; a charter member of the American Laryngological Association in 1878 and its president in 1887; he attended nearly all its annual meetings and was always to be depended on for a carefully prepared paper and discussion. Of the American Climatological Association he was also a charter member and president, as well as a member of the American Laryngological, Rhinological and Otological Society and chairman of the section on laryngology of the Pan-American Congress in 1883.

A subject in which he always felt great interest was medical education, in its highest and scientific sense. As early as 1879 he read a paper on "How shall the degree of M. D. be conferred?" and later, on the "Necessity of Modern Medical Colleges"; he made the report of a special committee on medical education in Illinois. He was one of those most instrumental in urging and bringing about the important affiliation of Rush Medical College with the University of Chicago. He had much to do with convincing President Harper of the University of the great value of this union, both as regards medical progress and as an extension of the usefulness of the university. As comptroller of the medical college his long years of service were invaluable and his business-like methods were appreciated by friends of medical education, who were the more disposed to contribute to an institution where his influence and methods were paramount. His most recent society work was in connection with the formation of the Institute of Medicine of Chicago. In 1914 he called a meeting at the University Club of the leading men of the profession of Chicago, with the idea of taking steps toward starting an Institute. The work of the American Medical Association interested him for many years and he served as trustee for six years.

His largest literary production was his book on "Diseases of the Chest, Throat and Nasal Cavities," N. Y., 1881, more than half of the pages of which were devoted to diseases of the lungs and heart. The second edition, 1892, on the other hand, was much more than half given over to the nose and throat. His medical papers, about 150, appeared in various journals, and their titles are to be found in the Index Catalogue of the Surgeon-General's Library. Many of the important articles on his special work are contained in the Transactions of the American Laryngological Association. A subject to which he gave much clinical study was bronchoscopy, for which he ingeniously devised or modified many instruments. He gave even more atten-

tion to an operation for intranasal drainage of the frontal sinuses, presenting a number of papers, which always excited great interest and often criticism, impelling him to further effort to show the correctness of his point of view. The treatment of fibrous tumors of the nasopharynx, immunization treatment of hay fever, intubation, laryngeal phthisis, were other subjects which claimed his attention and on which he wrote.

His last contribution was an article on angina pectoris, finished while he was lying in bed during the closing period of his life. It was a characterstic thing for him to do—to use his own illness as a text for a discussion that might be of benefit to humanity. The paper was read at a meeting of the Institute of Medicine, March 28, 1918, and he died in a paroxysm of angina April 30, only a month later.

In 1876 he married Lucy S., daughter of Dr. Ephraim Ingals, his uncle, and had seven children, four of whom, with their mother, survived him. JOHN W. FARLOW.

INGALLS, William (1769-1851). According to S. D. Gross (q. v.), William Ingalls of Boston was the first in this country to amputate at the shoulder joint for gunshot injury. This was in 1813 while he was professor of anatomy and surgery in Brown University (1811-1823). Dr. Ingalls was born in Newburyport, Massachusetts, May 3, 1769. His ancestor, Edmund of Lynn, came from Lincolnshire, England, in 1629. William was graduated A. B. at Harvard in 1790, M. B. in 1794. He received the M. D. degree in 1811 in usual course in common with all those who had been given the M. B. degree previously. Brown gave him her honorary M. D. in 1813. Dr. Ingalls suggested operation for strabismus as early as 1813, according to Hubbell's development of ophthalmology. He was the author of "Observationes ad abscessum bursalem pertinentes," 1803; "Essay on the Ganglionary System of Nerves in the Cranium," 1832; "On Scarlatina," 1837; "Lecture on Phrenology," 1839, and "Treatise on Malignant Fever," 1847, his chief work.

He married Lucy Myrick Ridgeway and their son was William Ingalls (1813-1903), a visiting surgeon at the Boston City Hospital and an obstetrician of some note who published in 1876, "Synopsis of Private Obstetrical Practice," covering a period of forty-two years of professional experience.

William Ingalls, senior, died at Wrentham, Mass., September 8, 1851.

IRVINE, William (1741-1804), surgeon of the Revolution from Pennsylvania, was born in Enniskillen, Ireland, Nov. 3, 1741. He graduated in both the collegiate course and the medical school of Dublin University and soon after received a commission as surgeon in the Royal Navy. A vivid picture of the life of a ship surgeon at that time is given by Smollett, who served as ship surgeon's mate, in "Roderick Random"; candidates for medical positions in the navy were given an examination which was a "mere farce." Irvine soon resigned and emigrated to America in 1763, settling at Carlisle, Pennsylvania, where he was practicing medicine in 1774. In that year he was a delegate to the Provincial Congress of Pennsylvania; in 1776 he was made colonel of the Sixth Pennsylvania Battalion, and led his command on the expedition to invade Canada. As the battalion had been enlisted and equipped through his efforts, "he was greatly chagrined when they participated in the defeat of the Americans at Three Rivers, he himself being captured July 16, 1776." He was treated with great courtesy by General Burgoyne and General Carleton during his captivity. In May, 1778, he was exchanged and the same year was on the court-martial that tried General Charles Lee. In May, 1779, he was made brigadier-general and commanded the Second Pennsylvania Brigade, seeing much active service. In 1782 he commanded the forces at Fort Pitt; active in studying the land problem in that part of the country, he was appointed by the state to "distribute the bounty lands to the troops who had served during the war." Through his efforts Pennsylvania purchased the district on the shores of Lake Erie known as "The Triangle," thus giving a lake front to the state. In 1786 he was elected to Congress, and again in 1793, serving until 1795; in 1794 he "commanded the Pennsylvania troops who put down the 'Whiskey Insurrection'." Irvine became superintendent of the military stores, situated at Philadelphia. He died in that city July 29, 1804.

ISAACS, Charles Edward (1811-1860), anatomist of New York, author of a monograph on the structure and functions of the kidney, was born in Bedford, Westchester County, New York, June 24, 1811, the youngest of five children. His father was a merchant and a farmer, and the boy spent much time in the country in nature study. He went to the parish school kept by Samuel Holmes, and later took up medicine with Dr. Belcher, of New

York, and had his first course of lectures at the College of Physicians and Surgeons, New York. From here he went to Baltimore, entered the University of Maryland and was graduated M. D. in 1832, at the age of twenty-one. President Jackson appointed him to accompany the Cherokee Indians in their removal beyond the Mississippi, and he traveled among the Indian tribes through the Southern States. In 1841 he entered the army, after being examined by the Army Board, coming out first among fifty candidates. He was sent to Governor's Island, and from there to Fort Kent, Maine, after two years he was ordered to Copper, Lake Superior, at the time when the discovery of copper caused excitement. In 1845 he went to Fort Niagara, New York; in 1846 he resigned his commission and opened a private medical school in Greene Street, New York City, with W. H. Van Buren (q. v.). After several changes he accepted the appointment of demonstrator of anatomy in the College of Physicians and Surgeons; later, he was adjunct professor of anatomy in the University Medical College. Between the lecture terms he served as surgeon on European steamers and thus had the chance to visit hospitals in Europe. He moved to Brooklyn in 1857 and acquired a large practice.

Isaacs is best known at home and abroad by his monograph on the structure and functions of the kidney (Tr. New York Acad. of Med. vol. i, part 9), and for his researches on the pleura. The paper on the kidney was commented on by Ch. Robin of Paris, as "the most valuable contribution to structural anatomy that has been made for years."

He died of pneumonia, associated with Bright's disease, on June 16, 1860, in Brooklyn.

ISHAM, Asa Brainerd (1844-1912), prominent Cincinnati physician. The Isham family is of English origin. Its ancestry in America has been traced back to 1660 when the first immigrant landed at Cape Cod. One of the descendants was the mother of Thomas Jefferson. The grandparents of Asa Brainerd were Asa and Sarah Chapman Isham. His father, Chapman Isham, a merchant and banker, was born in Wilbraham, Massachusetts, February 15, 1814. His mother, Mary Ann Faulkner Isham, was born in Jackson, Ohio, in 1821. Her ancestry in England had been followed as far as the year 1260. Dr. Isham was born in Jackson, Ohio, July 12, 1844. He received his preliminary education in the public schools of his native town and later was graduated from Marietta (Ohio) Academy. After graduation he was employed by the "Lake Superior Journal," at Marquette, Michigan, passing rapidly through the stages of printer, foreman and associate editor, his services extending from 1860 to 1862. In the latter year he became city editor of the "Detroit Daily Tribune." This training in printing and editing was invaluable as a means of education and in fitting the future physician to spread before the public the results of his experience, both in his military career and in the field of his medical labors. November 18, 1862, he enlisted as a private in the Seventh Michigan Cavalry and was assigned the duties of postmaster of the regiment, adjutant's clerk and regimental marker. Here began a most honorable military service. In January, 1863, he became sergeant of Company I. In April and May, 1863, he participated in several skirmishes and on the fourteenth of the latter month was severely wounded in an engagement near Warrentown Junction. Reporting for duty January 1, 1864, his regiment then forming part of Custer's brigade, he participated in the engagements of the Wilderness, Beaver's Dam Station and Yellow Tavern. At the last place he was wounded again and captured in a charge in which the Confederate General J. E. B. Stuart was mortally wounded. Isham was confined in Libby Prison until June, when he was removed to Macon, Georgia, and in August he was sent to prison in Savannah, whence he was taken to Charleston, South Carolina, and placed under the fire of the Union batteries on Morris Island, being paroled finally with the sick and wounded, December 10, 1864. Upon again returning to the front he was commissioned first lieutenant and discharged by a board of examiners at Annapolis, Maryland, April 14, 1865.

After the war he engaged in business in Celina, Ohio, and on June 6, 1866, began the study of medicine with Dr. Alonzo Thrasher Keyt (q. v.), in Cincinnati, Ohio. The following October he matriculated in the Medical College of Ohio and was graduated in 1869 and married the daughter of his instructor, Mary Hamlin Keyt, October 10, 1870. He was professor of physiology in the Cincinnati College of Medicine and Surgery from 1877 to 1880, and in 1880-81 professor of materia medica and therapeutics, translating, as a basis for his lectures, two books from the German. Dr. Isham was pension examiner from July, 1889, to 1893, and

from 1886 to 1903 he was a member of the medical board of police examiners of Cincinnati. This was the first board of medical examiners and Dr. Isham rendered his city great service in the reforms he introduced and carried through, working most of his term with his fellow member, Dr. N. P. Dandridge (q. v.). Marietta College conferred on him the degree of A. M. in 1889. He was a member of the board of trustees of the Cincinnati General Hospital from 1901 to 1912 and a member of the Academy of Medicine of Cincinnati from 1889 until his death, being its president in 1902 and a trustee from 1903 to 1912. He was for many years a member of the Literary Club of Cincinnati; of the Marietta Club, of which he was once president, a member of the Independent Order of Odd Fellows; The Masons; The Grand Army of the Republic; and The Loyal Legion.

Dr. Isham's daughter, Dr. Mary Keyt Isham, a graduate of Wellesley and the eldest of seven children, was graduated at the Laura Memorial Medical College, Cincinnati, in 1903, and was interne in the Presbyterian Hospital, Cincinnati, in 1903-1904. She was assistant physician in the Ohio State Hospital, Columbus, Ohio, in 1908, and in 1915, she went to New York City, where she has practiced medicine.

On the death of his father-in-law, Dr. Alonzo Thrasher Keyt, Dr. Isham edited the original researches of Dr. Keyt under the title:—"Sphygmography and Cardiography," a work which was received with great interest by the profession. Dr. Isham was a voluminous writer on subjects both medical and military, a full list of his publications being printed in the "Lancet-Clinic," Cincinnati, Mar. 12, 1912, vol. cvii, 333-339, where there is an extended In Memoriam. Among the tributes there we find this by Dr. Charles Caldwell, his friend and neighbor:—

"In his intercourse with his fellows, Dr. Isham was not what would be called an approachable man. His straightforward steadfast gaze was rather disconcerting to presumptuous efforts at familiarity on the part of those who could not give the countersign, and yet he was by nature diffident and modest to a degree. He was not always at ease with strangers. Perhaps it would be better to say he did not admit people readily to his friendship, nor was he, be it said to his credit, what in the vernacular of the day is called 'a good mixer.' With him, however, once a friend always a friend, and no one having gained his friendship need ever fear an act of disloyalty."

Dr. Isham died suddenly at his home in Cincinnati, February 20, 1912.

A. G. Drury.

ISHAM, Ralph Nelson (1831-1904), was one of the original founders in 1859 of the Chicago Medical College, now the Northwestern University Medical School, which was one of the first schools to require a three years' course. He was professor of surgical anatomy and then professor and professor emeritus of general surgery in the college from its foundation until his death. He was at one time or another connected with the Cook County, Mercy, Presbyterian and Passavant hospitals. He was born in Manheim, New York, March 16, 1831. His father, Nelson Isham, M. D., Yale, 1828, served in the field for four years in the 91st New York volunteer regiment. His mother was Delia Snell. Ralph was educated in the Herkimer Academy and graduated from Bellevue Hospital Medical College in 1854, where he afterward served as interne. Tuberculosis of the lungs, acquired during his service, was completely cured by a few voyages to Liverpool as ship's surgeon on a clipper ship.

In 1855 he moved to Chicago and in 1857 married Katherine Snow, daughter of George W. Snow; their children were George S. Ralph, Mrs. A. L. Farwell and Mrs. George A. Carpenter. His start in his profession was made by doing a tracheotomy for quinsy on a son of the leading Presbyterian minister. This locally hitherto unheard of proceeding was seriously opposed by many of the good parishioners as a direct interference with Providence. Whether Providence, not being informed upon surgical methods, had not made the child quite sick enough, is not stated. At the beginning of the Civil War he was actively engaged with the Sanitary Commission and from 1862 to the close of the war was the chief surgeon of the Marine Hospital in Chicago which was changed to a Military Hospital.

He died in Chicago of cancer of the pylorus, May 28, 1904.

George S. Isham.

IVES, Ansell W. (1787-1838), of Fishkill, New York, was born at Woodbury, Connecticut, on the thirty-first of August, 1787. Ives was the third child of a struggling farmer who had to let the boy be apprentice to a farmer till he was nineteen, when, having

qualified himself to keep an elementary school, he taught for several years with credit to himself and advantage to his employers. Continuing at the same time, with the greatest zeal, his plan of self-instruction, he soon found himself sufficiently advanced to begin the study of a profession; and having chosen that of medicine, entered himself a student with Dr. Elisha North (q. v.), a physician of New London. On removing to Fishkill, in the state of New York, he continued his studies with Dr. Barto White, and completed them in the office of Dr. Valentine Mott (q.v.), graduating at the College of Physicians and Surgeons of Columbia University in the year 1814. He contributed largely to our medical journals; and some of his papers, especially that on "Humulus Lupulus," gained him much credit, both at home and abroad. He republished, with notes and additions, "Paris's Pharmacologia," and "Hamilton's Observations on the Use and Abuse of Mercurial Medicines," and also a description of the "Epidemic Influenza," which prevailed in the northern and eastern states in the year 1815; indeed, his whole time was spent in improving his own mind, or making himself useful to his fellow-men. Yale conferred the honorary A. M. on him in 1821.

Dr. Ives was well formed, his manners prepossessing, and he had a fund of humor and anecdote which made his company acceptable to his associates. He enjoyed a good share of health, until he was attacked in February, 1837, by a tumor of the left hip from which he died on February 2, 1838.

FRANK UPTON JOHNSON.

IVES, Eli (1779-1861), prominent physician of Connecticut, was born in New Haven, February 7, 1779, son of Dr. Levi Ives (1750-1826), a physician of large practice in New Haven and a founder of the New Haven Medical Society. He entered Yale College in 1795, graduating in 1799, and then spent fifteen months as the rector of the Hopkins Grammar School, at New Haven. While thus teaching, he took up the study of medicine under his father and Dr. Eneas Munson, Senior (q. v.), and later went to Philadelphia to attend the lectures of Rush, Wistar and Barton, at the University of Pennsylvania. In 1802 he returned and began the practice of medicine, being made a member of the Connecticut Medical Society on May 4, 1802. Three years later he again went to Philadelphia to attend the lectures there, but did not remain long enough to graduate. In October, 1811, the honorary degree of M. D. was conferred upon him by the Connecticut Medical Society.

He was prominent among those who established the Yale Medical School, being on all the committees of conference and practically at the head of the movement so far as the medical society was concerned. On the opening of the school in November, 1813, he became professor of materia medica and kept the position until 1829, when he was transferred to the chair of the theory and practice of medicine. This professorship he filled until 1852, when he took the chair of materia medica again, retaining it until his death nine years later, but being for the last eight years professor emeritus. He is described by Dr. Henry Bronson, who was once his private pupil, as "tall and spare, of a weak organization, with a pleasant countenance and mild blue eye, unceremonious and unpretending, familiar and agreeable in manners and plain in dress." He was not an eloquent instructor, but gave a good practical course. In his knowledge of botany he was ahead of his time, and, at the opening of the medical school, established, on grounds adjoining the college, a botanical garden for the benefit of his classes, which was not properly seconded as an enterprise and so perished from neglect. He gave special attention to indigenous vegetable remedies in his extensive practice, and is said to have been one of the first to employ chloroform, having prescribed it by inhalation as well as by stomach, in 1832, a year after its discovery by Samuel Guthrie (q. v.) of Sackett's Harbor.

He was a member of the first convention which framed the United States Pharmacopœia in 1820, and, at the second convention in 1830, was made the president. For three years, from 1824-1827, he was vice president of the Connecticut Medical Society. When the American Medical Association met in New Haven in 1860, he was chosen its president. He served, also, as the candidate for lieutenant-governor on the anti-Masonic ticket in 1831, and acted for many years as the president of the Horticultural and Pomological societies.

Dr. Ives married on September 17, 1805, Maria Beers and had three sons, who took up the study of medicine, and one daughter who married a physician. He died on October 8, 1861. A portrait of him is preserved in the family. It was reproduced for his memoir in the "Proceedings of the Connecticut Medical Society for 1867."

Charles Linnaeus Ives (1831-1879), a grandson of Eli Ives, was a practitioner in New Haven, Connecticut, and was professor of the theory and practice of medicine in Yale.

WALTER R. STEINER.

JACKSON, Abraham Reeves (1827-1892), one of the older members and ex-presidents of the American Gynecological Society, died November 12, 1892, of a stroke of paralysis, due to cerebral hemorrhage. His appearance and work showed him as in the fulness of his powers. But the finger of Providence had touched him two years before, and although the touch was a light one, he knew its meaning. Yet he strode on cheerfully, and said nothing of it, except to a friend. The fatal touch came while still on duty.

He was born June 17, 1827, in Philadelphia. His early education was obtained in the public and high schools. After graduating at the Central High School of Philadelphia, in 1846, he began the study of marine engineering, but soon decided that medicine would offer a more congenial career. His admiration in early boyhood for the character and personality of his family physician had much to do with his partiality for the profession. He was graduated from the Pennsylvania Medical College in 1848, and forthwith began his life's work at Stroudsburg, Pennsylvania. Here he practiced for twenty years, with the exception of two spent in the service of his country—1862 to 1864—as assistant medical director of the Army of Virginia. In 1870 he moved from Stroudsburg to Chicago, and immediately assumed the position in the profession for which his natural endowments and careful preparation had fitted him. In 1871 the character of the man was displayed in the successful establishment of the Woman's Hospital of Illinois, of which he was the first surgeon-in-chief. After this he limited his practice entirely to gynecology.

In 1872 he was elected lecturer on gynecology at Rush Medical College, and held the position until 1877, when he resigned. In 1882 he established and incorporated, with the aid of two colleagues, the College of Physicians and Surgeons of Chicago, and was its president and professor of gynecology until removed by death. He was a charter member of the Chicago Gynecological Society, and its president in 1883. From 1889 until his death he occupied the position of president of the Association of Acting Assistant Surgeons of the United States Army; honorary member of the Detroit Gynecological Society, and corresponding member of the Boston Gynecological Society. It is pleasant to remember that, in addition to his labors and honors and responsibilities, his life contained much that was enjoyable. He was the companion of Mark Twain in the famous trip made by the "Innocents Abroad," and was the original of the very original doctor, whose jokes are the best in the book. He was funny, but never vulgar; witty, but never sarcastic and personal.

He married in 1850 Harriet Hollinshead, of Stroudsburg, by whom he had two daughters. He was left a widower by her death in 1865, and in 1871 married Julia Newell, of Janesville, Wisconsin, who survived him. With her he made a trip around the world in 1890, which constituted their last romance, preserved in the memory of one who was capable of enjoying such talented companionship.

In 1877, while operating upon an infected patient, he inoculated his finger, and never fully recovered from the effects of the disease. In 1889 new symptoms made their appearance in the form of an attack of aphasia. November 1, 1892, symptoms again appeared, and were followed the next day by the attack of apoplexy from which he died.

His writings were numerous, and always conservative in tone and original in thought. Among them are: "Remarks on Intrauterine Polypi, 1876; "The Ovulation Theory of Menstruation," 1876; "Vascular Tumors of the Female Urethra," 1878; "The Treatment of Sterility," 1879.

HENRY T. BYFORD.

JACKSON, Charles Thomas (1805-1880). The life of Charles Thomas Jackson, chemist, mineralogist and geologist, interests us because he had to do with the discovery of the electric telegraph and, more especially, ether anesthesia. Born at Plymouth, Massachusetts, June 21, 1805, he was descended from Abraham Jackson, one of the early settlers of that town, and on his mother's side, from Rev. John Cotton. While preparing himself for college his health failed and he made an excursion on foot through New York and New Jersey with several naturalists. Returning to Boston he studied medicine and was graduated from the Harvard Medical School in 1829, having made a geological survey of Nova Scotia during the summer vacations. After graduating he spent three years in Europe pursuing his studies and making a pedestrian tour. He assisted in autopsying the bodies of the victims of the

cholera epidemic in Vienna and as a result published "Cholera in Vienna" in the "Medical Magazine," Boston, for October, 1832. Returning to Boston in 1832 Jackson brought with him a large amount of electrical and philosophical apparatus and it so happened that Prof. S. F. B. Morse was a passenger on the same ship. Jackson claimed that he pointed out to Morse the essential and peculiar features of the electric telegraph, which was patented by Morse in 1840. Jackson had previously perfected a working model of such a telegraph but did not think it capable of being brought into general use. Later he got into a controversy with Morse as to priority.

Settling in the practice of medicine in Boston in 1833 Jackson devoted himself to medicine until 1836, when he was appointed state geologist of Maine, his surveys occupying three years. Then he was made state geologist of Rhode Island, and in the following year held a similar position in New Hampshire, the last taking his attention for another three years, the results of his labor appearing in a quarto volume in 1844. In that year he visited the southern shore of Lake Superior, explored the wilderness, and returning the next year, opened copper mines and made known to the world the rich mineral resources of that region.

As early as 1834 Jackson discovered that an alcoholic solution of chloroform brought into contact with a nerve renders the nerve insensible to pain. Long before, he had experimented with laughing gas and in 1837, resuming his experiments, proved that a part of the effects of this gas was due to asphyxia. Some time previous to the winter of 1841-42, having received from a chemist some perfectly pure sulphuric ether, he administered a portion mixed with air to himself, and lost all consciousness, experiencing no disagreeable consequences, as had been the case when he had inhaled the impure ether unmixed with atmospheric air. His experimens were known to W. T. G. Morton (q. v.), a student of medicine in his office, and Jackson showed ether to Morton and demonstrated how to inhale it so that he might use it in dentistry. Morton then procured some ether, used it to exartc teeth and finally administered the drug in the first case of surgical ether anesthesia at the Massachusetts General Hospital, October 16, 1846. It is to be noted that Jackson refused to be present on this occasion, although invited by the surgeon, Dr. J. C. Warren (q. v.), and showed no evidence that he appreciated the nature of the discovery until long after when a controversy as to priority had been started. In 1852 a memorial was presented to Congress, signed by 143 physicians of Boston and its vicinity, ascribing the discovery exclusively to Jackson. On the other hand a committee of the French Academy of sciences investigated the question and on their report the Monthyon Prize of 5,000 francs was divided equally between Jackson and Morton, the perpetual secretary of the academy saying that half of the prize was given to Jackson for the discovery of etherization and the other half to Morton, for the application of the discovery to surgical operations. Louis Napoleon conferred on Jackson the cross of the legion of honor and King Oscar of Sweden a gold medal that was struck expressly for him, while King Frederic William of Prussia gave him the order of the red eagle. He also received orders and decorations from the Sultan of Turkey and the King of Sardinia. In 1861 he published a "Manual of Etherization, with a History of the Discovery."

Among his scientific discoveries may be mentioned chlorine in meteoric iron; fossil fishes in the lower coal measure of New Brunswick; new trilobites in Newfoundland rocks; tin in ore from Los Angeles, California. He contributed numerous articles to the "American Journal of Sciences and Arts" and to foreign scientific journals; nearly 100 titles in all. The last seven years of Dr. Jackson's life were passed in retirement for his mind became deranged by the constant worrq and anxiety caused by his many controversies.

He died August 28, 1880, having helped to confer two great blessings on humanity. The electric telegraph was made workable by Morse and etherization became practicable when Morton made it so. Jackson supplied essential knowledge and suggestions.

WALTER L. BURRAGE.

JACKSON, Hall (1739-1797), New Hampshire army surgeon, was the son of Dr. Clement Jackson, who was practicing in Hampton, New Hampshire, when his son Hall was born on November 11, 1739. The father, either to enlarge the bounds of his practice or to better educate his children, moved to Portsmouth, New Hampshire, in 1749. His son, after receiving the ordinary common school education of those days, had also a special education in the classics by a local clergyman. He then entered his father's office and rode about with him seeing cases and studying medicine and investigating the action and

compounding of drugs until he had acquired sufficient knowledge to begin practice. Before entering on his life work he went to Europe and completed his medical education under the best masters of the day, being noted for his skill in surgery, an art which was by no means so extensively or so fearlessly practiced in those days. While in London he received honorable mention for an ingenious invention by which he extracted from a gun-shot wound a bullet which had baffled the skill of the attending surgeons . . . Returning home well equipped, he opened first a pharmacy as a sort of focus for practice, and as a source of income until he should gain enough patients to become self-supporting. This pharmacy he handed over ultimately to a son named John. From 1760 to 1775 he remained constantly in Portsmouth identifying himself with the community, gaining an excellent reputation and marrying the widow Mary Dalling Wentworth.

With the outbreak of the Revolution he came at once to the front and after the Battle of Lexington rode post haste to Boston to do his share in taking care of the wounded and in preparing for further medical and surgical work in the army which was soon to be recruited from the various New England States. He went back to Portsmouth in a few days, enlisted a company of men and was elected both their captain and surgeon, and these he continued drilling persistently, until news arrived of the battle of Bunker Hill, when he forthwith packed his chaise with all available instruments, drugs and lint, set off early in that June morning, and twelve hours later was amid the wounded whom he found in a most deplorable condition. In the two days that had elapsed since the battle, the Massachusetts surgeons had attended to their wounded in some reasonable fashion, Three physicians belonging to the New Hampshire troops were on the field, or wherever the wounded had been transported, but they were all young and inexperienced, and had never performed a single operation, to say nothing of the capital operations now demanded, and even with the best of skill they were most amazingly unprovided with even such necessary trifles as surgical needles or sutures. Jackson began his work at once, though twilight had set in, worked nearly all night long with the aid of laterns, and during the next day and the one following performed forty-eight operations, extracted a large number of bullets, and did one amputation at the hip-joint on a soldier by the name of Hutchinson. When this imperative work was done, it next became a vital question of a permanent hospital for the sick and convalescents of the twenty-five thousand troops soon collected around Boston. In this great work Jackson did yeoman service. In addition to these labors, he was the only surgeon at hand competent for medical consultations and he spent many a day in such work with Dr. Benjamin Church (q. v.) in riding out to Waltham, Watertown and Medford, to visit several of the officers of high rank who had been wounded at the battle or had fallen ill later on from their heroic exposure in the service of their country. For four months Jackson remained in the camp on Winter Hill, with the exception of a few days when he suffered intensely from so severe an inflammation of the eyes that he was obliged to give himself complete rest.

He became depressed at the hardships, at the thought that his practice at home was suffering and at the selfishness of many of the so-called patriots in neglecting the wounded. Despite his discouraged state of mind, neither Gen. Lee nor Gen. Sullivan would hear of his abandoning the sick to inferior physicians and it was not until October that he was able to return to his home for needed rest and then to make up for time lost to his patients.

Ultimately, the New Hampshire Assembly honored Dr. Jackson with the thanks of the province, paid him fifteen pounds a month and proper rations for himself and his horse and elected him surgeon to the New Hampshire troops in the Revolutionary Army. In return for these favors he enlisted a body of men and drilled them into a company of heavy artillery with four guns from a fort in Portsmouth harbor. In the next year he was surgeon-in-chief in Col. Pearse Long's regiment. The rest of Dr. Jackson's life was spent in active medical work. He was a first-rate surgeon, and regarded as clever as an obstetrician; he paid a good deal of attention to the couching of cataracts with the needle and had remarkable results in curing the blind. He was elected an honorary member of the Massachusetts Medical Society in 1783, and in 1793 received the honorary degree of M. D. from Harvard. He took great interest in smallpox inoculation.

His life was terminated, like many others of our profession, by an accident occurring while on his rounds of duty. In September, 1797, while "turning out" for another carriage his own was overturned and he was thrown

and suffered a fractured rib. Fever soon ensued and September 28, 1797, he died. Hardly any other medical name in New Hampshire stands out brighter than that of Hall Jackson, for he was kind to the poor, charming in manners, genial in society, skilful in every branch of medicine which he practiced, and above all an honest patriot.

JAMES A. SPALDING.

JACKSON, James (1777-1867), eminent physician of Boston, was born in Newburyport, Oct. 3, 1777, and died in Boston, August 17, 1867. His ninety years of busy life stretching from the middle of the war of the Revolution to the close of the Civil War, made Jackson a notable figure in the New England of his day, and one who played a significant part in the medical history of the Commonwealth of Massachusetts during its formative period. At the time of his birth medical practice was emerging from a crude infancy, in which the functions of the doctor and clergyman were often united; before he died the modern era had become fairly inaugurated. While a young physician he rendered conspicuous service in the founding of the Harvard Medical School and the Massachusetts General Hospital whose histories have been so notable, and he set up a standard of ideals in medical practice not to be surpassed. His volume of "Letters to a Young Physician," 1855, are still profitable to the student who sees not only his patient but the man and his fellow-citizen as well. This small book deserves a place on every doctor's shelf.

The founder of the Jackson family in America was Edward Jackson, who, with his older brother John, came from London to Cambridge, Massachusetts, in 1643, as a pioneer settler in New Cambridge, known as Newtown or Newton. He represented his town in the General Court for many years and was active in behalf of the commonwealth and of his community. Thirty-eight of his descendants fought in the War of the Revolution, and, fourteen of the descendants of his great-grandson Jonathan Jackson, the father of our subject James, fought in the Civil War of 1861. James Jackson's grandfather married Dorothy Quincy, and lived in Quincy until his death in 1757. Their son Jonathan was graduated from Harvard College in 1761 and removed to Newburyport to be near his inimate friend John Lowell. This friendship proved eventful for the later history of the family in many ways. In 1772 Jonathan Jackson married Hannah Tracy, daughter of Patrick Tracy, a prominent public-spirited merchant of Newburyport; they had nine children, of whom James Jackson was the fifth. Industry and enterprise were the fashion in those stirring times, and the five sons of Jonathan and Hannah early established themselves in professional life or business. The three brothers, Charles, James and Patrick, who long survived the other two, occupied an important place in the life of their community. Jonathan Jackson was unable to do more than was absolutely essential toward the education of his sons. James went to Harvard College where he met Dr. John Collins Warren (q. v.), and became the warm friend of John Pickering of Salem, the son of Timothy, Secretary of State under Washington, later a remarkable scholar and jurist. He received his A. B. from Harvard in 1796 at the age of ninteen, and taught for two quarters in Leicester Academy, where he would have stayed longer but for a call from his father, the Supervisor of Internal Revenue for the District of Massachusetts, to take a place as clerk in his office. His fixed purpose, however, was to study medicine, and even to borrow money to carry out his plan.

The young Medical Institution of Harvard University (founded 1783) was still grappling with its problems when Jackson attended its courses in 1796. There were no clinical advantages and the teaching was supplemented by an association with some practitioner outside called a preceptor. The small faculty was a good one for its day; there were Benjamin Waterhouse (q. v.), professor of the theory and practice of physic, John Warren (q. v.), Aaron Dexter (q. v.) and J. Gorman (q. v.), professors of anatomy, physiology, chemistry and materia medica respectively. Whatever wisdom Jackson got from this institution, his enrollment was important from the fact that it brought him into closer connection with the Warren family, and with Dr. John Collins Warren, who was graduated from Harvard in the class next below his, as well as with the Warren's father, John Warren, (q. v.), the fine, public-spirited patriot of the Revolutionary War, the teacher of human anatomy in the "Medical Institution." Jackson's next step in his medical education was enrollment in December, 1797, as a pupil of Dr. E. A. Holyoke (q. v.) of Salem, son of President Holyoke of Harvard College. This remarkable teacher (centenarian) was then the foremost physician in New England; Dr. Jackson ever called him his "glorious old master," who instilled into him accuracy of

observation and moderation in treatment. To him he dedicated his graduation thesis on the "Brunonian System" (1809).

In 1799 Jackson received a free passage to London in a ship with his brother Henry as captain. While in London he was a "dresser" at St. Thomas's, and studied anatomy with Cline at that hospital, and with Astley Cooper at Guy's, and vaccination at the St. Pancras Hospital under Woodville, besides attending the regular medical lectures. St. Saviour's Church yard, where he had his rooms, was only a block removed from the Hospital, then near the south end of the old London Bridge. Guy's Hospital nearby was opened for patients in 1725; and from 1768 until 1825 the two institutions were closely united for teaching as the "United Hospitals," and students were at liberty to attend operations and lectures in both. In August, 1800, he sailed for Boston in the "Superb," "a large ship for that period," and reached home in forty-nine days. Two days later he began practice, depending for his first success on vaccination coming into vogue. In his "Reminiscenses," published in old age, he writes:—

"My friends took me up on that account, (vaccination) so that in that October I derived $150 from that source. I also derived just as much from other business, that made my fees amount to $300 the first month. In the remaining 11 months of my first year I earned $500, or nearly $50 a month, or $800 for the year. I must say that everybody talked to me of vaccination, so that I got to fear that people would think I could talk of nothing else, and therefore, before my first winter was over, I rather avoided the subject. However, the cox-pox gave me notoriety, and that is a great advantage to a young man if it comes to him fairly, without any tricks."

On October 3, 1801, his twenty-fourth birthday, he married Elizabeth Cabot, at a time when he was $3,000 in debt, the sum borrowed for his education. This step proved a wise one and they lived together "for seventeen happy years"; they had nine children, three dying in infancy or early childhood. The oldest of Dr. Jackson's sons surviving childhood, James Jr. a remarkable young fellow, was graduated at Harvard College, studied medicine, and went abroad where he became a favorite pupil of Louis in Paris, under whom he did original work in the early diagnosis of tuberculosis of the lungs. He also made observations on the clinical history and pathology of cholera during the serious Paris epidemic, published as "Notes on Sixty Cases of Cholera," Boston 1832, 212 pages. A few months after returning to America, in 1834, this promising young man died of typhoid fever; the shock of this loss led Dr. Jackson soon to resign his positions in the hospital and in the medical school. He wrote a memoir of his son published in 1835, 444 pages.

After his wife's death he married her sister, Sarah Cabot, who lived until shortly before his own demise.

In 1802 Dr. Jackson was physician to the Boston Dispensary, serving in the "middle" district, extending from "the north side of Summer and Winter streets to the Mill pond and Creek." Next came the joint labor with Warren of reorganizing the Massachusetts Medical Society, as the representative body of the entire medical community of the Commonwealth, following the scheme of Dr. John D. Treadwell (q. v.) of Salem, "one of the best physicians of that day." Meantime, plans for removing the Medical School to Boston, where clinical facilities were more adequate, and for the founding of the Massachusetts General Hospital, constantly occupied the thoughts of Warren and Jackson. The removed Medical School was opened in Boston in 1810, and it became possible to utilize the Leverett Street Almshouse with about fifty sick or infirm persons for clinical instruction.

In 1812 Dr. Jackson was appointed Hersey Professor of the Theory and Practice of Physic, in place of Dr. Waterhouse, and with this move the Medical School was fairly launched in its new form. Dr. Jackson's lectures were didactic, according to the fashion of the day, and his notes, which were printed and are still extant, reveal much thoughtful study.

In 1811 the "New England Journal of Medicine and Surgery" was established, and up to 1825 Dr. Jackson was its largest contributor.

In 1810 the plans for the establishment of the Massachusetts General Hospital took definite shape, through the appointment of an able Board of Trustees, and in the same year Jackson and Warren drew up an appeal for subscriptions which went far toward assuring success. The carrying out of these plans was interrupted by the War of 1812, and the Hospital was not opened for patients until 1821; at first the applicants came in one by one as the notion of a hospital was a strange one. Dr. Jackson's distinguishing characteristic during his hospital service was a reverential fidelity in observation.

He was a man of medium height, dignified

and courtly in bearing. His features were regular, the nose aquiline, the upper lip markedly long and the mouth wide. There is a good bust in the Massachusetts General Hospital. He continued well into the new century to cling to the older customs which were rapidly disappearing. He wore knee-breeches, and after giving these up he still dressed in a longtailed coat like the evening coat of today. The stock and the white neckcloth, a regular part of the dress of a man of his position, always seemed peculiarly appropriate. His hat hung always on the same peg in the hatrack and no one would have been so presumptuous as to remove it. He was an early riser, and when as an old man he went to his dressing-room for his morning bath, his long-time faithful attendant had his foot tub and pitcher respectively placed always on the same pattern of the flowered carpet. A similar impulse made him scrupulously punctual in his professional engagements, and to avoid the chance of being late he carried two watches! As he grew older and largely withdrew from active practice, he continued to call each morning at a certain hour and minute on all of his children within his reach. The writer of this sketch well remembers that the clocks could be set by Dr. Jackson's ring at the front door, when he often found the family at breakfast.

Dr. Samuel A. Green (q. v.), the medical historian of his day, says of him, "He is perhaps the most conspicuous character in the medical annals of Massachusetts . . . No physician in the State ever exerted so large and lasting an influence over his professional brethren or his patients." O. W. Holmes (q. v.), one of the most affectionate and delightful of his biographers, has left this, out of a number of tributes:

"Thoughtful in youth, but not austere in age;
Calm, but not cold, and cheerful though a sage;
Too true to flatter, and too kind to sneer,
And only just when seemingly severe;
So gently blending courtesy and art,
That wisdom's lips seemed borrowing friendship's heart.
Taught by the sorrows that his age had known
In others' trials to forget his own,
As hour by hour his lengthened day declined,
A sweeter radiance lingered o'er his mind.
Cold were the lips that spoke his early praise,
And hushed the voices of his morning days,
Yet the same accents dwelt on every tongue,
And love renewing kept him ever young."

JAMES JACKSON PUTNAM.

Jackson, James (1810-1834). See American Medical Biographies, H. A. Kelly and W. L. Burrage, Baltimore 1920, page 602.

JACKSON, John Barnard Swett (1806-1879). The medical career of this pioneer Boston pathologist is of especial interest, as he studied in Paris at a time when modern medicine was just making its entry into the scientific world. The old theories of humors was giving place to the exact description of disease, based on pathologic anatomy, while by physical examination men were attempting to define, during life, the abnormal condition which was the cause of the disease under investigation. Jackson returned to Boston in 1831 and from the first devoted himself to pathology. His general practice was always limited and after 1850 he seldom saw patients except in consultation. His life was spent in the pathologic laboratory and the medical museum of the Harvard Medical School. His chief interest lay in the close study and exact description of the gross pathologic anatomy of diseased organs, not in the microscopic study of disease. The modern microscope was unknown to him, and he died before bacteriology made known to the world the etiology of most acute and many chronic diseases.

Dr. Jackson was born in Boston, June 5, 1806, being the fourth and youngest child of Henry and Hannah Swett Jackson. He was the grandson of Jonathan Jackson of Newburyport, Massachusetts, "an honored member of the Continental Congress who held several offices under Washington," of whom a contemporary wrote, "He was the beau ideal of a gentleman who retained the supremacy among that galaxy of worthies which formed the intellectual and social life of Newburyport." His uncle, James Jackson (q. v.), the noted physician, had great influence over his life in a social, personal and medical way, for his father, a sea captain, died the year of his birth. John was educated at private schools, entered Harvard College in 1821 and was graduated in 1825, among his classmates being Charles Francis Adams, Admiral Davis, the Rev. Dr. Hedge, S. K. Lothrop and the librarian, John Langdon Sibley. Dr. Jackson went abroad in 1829 in a sailing vessel, reaching Havre after a tempestuous voyage of fifty-six days. At first he devoted himself to surgery, studying with Dupuytren, Roux and Lisfranc. After a winter in Paris he spent some time in Edinburgh, where he studied with Mr. Syme. In London he first turned his at-

tention especially to medicine and pathology, working under Bright, Addison and Hodgkin. He sailed for home June 4, 1831, as surgeon of a packet of 350 tons, reaching New York after a stormy passage of forty-four days.

In 1853 he married Emily Jane Andrews, and had two sons, Henry, Boston consultant in internal medicine, and Robert Tracy, associate in palaeontology at Harvard. His freedom from the daily care of private practice afforded him much opportunity for association with his family and for journeys to Europe that gave him much pleasure and were of much value to his children. He was professor of pathological anatomy from 1847 to 1854 and Shattuck professor of morbid anatomy from 1854 to 1879, the latter chair being endowed by Dr. Shattuck as a proof of his personal regard and esteem and for the medical ability of Dr. Jackson. He was a member of the local medical societies and was especially prominent as a member of the Boston Society for Medical Improvement.

All his writings of import are on questions of pathology, and include many articles, published largely in medical journals. His most valuable contributions to the medical profession were to "The Warren Anatomical Museum" (1870), not, as its title might suggest, simply a catalogue, but a storehouse of the results of many of Dr. Jackson's studies in morbid anatomy. In 1851 he made an extensive trip to Europe, especially with the object of studying the museums and meeting again his fellow medical students, many of whom had won important positions in the medical world. Aside from his medical studies he was always deeply interested in natural history, and especially in the anatomy of the lower animals as well as in their diseases. He was probably the first medical man in Boston to turn his attention to the study of the diseases of the lower animals.

He died Jan. 6, 1879, of pneumonia. Though never robust, he worked hard to the end of his life and was in his beloved laboratory the day his last illness seized upon him.

A biographical notice of Dr. Jackson by his life-long friend and kinsman, Dr. Oliver Wendell Holmes, was published Jan. 9, 1879, in the "Boston Medical and Surgical Journal." In this notice Dr. Holmes says, "He was not a microscopist. What he knew he knew thoroughly, but he never pretended to have the slightest knowledge beyond what his honest, naked eyes could teach him," and later, "His look penetrated like an exploring needle, and many a tympanitic fancy of careless observers has collapsed under its searching scrutiny."

HENRY JACKSON.

JACKSON, John Davies (1834-1875), the biographer of Ephraim McDowell (q. v.), was born in Danville, Kentucky, December 12, 1834, and died in his native town, December 8, 1875, not completing the forty-first year of his life. He was the eldest child of John and Margaret Jackson, both natives of Kentucky, and received his education at Centre College in Danville, receiving the A. B. degree there in 1854. After taking one course of medical study at the University of Louisville he went to Philadelphia, where he was graduated from the University of Pennsylvania in 1857 with a thesis on "Vis Conservatrix et Medicatrix Naturae." Dr. Jackson practiced in Danville until the breaking out of the Civil War when he entered the Confederate Army with the rank of surgeon, and served throughout the war, going home to resume practice in 1865. During the succeeding ten years of his life he was a student of medicine, collected an ample private library, made frequent journeys to the medical centers of the country and one trip to Europe (1872) in order to keep abreast of the times. He published an article on "Trichiniasis" in the "American Journal of the Medical Sciences" in 1869, and he helped found the Boyle County Medical Society, besides practicing surgery. In 1873 he translated Farabeuf's "Manual on the Ligation of Arteries," published by Lippincott, Philadelphia, and his "Biographical Sketch of Dr. Ephraim McDowell" in the "Richmond and Louisville Medical Journal," 1873, a well written article of some six thousand words. It was in this year he got a systemic infection from an autopsy wound, and during his convalescence developed pulmonary tuberculosis, succumbing after a long illness. During the last two years of his life he devoted much labor and time in vindicating the claims of McDowell to priority in the operation of ovariotomy also in establishing a suitable memorial to him. At the time of his death Dr. Jackson was first vice-president of the American Medical Association and before this body he advocated the removal of Dr. McDowell's remains from the neglected family burying-ground at "Traveler's Rest," the former country home of Governor Shelby, to Danville, a project that had its fruition in 1879 when Dr. S. D. Gross dedicated the Mc-

Dowell monument at the home of the pioneer ovariotomist.

"In personal appearance Dr. Jackson was above the medium height, very erect and rather slender. He had fine bluish-grey eyes, a firm expression about the mouth and a forehead indicative of intellect. In his habits he was systematic, and in all his engagements he was promptness itself." Dr. Jackson was unmarried, he had few social duties, and his entire life was devoted to his profession.

JACKSON, Samuel (1787-1872), teacher of medicine and sanitarian of Philadelphia, was the son of Dr. David Jackson (1747-1801), of Philadelphia, a hospital physician in the Revolutionary army and a delegate to Congress. Samuel was born March 22, 1787, the year in which the College of Physicians, Philadelphia, was founded, and was graduated from the medical department of the University in 1808, having received his college education also at the University. His thesis was on "Suspended Animation." He was a student of Dr. J. H. Hutchinson (q. v.) and after Dr. Hutchinson's death, of Dr. Caspar Wistar (q. v.). He did not begin practice until about 1815, when he severed his connection with the drug business, of which he had assumed charge in 1809 on the death of his brother. He rapidly became prominent and in 1820, when the yellow fever prevailed in Philadelphia, he was chairman of the Board of Health. He rendered signal service not only fighting the disease fearlessly and valiantly, but publishing important papers in the "Philadelphia Journal of Medical and Physical Sciences." He himself had an attack of the fever and regarded it of local origin, due to filth and putrescent animal and vegetable matter.

His writings, chiefly opening lectures at the University and biographies of colleagues, occupy some two columns in the catalogue of the Surgeon-General's Library at Washington. His best work was his "Principles of Medicine founded on the Structure and Functions of the Animal Organism" (1832), the first of its kind published in America. Jackson was seventy-six years of age when he delivered his last course of lectures at the University in the session of 1862-63, which I attended. He had the appearance then of being a very old man—older than he seems in the bronze tablet which we in 1910 erected to his memory in our University. He was so feeble that he leaned on the arm of an assistant as he walked to his desk, whence he delivered his lectures sitting. There was, however, no lack of spirit in his message. With his bright eyes beaming, his face full of enthusiasm, and his white hair streaming over his shoulders, he was truly picturesque. Leaning forward, he narrated with great animation the happenings of the day in physiology as they appeared to the eyes of the great French physiologists, Claude Bernard, Milne Edwards and Brown-Séquard. For at that day the French were the acknowledged leaders in physiological science.

He became professor of materia medica in the College of Pharmacy in 1821 as the colleague of Prof. George B. Wood. Jackson's introduction to medical teaching was in the Philadelphia Hospital, in whose wards he served from 1822 to 1845, and attracted many students to his lectures. At that day the subjects of practice of medicine and the institutes of medicine were united under one professorship. Institutes of medicine was a term which in its broadest significance covered almost the entire subject of medicine except anatomy, surgery and materia medica, but practically was a synonym for physiology. In 1827 Dr. Nathaniel Chapman (q. v.) was the professor of practice and institutes, but finding the subject too extensive, Jackson was appointed assistant and delivered the course on institutes. In 1835 a chair of institutes was established and Jackson elected to it, resigning in 1863 after twenty-eight years' incumbency. He died April 4, 1872, nine years after his resignation, aged eighty-five years.

JAMES TYSON.

JACOBI, Abraham (1830-1919), of New York, father of American pediatrics, was born of Jewish parents, May 6, 1830 in Hartum, Westphalia. His people were not well-to-do, and his education was attained through privation and struggle. In 1847, he entered the University of Greifswald as a student of oriental languages. Becoming interested in medicine, he turned to anatomy and physiology, and following the peripatetic plan of the German student, proceeded to Goettingen and came under Frerichs and Woehler; he wound up at Bonn, graduating in 1851 with a Latin dissertation "Cogitationes de vita rerum naturalium," of considerable philosophic depth.

Meanwhile, the Revolution of 1848 found in Jacobi a leading congenial spirit. He was imprisoned for a year and a half in a German fortress at Cologne, convicted of lèse majesté, and again held in detention for six months at Minden. In 1853, through the friendship of his

jailer he managed to escape, took ship at Hamburg, and after vicissitudes in England, and New England, settled to practice in New York. Here, beginning with modest fees of twenty five and fifty cents for office and house visits and five to ten dollars for obstetric cases, he soon managed to make a living. The next year, he invented a laryngoscope which unfortunately was not made public before the appearance of Manuel Garcia's instrument two years later. By 1857, Jacobi was lecturing on pediatrics in the College of Physicians and Surgeons of New York,—the starting point of clinical and scientific pediatrics in this country. In this branch, he had but one American colleague, the devoted and unworldly J. Lewis Smith (q. v.) whose famous treatise of 1869 passed through eight editions. In 1860, Jacobi was called to the first special chair of diseases of children in the New York Medical College; in 1861, Smith became clinical professor of pediatrics in the Bellevue Hospital Medical College. In 1865, Jacobi took the clinical chair of his subject in the medical department of the University of The City of New York and from 1870 to 1899 was clinical professor of pediatrics in the College of Physicians and Surgeons. Officially, he taught pediatrics in New York for nearly half a century; actually, all his working life. In 1862, he established a pediatric clinic in the New York Medical College Building, which ran for two years. Thus, bedside teaching in pediatrics antedated bedside teaching in internal medicine in the United States.

Jacobi was an active and brilliant contributor to medical literature. In 1859, he published a volume of "Contributions to Midwifery and Diseases of Women and Children" with Emil Noeggerath (q. v.) who was his coadjutor in founding the "American Journal of Obstetrics" in 1862. During 1859-1903, Jacobi wrote much on diphtheria and published successive treatises on diseases of the larynx (1859), dentition and its derangements (1862), infant diet (1872), diphtheria (1876), intestinal diseases of infancy and childhood (1896-1903). To various medical periodicals he contributed many papers, including his more original observations of infantile diseases. His most enduring contributions are the three monographs on infant hygiene (1876), diphtheria (1877), and dysentery (1877) in the Gerhardt handbuch. To the history of pediatrics, he contributed the most important American papers, notably his St. Louis address (1904), two authoritative histories of American pediatrics (1902-1913), a history of cerebrospinal meningitis in America (1905), and a history of pediatrics in New York City (1917). In sixty six years of active practice, he wrote an enormous number of miscellaneous papers, most of which have been gathered in eight volumes, "Collectanea Jacobi," 1909. He had a mind literally saturated with medical lore.

During his long career, he held practically every honor which the medical profession can bestow. He was twice president of the American Pediatric Society and the first chairman of the section on diseases of children of the American Medical Association. He was president of the Association of American Physicians in 1896; of the New York State Medical Society in 1882; of the New York Academy of Medicine in 1885-89.

In 1873, he married Mary C. Putnam (Mary Putnam Jacobi q. v.), one of the first women graduates in medicine (1870), who also became famous.

Dr. Jacobi was of a short, slight, but elastic frame, his whole person being dominated by a large splendid head,—leonine, magisterial, with a crown of bushy hair; he was the living embodiment of an ancient high-priest of knowledge. He was large-minded, big-hearted, intensely human, his conversation flavored with banter, the tricksy humors of dainty Ariel or frolic Puck. He was a thorough democrat and not even the offer of Henoch's chair in Berlin induced him to give up the ideals of his fiery youth or desert the country of his adoption. He was perhaps equally known as a great citizen, a vigorous opponent of prohibition, an ardent advocate of birth control, and in every matter of public interest a conspicuous character.

In September, 1918, when his house at Lake George burned, he narrowly escaped death by jumping out of the window, but his valuable reminiscences, the labor of years, were lost. He died July 10, 1919, in the house of that other famous advocate of human freedom, Carl Schurz, at Bolton Landing, New York.

F. H. Garrison.

JACOBI, Mary Putnam (1842-1906), pioneer woman physician of New York, organizer, teacher, essayist, was born in London, England, August 31, 1842, the eldest of the ten children of George Palmer Putnam, publisher. She was descended on both sides from New England colonial stock and seven of her ancestors fought at Bunker Hill. She was educated by her mother and by tutors, but not

the least part of her education was gained from her literary environment. Her rare intellect early set a high goal for her efforts and the study of medicine appealed most strongly. Many of Mary Putnam's writings beginning with her ninth year are in existence; at seventeen she wrote a story, "Found and Lost," which was later accepted and published by the "Atlantic Monthly." This success almost turned her from her early decision to study medicine. She began to teach at the age of nineteen to earn money for a medical education, and at the same time studied anatomy under private instruction. Gaining admission as its first woman student to the New York College of Pharmacy, she graduated in 1862. The following two years she spent at the Woman's Medical College of Philadelphia, graduating in 1864. After one year as interne in the New England Hospital for Women and Children, Roxbury, Mass., she taught and wrote in New Orleans in order to continue medical study in Paris, where she went in 1866. During the first eighteen months she studied in the hospitals, but could not gain admission to l'École de Médicine because of lack of precedent. Her application through a friend to a certain professor for permission to enter his dissecting room was granted on the condition that she attend in male attire, whereupon, meeting the professor and looking up at his towering six feet from her short five, she exclaimed, "Why, Monsieur, look at my littleness, men's clothes would only exaggerate it. I should never be taken for a man and the objection to mixing with the students would be increased a hundred fold". Struck by her earnestness the good professor agreed, and her enrollment in l'École de Médicine soon followed. "How generously and delicately this brave girl adventurer was treated by the students and the faculty of those days, let this never be forgotten, to the honor of all the Frenchmen who then studied and taught in this great school!" Upon her graduation in 1871 Dr. Putnam received the highest mark for each of her five examinations, and her thesis took the bronze medal, the second prize awarded. She was the first woman ever to take the full course and the second to receive a degree in this institution; Dr. Elizabeth Garrett Anderson being the first.

Dr. Putnam's achievement in opening l'École de Médicine of Paris to women gave her an international reputation and led to many attractive positions being offered her, but she joined the little group of women who were struggling to establish the Woman's Medical College of the New York Infirmary, where she immediately became professor of materia medica and therapeutics. When Mary Putnam returned from Europe with a Paris medical degree and a training in scientific medicine, she was admitted in 1873, without discussion, to the Medical Society of New York County at the suggestion of Dr. Abraham Jacobi, its distinguished president, whom she married a few months later. She also became a member of the pathological, neurological and therapeutic societies, and of the New York Academy of Medicine. In conjunction with Dr. Anna Angell (q. v.) she founded a dispensary at the Mt. Sinai Hospital in 1873; in 1874 they founded the Association for the Advancement of the Medical Education of Women, and in 1876 won the Boylston prize (Harvard University), with an essay on "The Question of Rest for Women During Menstruation." From 1880 she was visiting physician to the New York Infirmary for Women and Children and visiting physician to St. Mark's Hospital after 1893. In 1882 a school for post-graduate instruction was opened in New York City and Dr. Putnam Jacobi was invited to a place on its faculty as the clinical lecturer on children's diseases, the first time such a lectureship in this country had been given a woman.

In 1893, in just recognition of her contributions to neurology, she was made chairman of the neurological section of the Academy of Medicine. Dr. James R. Chadwick (q. v.), of Boston, used to cite as an instance of her wonderful ability to quickly marshal facts from her fund of knowledge the occasion of an after dinner speech at the Annual Meeting of the Massachusetts Medical Society in 1889. He, as the "anniversary chairman", had invited her, the first woman thus honored, to be the guest of the Society; on their way to the hall he inquired her topic for an after dinner speech and was dismayed to hear she did not understand she was to make one, but more dismayed to have her add, "Oh, well, I will speak on 'Women in Medicine'." But that hotly discussed, long mooted subject must not be dragged in. "All right," she said, and when her turn came made, as he said, "a simply stunning and brilliant address on 'Practical Study in Biology'," calling forth ringing applause from the diners.

Logical, keen and alert in argument, swift to seize upon the kernel of thought and discard the mesh of verbosity, broad-minded, retentive of facts, almost to the encyclopedic

point, original in her conceptions and strong to follow where reason led; all these were qualities of Mary Putnam Jacobi's mind, and above and imbuing all was what Dr. Osler called her heliotropic potency, the truly solar gift of calling out the best that was in those about her. She was always interested in the political conditions of women, and in 1894 took up the gage in behalf of the ballot for women. She was also an early and ardent advocate of the necessity of having a woman physician in every insane asylum.

Dr. Putnam Jacobi had a dread of becoming a literary physician, feeling that a man who distinguishes himself most highly outside of his profession is rarely a distinguished member of his craft. As a medical writer she made for herself a high and permanent place. She was an active and industrious contributor to medical journals and to the archives of societies; her papers, numbering nearly a hundred, possessing, in addition to original scientific importance, a literary style rare in medical articles. From among her papers may be cited:

"Antagonism of Medicines" "Archives of Medicine," 1881; "Infantile Paralysis" "Pepper's Archives of Medicine," 1885; "Primary Education" "Popular Science Monthly," 1886; "Some Considerations on Hysteria," 1888; "Acute Mania after Operations," 1889; "Spinal Myelitis, Meningitis in Children" "Keating's Cyclopedia," 1890; "Brain Tumors" "Wood's Reference Handbook of the Medical Sciences."

Dr. Jacobi died in 1906 of a meningeal tumor pressing on the cerebellum. In the seventh year of her ten years' illness she sent her friend, Dr. Charles L. Dana, a story of her symptoms which he pronounced "so lucid, so objective and yet so human that it would be a classic in medical writing." In January, 1907, the Woman's Medical Association of New York City held a memorial meeting for Mary Putnam Jacobi at the Academy of Medicine. In all the addresses from men and women eminent in medicine, reform and literature there was one dominant note, "her dedication to the work of helping her fellow mortals." A memorial tablet to her memory has been placed in the main hall of the Woman's Medical College of Pennsylvania.

ALFREDA B. WITHINGTON.

JACOBSON, Nathan (1857-1913), surgeon of Syracuse, New York, was born in that city, June 26, 1857, received his early training in the common schools and the high school of his native city and studied medicine with Dr. Roger W. Pease and in the College of Medicine of Syracuse University, graduating in 1877. He continued his post-graduate studies in Vienna under such men as Stricker, Billroth and Hebra, returning to practice in Syracuse in 1878. His grounding in laryngology secured him an appointment in his own college in 1885 as instructor, followed by the lectureship coupled with clinical surgery and ending in the professorship of laryngology and of clinical surgery in 1889. In 1892 he abandoned laryngology for clinical surgery alone.

In 1906 he was elected to the professorship of clinical surgery in his alma mater, a position he held until he died. He was actively identified with the local state medical societies, and was a member of the American Surgical Association. He wrote much and delivered many addresses and was actively interested in broad public health questions, such as pure water, tuberculosis, hospital building and epilepsy. Much of his surgical work was done at St. Joseph's Hospital.

Jacobson was one of the important elements in the teaching force which conspired to give Syracuse its high rating in the country. He wrote the chapter on tubercular peritonitis in American Practical Surgery, edited by Bryant & Buck in 1910. (For other memoranda see Alumni record, Syracuse University 1872-1910, vol. iii, part I., page 436.)

He married Minnie Schwartz of Buffalo in 1884 and had one daughter and a son.

Dr. Jacobson died while making a professional call Sept. 16, 1913, death being due to heart disease.

FREDERICK W. SEARS.

JAMES, Edwin (1797-1861). Dr. James, who is best known among scientific men in this country as the botanist and historian of Long's expedition to the Rocky Mountains in 1820, under the auspices of the U. S. War Department, was born in Weybridge, Vermont, August 27, 1797. His father was Deacon Daniel James, a native of Rhode Island who removed to Vermont about the beginning of the Revolutionary war. Edwin was the youngest of ten sons, three of whom became physicians. His early studies were conducted at home in the manner usual at that period, the summer months being devoted to the labors of the farm, the winter spent at the district school. He pursued his academic and collegiate course at Middlebury, Vt., where he was graduated in 1816. Subsequently he engaged in the study of medicine for three

years under an elder brother, Dr. Daniel James, in Albany, N. Y. While pursuing his medical studies he was particularly interested in the natural sciences then taught by Professor Amos Eaton under the distinguished patronage of Stephen Van Rensselaer. In the spring of 1820 Dr. James was attached to the exploring expedition of Major Long as botanist and geologist, taking the place of Dr. William Baldwin, (q. v.) who accompanied this expedition the previous season as far as Franklin on the Missouri River, where he terminated his labors and his life. Dr. James was recommended for this position by the Hon. Smith Leconte, and Dr. John Torrey (q. v.), descriptive botanist of Dr. James's collection. The connection of Dr. James with the expedition lasted until its close, in November, 1820. His efficient labors on this arduous trip may be readily inferred from the published scientific results. Interesting additions were made to the knowledge of the botany of the great plains, at that time but imperfectly known. The elevated peaks forming the outlines of the Rocky Mountain range, rivaling in altitude the snowy summits of Mt. Blanc, revealed a reservoir of existing richness and attracted the attention of botanists both of America and Europe. It is still unexplained why the recommendation of Maj. Long applying to the lofty mountain in Colorado the name of "James Peak" has not been adopted by modern geologists. Amid the great number of elevated landscapes of this region some other peak fully as appropriate might have been selected to bear the name of the enterprising Pike.

On returning from this expedition the attention of Dr. James was occupied for two years in compiling the results, which were published in 1823, both in Philadelphia and in London entitled "Account of an Expedition from Pittsburgh to the Rocky Mountains in 1819 and 1820, under the Command of Major Samuel H. Long." This publication elicited no little interest and is now a valued fund of historic and scientific facts. When this work was finished Dr. James was for six or seven years connected with the U. S. Army as surgeon, serving in that capacity at several of the extreme frontier posts. During this period, aside from his professional duties, he was occupied with the study of the native Indian dialects and prepared a translation of the New Testament in the Ojibway language, subsequently published in 1833. He was also author of a life of John Tanner, a strange character who was stolen when a child from his home on the Ohio river by Indians, among whom he was brought up, developing in his future eventful history a strange mixture of the different traits pertaining to his early life and to his savage education.

At the reorganization of the medical department of the U. S. Army in 1830 Dr. James resigned his commission and returned to Albany, New York, where for a short time he was associate editor of a temperance journal conducted by E. C. Delavan, Esq. After leaving this he concluded to make his home in the far west, and in 1836 settled in the vicinity of Burlington, Iowa, where he spent the remainder of his life, devoted mainly to agricultural pursuits. It was at this time that some peculiar traits which distinguished Dr. James as a strange man became more conspicuous. His mode of life, his opinions and his views on moral and religious questions generally were inclined to ultraism and he assumed the habits of a recluse.

In his personal appearance Dr. James was tall, erect, with a benevolent expression of countenance and a piercing black eye.

On October 25, 1861, he fell from a load of wood and both wheels of the cart passed over his chest. He lingered until the morning of October 28th, when he expired at Rock Spring, Illinois, at the age of sixty-four.

BERTHA F. ROWE.

James, Martin L. (1829-1907), lecturer on the practice of medicine in the Medical College of Virginia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 607.

JAMES, Thomas Chalkley (1766-1835), first to occupy a separate chair of obstetrics in the University of Pennsylvania, was born in Philadelphia, August 31, 1766, and was the youngest son of Abel and Mary Chalkley James. The ancestors of Dr. James were originally from England, and on both sides were connected with the Society of Friends. His father was for many years one of the leading merchants in Philadelphia. James was well educated after the manner of Friends, especially at their school, under the superintendence of Robert Proud, the historian of Pennsylvania. James studied medicine under the direction of Dr. Adam Kuhn (q. v.), a disciple of Linnaeus, whose opinion always carried weight among his medical brethren, a man who had the honor of educating some of the first physicians of our country. In 1787, at the age of twenty-one,

he received a diploma of bachelor of medicine from the University of Pennsylvania and in 1811 that of doctor of medicine. When in London, in 1790, he found his countryman and fellow student, Dr. P. S. Physick (q. v.), a pupil and an assistant of the celebrated Mr. John Hunter, at St. George's Hospital. By Physick's advice, Dr. James entered (May 30, 1791) as a house pupil of the Story Street Lying-in Hospital under the care of Dr. Osborne and Dr. John Clarke, the two leading obstetric teachers in London. There he had soon the pleasure of receiving as companion his friend, Dr. I. Cathrall (q. v.), who was also with him at Canton. The winter of 1791-2 was spent in London chiefly in attending lectures, and also as an attendant at St. George's Hospital. After much deliberation respecting the relative advantages of spending a winter in Edinburgh or Paris, and after consulting by letter his friends on this side of the Atlantic, he finally followed the example of Dr. Physick and Dr. Cathrall, and went to Edinburgh in the spring of 1792. Here he remained and attended the lectures during the succeeding winter, in company with Hosack (q. v.) of New York. It does not appear that Dr. James took a degree at Edinburgh in imitation of his friends, Dr. Wistar and Dr. Physick, being content with the honors of his own university in Philadelphia, then in its infancy. In the month of June, 1793, accompanied by Dr. Ryan, he arrived at Wiscasset, in the then district of Maine. They reached Philadelphia only a short time before the terrible and then unknown yellow fever visited this city. James had hardly time to receive the congratulations of his anxious friends when the fatal scourge appeared, bringing dismay and terror even to the boldest spirits.

James, in conjunction with Dr. John Church, began his first regular course of lectures on obstetrics on November 27, 1802. The first course of lectures on midwifery in the University of Pennsylvania was begun by James in November, 1810. In 1807 (January 26) he was appointed physician to the Pennsylvania Hospital, as successor of Dr. J. Redman Coxe (q. v.), and on the twenty-fifth day of June, 1810, was changed at his own request to the station of obstetric physician. The duties of this appointment he continued to discharge with scrupulous attention and punctuality until November 26, 1832. He was elected fellow of the College of Physicians and Surgeons on the sixth of October, 1795. On the fourth of September, 1810, he gave the details of a case of premature labor, artificially induced by himself, in a patient with a contracted pelvis, after the expiration of the seventh month, with the gratifying result of recovery of mother and child. This was the first record, we believe, in this country, of the scientific performance of this operation.

On August 7, 1827, he read a paper on extrauterine pregnancy, in which he seemed anxious to establish the opinion, from an historical detail of cases, that ventral or abdominal pregnancy never originally occurred; that tubal or uterine pregnancy had previously existed in cases where the child was found in the cavity of the abdomen, the tube or uterus having been ruptured or ulcerated so as to allow the escape of the fetus from its original location into the peritoneal cavity. His reasoning from the anatomy and functions of the parts concerned and from the facts on record was ingenious and powerful.

With Hewson, Parrish and Otto, he edited the "Eclectic Repertory," which for eleven years gave important abstracts and original papers from foreign medical journals.

He married Hannah Morris, a lady connected with one of the first families in Pennsylvania, "eminently adapted by her mild, but decided character, her judicious, yet cheerful disposition to meet the peculiarities of Dr. James's character."

About the year 1825 the result of uninterrupted mental and bodily exertion began to be manifest in muscular tremor and impairment of utterance, and Dr. Dewees (q. v.) became his assistant. Ten years later, after twenty-five years valuable service to the Pennsylvania Hospital, he died on July 5, 1835.

HUGH L. HODGE.

JAMES, William (1842-1910), of Cambridge, Massachusetts although known as a great philosopher, had a medical back ground; in fact he was an assistant professor of anatomy and physiology. He was born in New York, on January 11, 1842, of devout and independent parentage. Throughout life his studies were much disturbed by ill health. In his youth he attended a Lycée in France and afterwards the University of Geneva, there gaining an unusual command of French. His German he acquired a few years later at the University of Berlin. In 1862-64 he was in the Lawrence Scientific School at Cambridge, Massachusetts, then for four years in the Harvard Medical School, from which he received the degree of M. D. in 1869. He also

studied with Louis Agassiz (q. v.) in the Cambridge Museum.

The progress of his mind can be traced in the successive topics of his teaching. In 1872-1873 he was an instructor in physiology at Harvard; instructor in anatomy and physiology 1873-1876, and assistant professor in that subject, in 1876. During the latter period he offered a course on the theory of evolution in the department of philosophy. In 1880 he abandoned anatomy and physiology altogether, becoming in that year assistant professor, and in 1885 professor, of philosophy. He now gave himself enthusiastically to psychology, and under his energetic guidance a psychological laboratory was established here. He was professor of psychology from 1889 to 1897 and professor of philosophy 1897-1907, and emeritus professor to the time of his death. But after the publication of his treatise on psychology, in 1890, his interest in it declined, and he turned more towards the history of philosophy and the theory of knowledge. In 1892 he resigned the directorship of the laboratory, and after 1897 was never willing to offer a psychologic course. Religion and metaphysics claimed him, and his last years were devoted to the elaboration of a comprehensive philosophy in which the portion known as "Pragmatism" occasioned wide discussion. His scientific equipment lent him authority, while his remarkable literary gifts secured for him a wider hearing than that accorded to any other living philosopher. His name was chiefly associated with his persuasive exposition of the doctrine of "Pragmatism," by which the value of any assertion that claims to be true is tested by its consequences, i. e., its practical bearing upon human interests and purposes—a doctrine which he derived from C. S. Peirce at Cambridge (Massachusetts) in the early "seventies." Of the permanent value of this doctrine it is difficult to speak. But there can be no question of the impetus which he lent to the study of psychology by a combination of qualities which placed him among the foremost thinkers of his time.

Whether readers agreed with his books or dissented all perceived that they vitalized their subjects. Several necessitated a new departure of human thought in their respective fields, the most notable being "The Principles of Psychology," 1890; "Talks to Teachers on Psychology," 1899; "The Varieties of Religious Experience," 1902; and "Pragmatism," 1907. Perhaps four short papers should also be mentioned: "The Feeling of Efforts," 1880; "The Dilemma of Determinism," 1884; "Is Life Worth Living?" 1895; "The Will to Believe," 1896.

The honors received by Prof. James were many and great. He was a member of the National Academy in America, France, Italy, Prussia, and Denmark; was a doctor of letters at Padua and Durham, of laws at Harvard, Princeton and Edinburgh, of science at Geneva and Oxford. He delivered a course of Lowell Lectures in Boston, of Gifford Lectures in Edinburgh, of Hibbert Lectures in Oxford. He was one of the founders, and always a chief supporter, of the Society for Psychical Research, a subject which profoundly interested him.

Professor James's personality had a strong influence on the students in his philosophical courses—they idolized him. In his later years he became involved in his diction, like his brother Henry, the novelist and in espousing publicly the cause of Christian Science, he brought discredit on his early medical training.

JAMESON, Horatio Gates (1778-1855). This surgeon of Washington, Baltimore and Philadelphia, was born in York, Pennsylvania, in 1778, the son of Dr. David Jameson who had emigrated to Charleston, South Carolina, in 1740, in company with Dr. Hugh Mercer (q. v.). Horatio studied medicine under his father and began practice at the early age of seventeen. After living in Somerset County, Pennsylvania and in Adamstown and Gettysburg, Pennsylvania, he arrived in Baltimore in 1810 and attended lectures at the College of Medicine (University of Maryland), and was graduated M. D. in 1811, his inaugural thesis being "The Supposed Powers of the Uterus." For some years he combined the business of druggist with that of medicine. During the War of 1812 he was surgeon to the United State troops in Baltimore, for which service his widow received a pension. He was physician to the City Jail for several years; from 1814 to 1835 he was surgeon to the Baltimore Hospital; from 1821 to 1835 he was consulting physician to the Board of Health. In 1827 he joined with Samuel K. Jennings, William W. Handy, James H. Miller, Samuel Annan (q. v.), and John W. Vethake in founding the Washington Medical College, which in 1839 obtained a charter conferring University rank, but never succeeded in establishing any other department and was suspended in 1852.

In 1830, by special invitation, he visited Europe and read a paper on the "Non-contagiousness of Yellow Fever" before the Society of German Naturalists and Physicians at Hamburg. He was the first American to attend these meetings and the only delegate present from the new world on this occasion. In 1832 he was appointed superintendent of vaccination and improved the virus in use by repassing it through the cow. He also had charge of the cholera hospitals established during the terrible epidemic of that disease. He published in the "American Medical Recorder" in 1822 (v. 116) "A Case of Bronchocele, Relieved by Taking Up One of the Superior Thyroid Arteries." In 1835 he accepted the presidency and a professorship in the Ohio Medical College at Cincinnati, but his wife's ill-health caused him to return to Baltimore after one session. In 1854 he removed to York and thence, after a brief stay, to Philadelphia, where he wrote and published his book on "Cholera." It is interesting to note that he had found the treatment of this disease more successful as it was milder and more simple. During a visit to New York for the purpose of disposing of this work he was taken suddenly ill and died August 24, 1855, at the age of seventy-six. His remains were brought to Baltimore for interment. His last written article was published in the "American Journal of the Medical Sciences" for October, 1856.

Dr. Jameson was well built, erect, his face was florid, healthy and clean-shaven, and free from wrinkles; his eyes were dark brown, piercing and surmounted by bushy eyebrows. He wore heavy gold spectacles and was very neat in his attire, and was noted for his mechanical ingenuity. In the "American Medical Recorder" for January, 1829, there is an account of a remarkable trial held in the Baltimore City Criminal Court in the spring of 1828. It was the result of a suit brought by Dr. Jameson against Dr. Frederick E. B. Hintze for defamation of character. The trouble arose from the attempt to establish a second medical school in Baltimore and the envy and ill-will thereby engendered. The report gives interesting details of some of Jameson's great and original operations. The cases mentioned are: 1. Extirpation of upper jaw, with preliminary ligation of the carotid artery, 1820. It was among the first of these operations and was a complete success, the patient being in good health at the time of the trial. 2. A case of lithotomy in which a hard fibro-cartilaginous tumor just within the neck of the bladder produced a grating sensation on passing the catheter simulating that caused by a stone in the bladder. 3. Removal of a scirrhus of the uterus, the first done in America. 4. A large tumor of the neck in which an exploratory trocar was introduced. 5. Attempted ovariotomy. The result was that Hintze was fined and Jameson completely vindicated. From 1829 to 1832 Dr. Jameson published a quarterly journal entitled the "Maryland Medical Recorder," and in this and the "American Medical Recorder" his numerous papers and reports of operations appeared. In 1817 he published two lectures on "Fevers in General," pp. 48, and a work, "American Domestic Medicine," pp. 161 (second edition 1818). His work on cholera has already been mentioned, "A Treatise on Epidemic Cholera," Philadelphia, 1854, pp. 286.

He was twice married, first in 1797 to Catherine Shevell, of Somerset County, Pennsylvania, by whom he had nine children. She died in 1837 and late in life he married a widow named Ely, who survived him but had no children. His sons were all physicians and died early, leaving no descendants.

EUGENE F. CORDELL.

JANEWAY, Edward Gamaliel (1841-1911), of New York, was among the foremost clinical teachers and consultants of his generation. He was born near New Brunswick, New Jersey, August 31, 1841, the son of Dr. George Jacob and Matilda Smith Janeway. On his father's side he was of English and Scotch descent, the first American ancestor having settled in New York City in 1695. His father, who was a physician, had been one of that early group of American students who sought the inspiration of Paris in its greatest period. His grandfather, Rev. Jacob Jones Janeway, D. D., minister of the Presbyterian Church, professor in Princeton, later vice-president of Rutgers College, was a man of robust intellect and great moral earnestness. His mother was a New Yorker of New England stock, who died while he was a boy. His school and college life were passed in New Brunswick, where he received from Rutgers College the degree of A. B. in 1860, and later the A. M. He did not take special honors in college and showed a very wholesome fondness for outdoor sports and practical jokes. The career of a physician, as he had watched his father's arduous days, did not attract him, and he begged permission to enter business in New York. His father was wiser and, with confi-

dence that his talents would develop best in medicine, begged him to try. The first year of the old curriculum at the College of Physicians and Surgeons, New York City, with its grind of didactic teaching, and its lack of contact with objective facts except in the dissecting room, gave him no enthusiasm for the profession. Then came the experience of a hospital, where he could see real sick people and do real things to help them, and his love for the work grew apace. This experience was brought by the Civil War, in which, during 1862 and 1863, he served as medical cadet in the army hospital at Newark, N. J., under his cousin, Dr. John H. Janeway, U. S. A. From that time on the study of medicine absorbed his every energy of mind and body. He completed his course and graduated in 1864, and immediately entered Bellevue Hospital, where he served on the house staff for two years. In those days the first service of an interne was the charge of the small-pox hospital on Blackwell's Island, where a visiting physician rarely came, and education was laboriously won in the bearing of heavy responsibility, alone.

In 1866, soon after the completion of his hospital service, he was appointed curator of Bellevue Hospital, a position he held until 1872, when he became visiting physician. Those six years laid the firm foundation of his later achievements. He literally lived in the dead-house, in spite of the remonstrances of friends, who thought he was throwing away all his opportunities for acquiring a practice. Virchow's work was just coming into prominence, and he mastered medical German in order that he might follow it at first hand. Stimulated by it, he, with Francis Delafield, (q. v.) who became the other great teacher and consultant of his time in New York City, and the brilliant J. W. Southack, his particular friend, who died young, conducted systematic autopsies for the first time in New York City. Through them he learned to know the lesions of disease as the greatest clinicians, and none but the greatest, have known them in the past, and as few will ever know them in the future, now that pathology has become a separate field of investigation. Through them he also came to recognize the pitfalls that await the diagnostician and to know the limitations of his methods, where he might be bold in the certainty of observed fact, where cautious in the dangers of interpretation. Few men, I believe, have ever so completely exemplified Virchow's dictum that the physician must, above all, think anatomically. The almost uncanny skill with which, in later life, Dr. Janeway would sometimes solve a difficult diagnostic problem by a few simple observations, and which made men say that he could see inside a patient, was but the result of a mind stored to the full with accurate visual memories of almost every known lesion that can affect the internal organs. Pathology was never for him an end in itself, but always the final chapter in the history of a case of disease. When, in 1872, he received the coveted post of visiting physician, he still frequented the autopsy room, and throughout his whole life he would cancel any other engagement to see the post-mortem on a patient he had observed. He obtained many autopsies on private patients, and later, as commissioner of health, he often incurred the risk of physical violence in order to confirm by section his suspicion of the existence of such dangerous diseases as hemorrhagic smallpox or typhus fever. He left no permanent contributions to pathological theory, but his contribution to making pathological anatomy the basis of clinical diagnosis in the United States was conspicuous. The "Pathological Reports of Autopsies performed in Bellevue Hospital" (Bellevue and Charity Hospital Reports, 1870) and the "Proceedings of the New York Pathological Society" from 1868 to 1878, attest his activity during this period.

From 1868 to 1872 he was a visiting physician to Charity Hospital. During 1870 he gave up some months at the urgent request of the Commissioners of Public Charities to live there as chief of staff, in order to root out the corruption known to exist, and he accomplished it successfully and fearlessly. This was his first public service. A far more important one followed in 1875, when he was appointed commissioner of health of the City of New York, serving until 1881. He thus acquired a large interest in and knowledge of sanitation, and throughout his life his advice was sought on public health problems. He also added to his clinical training a large experience with the epidemic diseases. In 1892 he was an active member of the advisory committee of the New York Chamber of Commerce, which played an important rôle in safeguarding New York from Asiatic cholera. He was instrumental in securing the first hospital for contagious diseases on Manhattan Island, and had to overcome violent opposition in placing it. A later outgrowth of his appreciation of preventive medicine was his early participation in the anti-tuberculosis movement.

He was one of the first members and later chairman of the tuberculosis committee, of the Charity Organization Committee, and on a similar committee of the State Charities Aid Association.

His career as a teacher really began in 1872, when he became professor of pathological anatomy in Bellevue Hospital Medical College, though he had held a position for one year previously in New York University Medical College. He was also for a time demonstrator of anatomy. Later he added lectures on materia medica, therapeutics and clinical medicine to his duties, and gave classes in physical diagnosis in Bellevue Hospital that were greatly sought after. In the college and in Bellevue Hospital he was intimately associated with Austin Flint, the elder (q. v.), for whom he had an intense admiration, and who alone of his seniors seems to have influenced his development, which was otherwise wholly independent and self-impelled. In 1881 he became professor of diseases of the mind and nervous system and adjunct to Dr. Flint, the professor of medicine. During this time he was a close student of Charcot and the French neurologists and was associated with Seguin (q. v.) in extending the new knowledge of cerebral localization, and the exact diagnosis of organic nervous diseases in America. In 1886, on the death of Dr. Flint, he succeeded him as professor of the principles and practice of medicine and clinical medicine. This chair he held until 1892, when certain differences with his colleagues as to policy compelled him to resign as professor, and as visiting physician to Bellevue Hospital. When, in 1898, the Bellevue Hospital Medical College was united with the New York University, he became professor of medicine and dean, holding these positions until 1907, but giving only clinical instruction. His active teaching career closed in 1892.

Dr. Janeway's consultation practice grew out of the reputation gained in hospital work and as teacher. He was one of the first men in America to recognize that a family practice is not the proper training school for a great consultant, and that a consultant, who accepts no patients except for opinion and advice to their physician, occupies a far stronger ethical position than one who may be persuaded to retain a wealthy patient for treatment. I believe that few physicians have more deliberately trained themselves for usefulness as consultants, nor more resolutely declined the entanglement of an associated family practice. These, with his recognized skill in diagnosis, his unimpeachable honesty, and his extraordinary consideration for and helpfulness to consultants brought him into such demand that, for the last twenty years of his life his days were filled to overflowing with consultations at half hour intervals. Only a vigorous physique, an ability to concentrate on essentials, an unconquerable zest for the pursuit of a diagnostic problem, and a certain boyish pleasure in doing more than anyone else in a given time, enabled him to stand the strain. He loved to make seemingly impossible railroad connections in order to see one more patient. His charges were so moderate that all classes sought his advice. With his training, a laboratory was essential to his work and he had one when laboratories were scarcely to be found in any physician's office in New York. He was always an expert microscopist. Later he built a well-equipped laboratory for clinical and microscopical diagnosis, and four teachers of medicine and a well-known teacher of pathology worked for him at various times and had an invaluable training there. From it came publications to which he would never allow his name to be attached. He was keen to follow up any new discovery that seemed likely to be of service and was one of the first men in this country to see under the microscope the tubercle bacillus and the malarial plasmodium.

Hospital practice was an essential part of his life. In addition to his active teaching connection with Bellevue Hospital, he was visiting physician to Mt. Sinai Hospital, 1883 to 1897, and at the time of his death was consulting physician to the Presbyterian, St. Vincent's, Mt. Sinai, St. Luke's, the French, the Woman's, the Skin and Cancer, the J. Hood Wright hospitals, and the Hospital for Ruptured and Crippled Children. He supported medical societies as the duty of a loyal physician, but hated medical politics and never cared for office. I doubt if any man of his generation belonged more thoroughly to the whole profession and not to any party in it. He was vice-president of the New York Pathological Society in 1874, president of the New York Academy of Medicine in 1897-1898, of the Association of American Physicians in 1900, and of the National Association for the Study and Prevention of Tuberculosis in 1910. He was a delegate to and honorary vice-president of the British Congress on Tuberculosis in 1901, and a vice-president of the clinical section of the International Tuberculosis Con-

gress at Washington in 1908. The degree of LL. D. was conferred on him by his alma mater, Rutgers, in 1898, by his medical alma mater, Columbia, in 1904, and by Princeton in 1907. The College of Physicians of Philadelphia made him an honorary member in 1909.

Dr. Janeway wrote no book. He had none of the instincts of the compiler and early in life determined that he would write nothing which was not based upon his own experience. When experience was ripe, leisure for writing was gone. He was so scrupulously honest that he would publish over his name nothing which any other man had assisted in. He contributed to a few text books early, and to the journal literature throughout life, but never frequently. He gave the earliest adequate description of leukaemia ("Leucocythaemia," "Med. Rec.," 1876, xi, 279; 295) in America, and was the first to call attention to the fever of tertiary syphilis and the importance of its recognition ("Danger of Error in Diagnosis between Chronic Syphilitic Fever and Tuberculosis." Tr. Assn. Amer. Phys., 1898, xiii, 23). In 1882 he taught the contagiousness of tuberculosis ("Possible Contagion of Phthisis." "Arch. Med.," 1882, viii, 219). His method and individuality as a clinician are shown in such publications as "Points in the Diagnosis of Hepatic Affections" (Am. Clin. Lect., N. Y., 1877, iii, 107), "Certain Clinical Observations upon Heart Disease" ("Med. News," 1899, lxxv, 257), and "Observations on Some Limitations of Diagnosis" ("Med. Rec.," 1903, lxiii, 641).

Throughout his whole life he taught at the bedside, and not only his undergraduate students, but the bulk of the medical profession of New York and the surrounding states learned from his thoroughness in examination diagnosis based on the bedrock of observed fact and not on speculation; it learned prognosis which remembers the patient's need and the physician's liability to err, and conservative and common-sense treatment. His essential greatness was as a diagnostician. It is the general opinion of all who knew him in his work, whether those keenest critics, his hospital staffs, or his colleagues, that in the detection of obscure disease he had no equal in his generation.

Dr. Janeway was married in 1871 to Frances Strong Rogers, daughter of Rev. E. P. Rogers, D. D., of New York City. She, with three children, two daughters and a son, survived him. One daughter had died in infancy. In his home he was altogether happy and he grudged every hour spent away from it except for his work. He was a generous host, but an unwilling guest. Modest, humble in spirit, though absolutely confident of his judgment when he had once reached a decision within the realm of his science; a man of few words, with little facility of self-expression; of transparent honesty of thought, word and deed, ever ready to acknowledge his ignorance, when baffled, and hating sham above all things; to those who knew him slightly he seemed a man of great wisdom, but little geniality, inspiring implicit trust, but repelling familiarity.

Brought up in the strictness of life and theological doctrine of the older Calvinism, he kept throughout his life its rigorous standards of conduct and religious observance, though his science profoundly modified his attitude toward its intellectual formulations. He was for many years an Elder in the Dutch Reformed Church. Duty was his guiding principle, and he hesitated at no sacrifice that it might demand.

For twenty years he suffered with increasing frequency from inherited gout. In July, 1910, he showed signs of increasing weakness and retired to his country home. On February 10, 1911, he died, after several days of anuria, at Summit, N. J. Among the many biographic notices which voice the esteem in which he was held by his colleagues, the following are characteristic: Med. Rec., N. Y., 1911, vol. lxxix, 684; N. Y. Med. Jour., 1911, vol. xciii, 331; Ibid., 1912, vol. xcv, 105; Amer. Med., 1911, vol. xvii, 107; Boston Med. and Surg. Jour., 1911, vol. clxiv, 249; Columbia Univ. Quart., 1911, vol. xiii, 309; München. med. Wochnschr., 1911, vol. lviii, 1, 582, Reference Handbook of the Med. Sci., N. Y., 1915, 3rd ed., vol. v, 679.

THEODORE C. JANEWAY.

JANEWAY, Henry Harrington (1873-1921), radiologist of New York, was born March 19, 1873, in New Brunswick, New Jersey. After graduating A. B. from Rutgers College in 1893, he studied medicine at the college of Physicians and Surgeons, Columbia and was graduated in 1898. He became chief of laboratory of experimental surgery at Columbia in 1909; professor of physiology in the New York College of Dental Surgery, and attending surgeon and chief of the radium department of Memorial Hospital in 1914.

Dr. Janeway was essentially an investigator. He early made important contributions to the pathology of shock and on the

methods of intrathoracic surgery. His main work was as a pioneer in the development of effective methods of radium therapy, combining a thorough knowledge of the physics of radium with familiarity of the effective methods of using this agent and the technical skill of the surgeon; he was the first to apply successfully and on a large scale the use of unfiltered radium in the treatment of carcinoma of the tongue, tonsil, uterus, and breast.

Although he suffered for many years from the disease which eventually caused his death, he was an indefatigable worker and writer, contributing forty-four original articles, mostly on cancer but covering a wide range of medicine and surgery. He died February 1, 1921.

JAMES EWING.

JANEWAY, Theodore Caldwell (1872-1917), professor of medicine at the College of Physicians and Surgeons, New York and at the Johns Hopkins University, Baltimore, was born in New York City, November 2, 1872, son of Professor Edward G. Janeway (q. v.), America's leading clinical, consultant and teacher, and Frances Strong Rogers. Developing in such a highly charged medical atmosphere, Theodore Janeway also became eminent as a physician, a leader in scientific work and a teacher. Beginning at the Cutler School, he was graduated from the Sheffield Scientific School, Yale (1892), and in medicine at the College of Physicians and Surgeons (1895). He practiced with his father and was instructor in bacteriology in Columbia (1895-1896); interne in St. Luke's Hospital (1897); instructor and lecturer in the University and Bellevue Hospital Medical College (1898-1906); associate in clinical medicine in the College of Physicians and Surgeons, Columbia (1907-1909); and upon the retirement of Dr. Walter Belknap James (1909) he became professor of medicine, until his resignation in 1914 to go to the Johns Hopkins University and Hospital.

Janeway as a young man was conscientious, persevering and serious, and matured early . . . always studious and a hard worker, but light-hearted and keen among his fellows, and cheerful and well liked (Howland). In his medical training under the constant supervision and guidance of his father, he received a continuous intensive training, absorbing medicine at every pore, and as far as it is ever possible for one man to transfer his abilities, the extraordinary skill of the elder Janeway was engrafted into the heart and mind of the son. Theodore Janeway was the first in New York City to teach medicine from the standpoint of disease as a departure from the normal physiological basis, and with Oertel he introduced at the City Hospital the clinical pathological conference. The clinical study of blood pressure in this country began with him, and he devised the first instrument readily available at the bedside. When he went to the City Hospital on Blackwell's Island, the service was wretched, but in a short time he reorganized it with an active efficient staff and with men competing for the positions on his service. While in New York he advised and assisted the charitable organizations caring for those incapacitated for work by accident or disease; he was also closely identified with the Charity Organization Society and organized the bureau for the handicapped, a work which he considered his most original contribution. He informed the writer personally that it was a matter of serious regret that the pressing duties at the Hopkins Medical School prevented his active co-operation in this kind of work in Baltimore.

While in New York he was visiting physician to St. Luke's, the City, and the Presbyterian Hospitals; he was active in the Association of American Physicians, and in other medical societies; at the time of his death he was on the governing board of the Rockfeller Institute of Medical Research. In 1914, under the grant from the Rockefeller Foundation, the Johns Hopkins University adopted a whole-time basis for three chairs in the medical school, and Janeway was called as the first whole-time professor of medicine under the William Welch Endowment. His predecessors in the medical school were Sir William Osler (q. v.) and Lewyllys F. Barker. This decision to place these chairs on a full-time basis was a "new departure in medical education in the English-speaking world." Janeway took part in establishing the Postgraduate School for the Study of Tuberculosis at Saranac Lake, in memory of Edward Trudeau; (q. v.) and for three years he was president of the Laennec Society, organized by Sir William Osler at the Johns Hopkins Hospital, for the study of tuberculosis.

A member of the Army Medical Corps, he was called into active service in April, 1917, intending to go to France with the Johns Hopkins University Unit in June, 1917, but was persuaded that his best service could be rendered in this country. He entered the service

as a member of the United States Reserve Officers' Corps, safeguarding the health of the soldiers, a work temporarily interrupting his teaching activities. As an organizer and as a clinician Janeway excelled, and was the leader of "a younger group of physiological clinicians who have been quietly but surely upbuilding and transforming American medicine" (Osler). He stood with the new school of clinicians in wedding pathology as closely as possible with clinical medicine.

Janeway's "Clinical Study of Blood Pressure" was published in 1904, and "admirably illustrated the application of physiological methods to bedside problems" (Osler). He was an editor and contributor to the "Archives of Internal Medicine." An elaborate work on diseases of the heart and blood vessels was nearly completed at his death; it was to have been published early in 1918 but military duties interfered. As a public speaker, he began slowly and with hesitation but soon warmed up and presented his subject in a clear, logical, convincing way; he became eloquent as he caught the sympathy of his audience, developing a high degree of oratory by simple force of earnestness and moral conviction. He won friends in his personal relations by an unusual charm of manner. His geniality and sympathetic traits of mind are seen at the best in the brief "Introductory Survey of French Medical Science" ("Science and Learning in France," 1917).

In appearance Janeway was of slight, well-knit and alert figure with quick yet graceful movements. With a mobile expression, his face would light and his eyes sparkle with animation as he talked. His whole appearance, to the stoop of his shoulders, indicated the scholar combined with the man of wide public interests.

In 1898 Dr. Janeway married Eleanor C. Alderson of Overbrook, Pennsylvania, who, with three daughters and two sons, and his mother, survived him.

After less than a week's illness with pneumonia, he died at his home in Baltimore, December 27, 1917.

HOWARD A. KELLY.

JANVRIN, Joseph Edward (1839-1911), New York gynecologist, was born at Exeter, New Hampshire, January 13, 1839. He was the son of Joseph Adams and Lydia Ann Colcord Janvrin, both of Exeter. The first ancestor of the name to settle in this country was John Janvrin, who came from the Isle of Jersey in 1705 and settled at Portsmouth, New Hampshire, marrying a Miss Knight of that place. Dr. Janvrin was a lineal descendant of the Adams family, of Braintree, now Quincy, Massachusetts. After graduating from Phillips Exeter Academy in 1857 he taught school for two years and then began the study of medicine under Dr. William G. Perry, of Exeter. At the outbreak of the Civil War, in 1861, he enlisted in the 2nd New Hampshire Regiment, and eighteen months later was appointed assistant surgeon to the 15th Regiment, New Hampshire Volunteers, with which he remained until mustered out of service in August, 1863. He attended courses of medical lectures at Dartmouth, and finally studied at the College of Physicians and Surgeons (Columbia University), in New York, from which he took his M. D. in 1864. He entered private practice in New York City, as an associate of Dr. Edmund R. Peaslee (q. v.), the gynecologist.

From 1868 to 1872 Dr. Janvrin was visiting physician to the department of heart and lung diseases in the Demilt Dispensary. From 1872 to 1882 he was an assistant surgeon to the Woman's Hospital in the State of New York; he then became gynecologist to the New York Skin and Cancer Hospital. He was president of the New York Obstetrical Society in 1890 and 1891, of the New York County Medical Association in 1896 and 1897, a trustee of the New York Academy of Medicine for five years, and president of the American Gynecological Society in 1903.

Dr. Janvrin was a frequent contributor to medical journals, upon subjects connected with gynecology and obstetrics. Among the more important of his papers were:—"The Surgical Treatment of Early Diagnosed Cancer of the Uterus." (President's address before the American Gynecological Society at Washington, D. C., May 13, 1903.) "Immediate vs. Deferred Operation for Intra-abdominal Hemorrhage, due to Tubal Pregnancy." (Trans. Amer. Gynec. Soc., 1908). "A Clinical Study of Primary Carcinomatous and Sarcomatous Neoplasms between the Folds of the Broad Ligaments, with a Report of Cases" (Trans. Amer. Gynec. Soc'y., 1891). "Vaginal Hysterectomy for Malignant Disease of the Uterus" ("New York Jour. of Gynec. and Obst.," September, 1892).

On September 1st, 1881, he married Laura L. LaWall, of Easton, Penn. They had two children, Marguerite LaWall and Edmund R. P. Janvrin.

After a life of remarkable activity, he died December 21, 1911, at the Roosevelt Hos-

pital in New York City, following an operation for acute appendicitis.

HERMANN J. BOLDT.

JARVIS, Edward (1803-1884), alienist and statistician, was born in Concord, Massachusetts, January 9, 1803. He was graduated at Harvard College in 1826 and took his degree in medicine at Harvard Medical School in 1830. He practiced medicine two years in Northfield, five years in Concord, Massachusetts, and five years in Louisville, Kentucky, with poor success. His tastes inclined to the study of mental science and anthropology. He was early interested in the cause of education and started public libraries in Concord and in Louisville. In 1836, while at Concord, he received an insane young man from Cambridge into his house for treatment. Several other patients were afterwards received for the same purpose, and he became interested in the treatment of insanity, a specialty he resumed when he established a permanent home in Dorchester, Mass., and continued it for many years successfully. Dr. Jarvis was disappointed several times in his candidacy for the superintendency of public hospitals for the insane in Massachusetts, a position for which he brought the highest recommendations and towards which his tastes were strongly inclined. Although he felt these disappointments keenly, he was not deterred from pursuing his favorite studies.

In 1840 his attention had been directed to the apparently excessive amount of insanity among the free colored population of the north. This excess, which had been used by speakers in Congress to show the probable effect of emancipation upon the negro, he pointed out to be due to gross errors in the census of 1840. His aid was accordingly solicited in the preparation of the census of 1850, and although without official authority and pecuniary return, he gave one-third of his time for three years to perfecting the returns. In 1874 the government, however, acknowledged his merits by paying him for this service. He was also employed on the census of 1860, and became the leading authority on vital statistics, being recognized as such at home and abroad.

In 1854 the Legislature of Massachusetts appointed a commission, consisting of Levi Lincoln, Increase Summer and Edward Jarvis, to inquire into the number and condition of the insane and idiots in Massachusetts, and the report of that committee, prepared by Jarvis, is a monument of his patient, painstaking investigation into the number of the insane and idiots in the state. The hospital at Northampton was erected in consequence of the recommendations of this commission.

In 1843 he became a member of the corporation of the School for Idiots in Boston, and in 1849 was appointed physician to the Institution for the Blind, in that year delivering the annual discourse before the Massachusetts Medical Society. He continued to be associated with Dr. S. G. Howe (q. v.) in the supervision and care of these two institutions for many years, his service being largely gratuitous. In 1860 Dr. Jarvis visited Europe, where he traveled extensively in charge of a wealthy insane patient, who was accompanied by his family. He was commissioned a delegate to the International Statistical Congress in London, where he made the acquaintance of many distinguished foreign physicians and alienists. He was chosen one of the two vice-presidents of this congress.

In 1874 his labors were suddenly arrested by a stroke of paralysis. He remained in comfortable health, however, until October 20, 1884, when a second attack occurred, which terminated fatally on October 31, 1884. His wife died the second day afterwards, and they were both buried on the same day in their native town of Concord. Dr. Jarvis was a fellow of the American Academy of Arts and Sciences. His writings were voluminous and embraced a wide range of subjects. He wrote a school physiology, which was translated into Japanese and was in use in Japan. A bibliography of his writings may be found in the History of the Harvard Medical School, T. F. Harrington, M. D., N. Y. 1905, page 1462.

JARVIS, William Chapman (1855-1895), rhinologist of New York, inventor, was the oldest son of Jane Mamford and the late Surgeon N. S. Jarvis, a veteran officer of many years service. Dr. Jarvis was born May 13, 1855, amid the romantic surroundings of the old casemates at Fortress Monroe, Virginia, then, as now, occupied as officers' quarters.

He received his early training in private schools in Baltimore. It cannot be said that he took his studies seriously, having a mind diverted by the more fascinating woods and the fields, where his inborn love for nature and all its wonders found contentment and joy. As a mere boy, he delved in astronomy, chemistry and physics and the microscope was his constant joy. He was a photographer in

the days of the wet plate, a stenographer and a mechanic of unusual resourcefulness. His boyish ingenuity suggested objects for domestic use—a mouse trap, a stationary basin, a steam gun, a stationary steam engine. His draughtsmanship, unusual in a boy, developed in later life to a high degree, and his drawings of the diseased and normal organs, prepared by him for his various medical contributions, were clear and accurate. Approaching manhood, he suddenly decided upon medicine as a career, though his mother had always promised for him the vocation of the farmer. Graduating at the University of Maryland Medical College at the age of 20, he pursued post-graduate work at the Johns Hopkins with Professors Roland and Martin in the biological laboratories, and advanced chemistry with Remsen. Outside of the domain of medicine, he offered a wide diversity of attainments. A student of Latin and Greek, he was also familiar with French and German,—the latter he spoke fluently. His great diversion was music, and the piano and zither were his frequent solace. In his laboratory he worked out many useful formulæ and perfected his remarkable array of surgical devices which bear his name. He was deeply religious, an earnest student of the Bible and not only a believer but a doer of the word. The New Testament he had translated for his own instruction from the Greek, Latin, French and the German a somewhat unusual procedure prompted probably by a desire to familiarize himself with the manner in which the great promises of the Gospel appeared in those tongues. His library held volumes of precious value to the student of sacred things and he conducted in the latter years of his life a class for Bible study in one of the New York Churches. Dr. Jarvis moved to New York in 1877, taking up the general practice of medicine in the eastern section of the city. Deciding upon laryngology as a specialty, he was appointed an assistant to the service of Professor Franck Bosworth in the throat clinic of the Bellevue Out Door Poor. In 1881, at the early age of 26, he was designated lecturer on laryngology at the University Medical College, and subsequently clinical professor of diseases of the throat. He was a visiting physician to the City Hospital and for a brief period lectured at the University of Vermont.

Dr. Jarvis first came into prominence as an original worker by the invention and introduction to intra-nasal surgery of the "Jarvis wire snare ecraseur." The little device, though simple in itself, was based upon the introduction of a new material for intra-nasal surgery. His claim to originality in the employment of his piano wire has not been disputed except by one German mechanic. His biographer has had no convincing proof that piano wire was used in intra-nasal surgery prior to Dr. Jarvis' entrance into this field of work. The introduction of piano wire for cutting purposes revolutionized intra-nasal surgery, placing in the hands of the specialist and general practitioner a safe and easy method for the removal of neoplasms and deformities. The principle of the Jarvis snare, has been copied in numerous modifications. Few of these instruments show any marked advantage over the original device of Dr. Jarvis, who modified his own instruments slightly to meet varying conditions, the most important being the application of a graduated scale upon the shank of the instrument, and the milled nut. It is thus possible by a simple measurement of the growth to determine how many turns of the nut are necessary to cut it through. Other instruments suggested by Dr. Jarvis were the applicator for the treatment of glottic and subglottic growths. The instrument devised in 1884 ("N. Y. Medical Journal," August, 1884) was intended for the use of chromic acid as an escharotic, a crystal being placed upon the tip of a concealed stylet and fused. By means of a trigger device upon the handle of the instrument the stylet was suddenly plunged upon the growth, cauterizing a localized area. He suggested also a method of removing deviations of the nasal septum by means of tubular nasal drills driven by an electric motor. ("N. Y. Medical Record," 1887, vol. xxxi.) He described a case of ozena of years standing cured by the removal of the carious intra-nasal bones, using these drills for their rapid excision, in a paper read before the American Laryngological Association 1888. ("Medical Register," February 2, 1889). At the annual meeting of the New York State Medical Society, 1885, Dr. Jarvis presented a plan for illumination of the upper air passages by the application of electric light bulbs at the focus of the head mirror and at the shank of a laryngoscope handle. This was the introduction to what is now a common and convenient means of illumination of all the body cavities. He was a pioneer in the use of cocaine in intra-nasal and laryngeal surgery, which he predicted would prove of great value in the future. At that time he found it difficult to secure the pure drug and

indicated the necessity of obtaining pure crystals only to attain satisfactory results, "Cocaine in Intra-nasal Surgery" ("New York Medical Record," vol. xxvi, 654-56).

A rare member of society, he was withal extremely modest, genial and amiable, punctilious in all the responsibilities that rest upon an active practitioner and in all the duties of life. He died as he had lived, calmly resigned to the will of his Maker. He had suffered for several years from an obscure abdominal disease, dying July 3, 1895, at Fort Totten, New York, while on a visit to his brother, Captain N. S. Jarvis, U.S. Army. So, by a curious coincidence, his first and last glimpse of daylight came to him in a military post.

N. S. JARVIS.

JAY, John Clarkson (1808-1891), conchologist, founder of the New York Academy of Sciences, son of Peter Augustus Jay and grandson of John Jay, was born in New York City, September 11, 1808, and died at his home, called "Rye," in Westchester County, New York, November 15, 1891, in his eighty-fourth year, the immediate cause being senile gangrene. He was graduated from Columbia College in 1827, and the College of Physicians and Surgeons, New York, in 1830, and served as interne in the New York Hospital the usual term. Upon his marriage with Laura Prime, daughter of Nathaniel Prime, a well-known banker, he left his practice and for a short time engaged in the banking business, but soon retired from both business and professional pursuits to live at his country seat, "Rye," where 400 acres gave him ample occupation.

Jay was well known in the scientific world as a specialist in conchology. His wonderful collection of shells, for many years the most noted in the United States, is now owned by the American Museum of Natural History, and is known as the Jay Collection. These shells were gathered during the expedition to Japan under the command of Commodore Matthew C. Perry. They were submitted to Dr. Jay, who wrote articles on them which appeared in the government reports. He was also the author of "A Catalogue of Recent Shells," published in 1835; "Description of New and Rare Shells" (1836), and of later editions of his "Catalogue," in which he enumerated about 11,000 well-marked varieties and about 7,000 well-established species.

Dr. Jay was for many years a trustee of Columbia College and for ten years a trustee of the College of Physicians and Surgeons. He was actively interested in founding the Lyceum of Natural History, now the New York Academy of Sciences, and was its treasurer from 1836 to 1843. One son, Dr. John C. Jay, Jr., and four daughters survived him.

JAYNE, Horace Fort (1859-1913), anatomist and entomologist, son of Dr. David Jayne (1799-1866) and Hannah Fort, was born in Philadelphia, March 17, 1859. His father was connected with the drug business and grew wealthy in the manufacture of medicines. David Jayne was said to have been the first to publish almanacs as a means of advertising. Horace took an A. B. at the University of Pennsylvania in 1879, and an M. D. in 1882, leading his class and taking the thesis prize, and dividing the anomaly and anatomical prizes with Howard A. Kelly. In 1893 he received a Ph. D. (hon.) from Franklin and Marshall College. In 1882 he was assistant instructor in biology in the University, and went abroad to study under Haeckel at Jena, and at the University of Leipsic. In 1883 he studied at Johns Hopkins, and in 1884 was made professor of vertebrate morphology in the University of Pennsylvania, becoming professor of biology in 1888. He was dean of the college (1889-1894), and dean of the faculty of Philosophy (1892-1894). He resigned his college professorship in 1895, having assumed directorship of the Wistar Institute of Anatomy and Biology in 1894. A working staff was organized and extensive valuable collections were made. In 1898 he published a text book on comparative anatomy, using the domestic cat as a type. In 1904 Jayne resigned his directorship and traveled for three years. In 1907 he again became a member of the institute staff and was interested in bringing the five American anatomical journals under the roof of the Wistar Institute as responsible for their publication. In 1909 he resigned, following the death of his wife. He was for a long time a warm friend of Dr. George H. Horn (q. v.), who stimulated his interest in Coleoptera. He was a member of the American Philosophical Society, Association of American Anatomists, Academy of Natural Sciences, Society of American Naturalists, American Entomological Society, and other scientific organizations.

He wrote: "A Revision of the Dermestidae of North America;" "Abnormities Observed in North American Coleoptera;" and "Origin of the Fittest."

In 1894 he married Caroline Augusta Furness, daughter of Dr. Horace Howard Furness. The issue was Kate Furness and Horace Howard Furness. Dr. Jayne died at Wallingford, near Philadelphia, July 8, 1913.

H. LaBarre Jayne.

JEFFRIES, Benjamin Joy (1833-1915), a well-known Boston ophthalmologist, the first to direct attention emphatically to the dangers of color-blindness, as, for example, in the railway service, was born in Boston, Mass., March 26, 1833. He came of old New England ancestry, obtained his early education at the Boston Latin School and at Harvard University, at the latter institution receiving the degree of A. B. in 1854 and M. D. in 1857. The next two years, which were spent in Europe, chiefly at Vienna, were devoted to the study of ophthalmology and dermatology. The teachers who mostly influenced him were von Arlt and Hebra. Returning to America, he settled in his native city, as a specialist on diseases of the eye and skin, in which unusual combination of branches he continued for several years. Together with Dr. Francis P. Sprague, he opened a free dispensary for the treatment of diseases of the eye and skin in Eliot Street. He was also ophthalmic surgeon to the Massachusetts Charitable Eye and Ear Infirmary from 1866 to 1902—more than thirty-six years. He was a member of the New England Ophthalmological Society, of the American Ophthalmological Society, of the Boston Society for Medical Observation, and of the American Association for the Advancement of Science. He was also one of the founders of the Boston Society of Natural History, a lecturer at the Berkshire Medical Institution and from 1862 to 1865, during the Civil War, served as surgeon in Boston Harbor. He belonged to various social and yachting clubs.

Dr. Jeffries was a man of sunny disposition, a fact that is well nigh obvious from all of his published portraits. It was indeed a happy and almost prescient impulse which induced his parents to place in the very center of his name "that shining monosyllable, Joy." For joy was the central characteristic of Dr. Jeffries' being—joy for himself and joy for others also. Anyone who met him was almost made to think involuntarily of that old Greek form of address, xaipete, "rejoice." The Doctor, himself, in fact, who was something of a punster, would sometimes joke about the monosyllabic center of his name. Thus, when yachting—a pastime of which he was very fond—he would now and then burst out to his friends, "Ah! This is what I call joy riding—excuse me, Joy-Jeffries riding."

Dr. Jeffries married, in January, 1872, Miss Marian Shimmin and of the union there were born two children, a son who died while in college and a daughter who became the wife of Dr. James H. Means, Jackson Professor of Clinical Medicine at Harvard.

Dr. Jeffries wife died in 1888, and after that time he lived with his daughter in the old family mansion at 15 Chestnut Street. He retired from practice in 1912, because of failing health, and passed from life, after a brief illness from pneumonia, on Nov. 21, 1915, leaving to the Boston Medical Library a very complete library on ophthalmology, especially full in titles on color-blindness, and in autograph letters.

Thomas Hall Shastid.

JEFFRIES, John (1745-1819), aeronaut, meteorologist, picturesque loyalist pupil of Dr. James Lloyd (q. v.) of Boston, was born in that town, February 5, 1745, graduated at Harvard in 1763 and studied abroad, where he received an M. D. at Aberdeen in 1769. Educated under Hunter, Smellie and Warner, Broussais considered him the leader of medical opinion in America, according to O. W. Holmes. In 1771 Admiral Montague, commander-in-chief of the British North American Squadron, appointed Jeffries assistant surgeon of a ship of the line, with a hospital on shore, a position he held until 1774. His British sympathies held true during the Revolution. It was he who identified the body of Joseph Warren, his intimate friend, to General Howe after the battle of Bunker Hill. Following the evacuation of Boston he accompanied the British to Halifax and eventually was appointed surgeon-major to the forces in America, settling in England at the close of the war. In 1784 he made the first balloon voyage over London, dropping cards of greeting to admiring friends below. This ascent was made for scientific study of the air at high levels, and not solely for spectacular purposes. Jeffries carried with him a reliable barometer, a thermometer of special make, a hygrometer, an electrometer, a mariner's compass, and seven small bottles for obtaining samples of air at different heights. He reached an elevation certainly exceeding 6560 feet; his observations were turned over to the Royal Society to be discussed; they were analyzed by no less a chemist than Cavendish. On January 7, 1785, about five weeks after the London

ascent, Jeffries crossed the English Channel, leaving the cliffs of Dover and landing with his aeronaut in the forest of Guines, in Artois, near the Field of the Cloth of Gold. Jeffries was a keen meteorologist, one whose interest did not flag with advancing years. He kept detailed records of the weather in Boston from 1774 until March 4, 1776, when they were evidently interrupted by the war, and again from 1790 until 1816. These are now in the library of the Blue Hill Meteorological Observatory and are greatly prized as authentic climatic data.

The year 1790 marked the return of Jeffries to Boston, where he practiced surgery, medicine and midwifery until near the time of his death, September 16, 1819, from strangulated hernia. James Thacher says that he delivered the first public lecture on anatomy in Boston and that on the second evening a mob collected and carried off his subject, the body of a convict. His love of anatomy continued through his life. At his death he had one of the most valuable private libraries in the country. He published a "Narrative of Two Aerial Voyages," London, 1786. His methodical habits are attested by the diary he kept for more than forty years, recording all his important cases in medicine and surgery and nearly two thousand cases of midwifery he had attended; this beside making three entries a day in his meteorological journal. His son, John Jeffries (1796-1876), made a specialty of ophthalmic surgery and helped found the Massachusetts Charitable Eye and Ear infirmary in Boston in 1824.

WALTER L. BURRAGE.

JELLY, George Frederick (1842-1911), Boston alienist, was born in Salem, Massachusetts, January 22, 1842. He was graduated from Brown University in 1864, receiving the degrees of A. B. and A. M., and in 1907 that of Sc. D. He took his M. D. at the Harvard Medical School in 1867 and was house officer at the Boston City Hospital in 1868. He then began private practice in Springfield, Mass., but in 1869 received an appointment to the McLean Hospital (a semi-public insane hospital then situated in Somerville, Mass.) and in 1871 was made superintendent, when only 29 years old. He resigned from this post in 1879 and entered private practice in Boston as a specialist in mental diseases, and gained an important place in the community. He was appointed examiner for the insane for the city, a position which he continued to fill until shortly before his death. When the State Board of Insanity was organized in 1898 he was unanimously selected as chairman, and held that position until 1908, when he resigned because of failing health. He was a diligent worker in the cause of the insane in all its details and was the first to suggest in an annual report the need of an observation hospital for cases of mental disease, a project that afterwards saw its fruition in the "Psychopathic Hospital." Dr. Walter Channing says of him: "Dr. Jelly's services were extensively sought as a consultant and as an expert in court. He was thorough and deliberate in forming his opinions and absolutely honest and fearless in his expression of them, and was always true to his convictions. As a result he gradually acquired the reputation of a man without fear and without reproach, whose judgments were sound and reliable. He was the most gentle, loyal and tender of physicians and friends, always anxious to serve and expecting nothing in return. His life was a continual glad sacrifice to duty, and he broke down under the strain and died."

He was twice married but had no children.

He is remembered at the McLean Hospital as the first superintendent to place women nurses on the men's wards and as one of the best loved by the patients of any physician ever in its service.

He died October 24, 1911, in the seventieth year of his age.

HENRY M. HURD.

JENKINS, John Foster (1826-1882), successful general practitioner, secretary of the United States Sanitary Commission, and medical bibliophile, was born at Falmouth, Massachusetts, April 15, 1826, the eldest son of the Hon. John Jenkins and his wife Harriet, in a family of nine boys and one girl. He went to boarding school to the Rev. Lynch at Roxbury, Mass., and from there entered the Junior class at Brown University in 1842; two years later he entered Union College and graduated in arts in 1845. He began to read medicine under Dr. Alexander M. Vedder of Schenectady, New York, and took his medical degree at the University of Pennsylvania in 1848, adding attendance at an extra course in didactic and clinical lectures at Harvard the following year. From 1849 to 1856 he practiced in New York City. During the years 1850 and 1851 he spent seven months in Europe. In October, 1854, he married Miss Elizabeth Sicard David of Philadelphia. In May, 1856, he settled in Yonkers, and prac-

ticed medicine, surgery, and obstetrics. Being a staunch Unionist he enlisted in the war of the Rebellion in August, 1861, as associate secretary of the Sanitary Commission. On the retirement of Frederick Law Olmstead in 1863, he was elected to the responsible office of general secretary, which he held until his health gave way in May, 1865. The vast activities of the Sanitary Commission were largely directed by him, employing an average of some 300 agents. The entire board and many laymen and surgeons gave their time without compensation.

He wrote on puerperal mania connecting it with a toxic state of the blood and differing from a pyemia. ("Amer. Med. Monthly," Nov. 1857). Following Stephen Smith's 79 cases (1885), Jenkins collected 178 cases of spontaneous hemorrhage of the cord of the newborn. (Trans. Am. Med. Asso. 1858; see "Amer. Jour. Med. Sci.," 1859.) His paper on Tent Hospitals (1874) is noteworthy. As president of the medical society of the county of West Chester he delivered a valuable address on the relations of war to medical science, a résumé of his experiences in the Sanitary Commission. In 1878 he went to Europe for the third time for health reasons, and on returning worked three years more, and then after an illness of nine weeks, died Oct. 9, 1882.

Dr. Jenkins had a large and valuable library, his especial pet and pride, filled with choice works on anatomy, surgery, botany, obstetrics, medical history, biography and bibliography. After his death his books, which were sold in over 1,800 lots, embraced in a catalogue of over a hundred pages, were scattered and brought the paltry sum of $3,940.98! He was a long time intimate friend of his neighbor, the great bibliophile G. J. Fisher (q. v.) of Sing Sing, New York.

HOWARD A. KELLY.

JENKS, Edward Watrous (1833-1903), Detroit gynecologist and obstetrician, was born March 31, 1833, at Victor, New York, where his father, Nathan Jenks, had long kept a general store. In 1843 the family removed to LaGrange County, Indiana, where the elder Jenks had large tracts of land. Here he laid out the town of Ontario and established the LaGrange Collegiate Institute, in which E. W. Jenks received his general education. In 1853 the son began his medical training at the University of New York, continuing it at Castleton Medical College, Castleton, Vermont, receiving his M. D. in 1855. He began practice at Ontario, Indiana, continuing there till his removal to Detroit in 1864, excepting two years spent at Warsaw, New York, and one winter at Bellevue Hospital Medical College New York, where he received his "ad eundem," M. D. in 1864. When Dr. Jenks settled in Detroit the same year, medical matters were in a plastic state. Since the early fifties abortive efforts had been made to utilize the clinical material of the city for the medical department of Michigan University and Jenks soon solved the problem by founding the Detroit Medical College.

He married Miss Darling, of Warsaw, in 1859, but she died childless shortly after moving to Detroit. In 1867 he married Miss Joy, daughter of the Hon. J. F. Joy, of Detroit, by whom he had two children, Mattie and a son, Nathan, who became a physician in Detroit. Jenks died of pneumonia, on the cars between Detroit and Chicago, March 19, 1903, after an illness of five days.

Among his many appointments and memberships he was: A founder of the Michigan State Medical Society, in 1866; its president in 1873; a founder of the Detroit Academy of Medicine, vice-president in 1869, president in 1871; a founder of the Detroit Gynecological Society in 1879, president in 1888; a founder of the American Gynecological Society; a founder of the Detroit Medical Library Association; honorary member of the London Obstetrical Society, 1884; member Maine Medical Association, 1875, also Jenks was a founder and for four years editor of the "Detroit Review of Medicine and Pharmacy," 1866-69; a founder of the Detroit Medical College in 1868, its president and professor of obstetrics from 1868 to 1880. In 1879 he was professor of obstetrics and diseases of women and children at Bowdoin College, Maine; in 1879 professor of gynecology, Chicago Medical College; in 1892 professor of gynecology, Michigan College of Medicine and Surgery, Detroit; from 1865-80 gynecologist to Harper's Hospital, Detroit; 1868-80 gynecologist to St. Mary's Hospital, Detroit; 1875-80 gynecologist to the Woman's Hospital. Dr. Jenks after an extended experience corroborated enthusiastically the findings of Dr. D. L. Phares (q. v.) as to the use of "viburnum prunifolium" as a preventive of abortions and extended its field to the relief of menorrhagia and dysmenorrhea and as a uterine sedative and tonic (Trans. Amer. Gyn. Soc. 1876, vol. 1; 127).

He was a constant attendant at the meetings of the American Gynecological Society and his numerous papers may be found in its Transactions, as well as in the "Detroit Review of Medicine and Pharmacy," and in the "American Journal of Obstetrics" and other periodicals of the time.

LEARTUS CONNOR.

JENNINGS, Samuel Kennedy (1771-1854), Baltimore preacher, professor of materia medica and obstetrics, was born in Essex County, New Jersey, and studied medicine with his father, Dr. Jacob Jennings; in 1818 he received an M. D. (hon.) from the University of Maryland. He was ordained a minister in the Methodist Episcopal Church, and in 1817 moved to Baltimore, where he was president of Asbury College, 1817-18; president of the Medical Society of Baltimore, 1823-4; a founder of Washington Medical College, Baltimore, in 1827 and professor in it of materia medica, 1827-9; professor of obstetrics, 1839-42; also professor of anatomy in the Maryland Academy of Fine Arts, 1838-43. He lived in Tuscaloosa, Alabama, from 1845 to 1853.

Jennings wrote "A Plain, Elementary Explanation of the Natural Cure of Disease," Richmond, 1814; "Letters and Certificates Recommending the Patent Portable Warm and Hot Bath," Norfolk, 1816; "The Married Lady's Companion," Richmond; "A Compendium of Medical Science; or, Fifty Years Experience in the Art of Healing," Tuscaloosa, Ala., 1847 (portrait).

He died at Baltimore, Oct. 19, 1854.

Samuel Kennedy Jennings (1796-1877) was his son, born in Virginia Aug. 13, 1796. He studied with his father, received his M. D. from the University of Maryland in 1820, then moved to Erie, Alabama, where he practiced. He married and had several children. He was the author of "Jennings' Genealogy," 2 vols.

The younger Jennings died in Tennessee in 1877.

Jerome, James H. (1812-1884), professor of anatomy in Geneva, (N. Y.) Medical College. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia, 1912, vol. II. pp. 43-44.

JERVEY, James Postell (1808-1875), lecturer in the Medical College of South Carolina, was born at Charleston, South Carolina, December 4, 1808, and obtained his early education at Charleston College, which he left before graduation to study medicine. He was graduated in medicine from the Medical College of South Carolina in 1830, after which he studied for two years in Paris. Conspicuous for good scholarship from his earliest school days, Dr. Jervey won distinction at the Medical College of South Carolina, taking, at the end of his course, in 1830, the silver cup awarded for the best Latin thesis. Soon after his return to Charleston in 1832 an outbreak of cholera occurred. Volunteer physicians were called for by the city to take charge of cases isolated in an emergency hospital on Folly Island and Dr. Jervey responded and remained at his post until all danger was passed. During the session of 1851-52, and thereafter for several sessions, Dr. Jervey delivered courses of lectures upon comparative anatomy and medical jurisprudence at the Medical College of the State of South Carolina. These lectures were marked by the daily attendence of many of the faculty; and in 1852 the students themselves adopted resolutions "to express to Prof. L. Agassiz, M. D., and to James Postell Jervey, M. D., the high appreciation of their lectures delivered before them during the winter." Dr. Jervey practiced in Charleston until 1861. He was then given a commission as surgeon in the Confederate States Army and for some time was in charge of the hospital at Summerville, South Carolina. At the close of the war he moved to Powhatan County, Virginia, where he lived until 1873, when he returned to Charleston. Sympathetic and eager in relieving every form of suffering, and an excellent raconteur, he was a welcome guest in social, literary and professional circles.

Dr. Jervey married, in 1832, Miss Emma Gouch Smith, daughter of Dr. Edward Darrell Smith, professor of chemistry in the South Carolina College of Columbia. They had twelve children, of whom seven lived to maturity. One son, Henry Dickson, and one grandson, J. Wilkinson Jervey, followed the medical profession.

J. WILKINSON JERVEY.

JEWELL, James Stewart (1837-1887). Editor and founder of the "Quarterly Journal of Nervous and Mental Diseases," a founder and president of the American Neurological Association, James Stewart Jewell was born at Galena, Illinois, September 8, 1837, and died at his home in Chicago, April 18, 1887. He received his general education in the schools of his native city and at the age of eighteen began the study of medicine under Dr. S. M. Mitchell. He attended his first course of in-

struction at the Rush Medical College, 1858-59, and his second course at the medical department of Lind University (Chicago Medical College), receiving his M. D. there in 1860. For two years he practiced in Williamson County, Illinois, and, returning to Chicago, was appointed professor of anatomy in his alma mater. This position he filled until 1869 when he resigned with the purpose of studying and teaching biblical history. With this in mind, he traveled abroad for two years in Palestine and Egypt previously serving, during the Civil War, as contract surgeon in General Sherman's command. The lure of medicine proved too much for him, and when he reached Chicago in 1871 he resumed practice and gave his attention to nervous and mental diseases, being appointed professor in this branch in the Chicago Medical College in 1872 and two years later founding the "Quarterly Journal of Nervous and Mental Diseases" and becoming its editor. His labor as professor at the medical college resulted in large classes, and for the journal, raised it to a high rank among similar publications. In 1875 only two of the national societies of specialists had been formed, the ophthalmological and the otological societies. Dr. Jewell was engaged in promoting neurology as a specialty and therefore was interested in the formation of the American Neurological Association in June of that year. Subsequently he served the association as president for three successive years.

Northwestern University conferred the degree of Master of Arts on him in 1869. He collected a valuable private library and was the master of several foreign languages. Much of his writing appears in the columns of his journal. Pulmonary tuberculosis was his particular enemy and caused him to interrupt his labors on more than one occasion. Finally, in 1883, he was obliged to resign and seek a more favorable climate, and the disease progressed until the end came when he was not yet fifty years of age.

Dr. Jewell married M. C. Kennedy, of Nashville, Illinois, December 22, 1864.

JEWELL, Wilson (1800-1867), of Philadelphia, was president of his city's board of health, and devoted much attention to "Vital Statistics," being instrumental in framing the law for the registration of births, marriages and deaths, that stood for thirty years on the statute books. He was born in Philadelphia, November 12, 1800, the son of Kenneth Jewell, a draper and tailor. Wilson was graduated in medicine from the University of Pennsylvania in 1824 and then sailed on a packet ship to China as medical officer. On his return he married Rachel Lyon, an orphan, and began practice at Branchtown, Pennsylvania. In 1828 he was back in Philadelphia to remain for life, except for two years spent in Alton, Illinois, from 1837 to 1839. As a Fellow of the College of Physicians of Philadelphia he read a report before the college in 1853 on the outbreak of yellow fever in that year. He took a lively interest in the affairs of the Philadelphia County Medical Society, and in the Quarantine and Sanitary Commission, of which he was president in 1857, when it met in his native city. As vice-president of the American Medical Association he delivered the address of the retiring president in 1864 because of the illness of Dr. Eli Ives (q. v.), the president. He published in the "Medical Examiner" mortality tables of Philadelphia during the years 1852 and 1853, having previously read a report on hygiene before the Northern Medical Association.

His wife, the mother of nine children, died of pneumonia in 1865. Two years later Dr. Jewell married Mrs. Charlotte McMullen, who had been his patient for many years. They made a journey to Europe, which was cut short at the end of four months by his illness with heart disease. He lived only a short time, dying suddenly in his office, November 4, 1867. Dr. Jewell was a tall and portly man. He had positive opinions on many subjects. An indomitable perseverance with a high sense of duty enabled him to accomplish much.

JEWETT, Charles (1839-1910), obstetrician of Brooklyn, New York, was born in Bath, Maine, September 27, 1839; both his father, George Jewett, and his mother, Sarah Jewett, née Hall, were residents of Maine. He received his early education at the Bath High School, and later attended Bowdoin College, being graduated from that institution with high honors in 1864, with the degree of A. B. Three years later he received his A. M. Bowdoin afterwards honored him, (1894), by conferring upon him the degree of Sc. D. He began the study of medicine under the preceptorship of Hiram Lathrop, M. D., of Cooperstown, N. Y., in 1867. In 1869 he continued his medical studies by taking his first course of lectures at the Long Island College Hospital; from there he went to the University Medical College in New York. His third

year was spent at the College of Physicians and Surgeons, from which he received the degree of M. D. in 1871. After his graduation he settled in Brooklyn, N. Y., where he practiced general medicine for about eight years.

In 1868 Dr. Jewett married Miss Abbie E. Flagg, of New Hampshire. Two children were born of this union—Harold F. Jewett, M. D., and Alice Hall Jewett. Mrs. Jewett died at the birth of her second child from a puerperal complication, due to the faulty obstetrical methods of the times. The sorrow so affected Dr. Jewett that he determined to devote his life to the improvement of obstetrical conditions and technique. In 1880 he was appointed professor of obstetrics in the Long Island College Hospital, a chair he held until 1898, when, upon the death of the late A. J. C. Skene (q. v.), in 1899, he became professor of obstetrics and gynecology in the same institution, a position which he held until the time of his death. During his years of activity in his special field he was connected at one time or another, as attending or consulting surgeon, with many of the large hospitals of Brooklyn. For the last few years of his life his time was given to the Long Island College Hospital, to which he was attached as obstetrician and gynecological surgeon. He was consultant obstetrician and gynecologist to the Kings County Hospital, the Bushwick Hospital, the Swedish Hospital, the German Hospital, St. Mary's Hospital, and St. Christopher's Hospital. At the time of his death he was a member of the Medical Society of the County of Kings, a society he served successively as censor, trustee, vice-president, and president during the years of 1880, 1881, and 1882. His membership included the Brooklyn Anatomical and Surgical Society, the Brooklyn Medical Society, the Associated Physicians of Long Island, the Medical Association of Greater New York, the New York Academy of Medicine, and the New York Obstetrical Society. In the latter he was honored with its presidency in 1894.

As a figure in State politics, we find that he was a member of the New York State Medical Society from 1886 to 1910. In the latter year he was elected president and was serving in that capacity at the time of his death. In 1891 and 1893 he was vice-president of the Physicians' Mutual Aid Association. In 1900 he served as president of the American Gynecological Society. Besides being a member of this national body he was for many years a member of the American Academy of Medicine, the American Medical Association, the British Gynecological Society, and the Detroit Gynecological Society. When the Pan-American Medical Congress was organized his international reputation was recognized by making him an honorary president. He was one of the founders of the International Congress of Obstetricians and Gynecologists.

As a writer, Dr. Jewett's life was a busy one; his publications were numerous and valuable. In 1891 he published his "Manual of Child Bed Nursing," one of the most helpful little guides to the nurse and mother. In 1894 he brought out the first edition of "The Outlines of Obstetrics," which afterwards appeared under the title of "The Essentials of Obstetrics." In 1898 he edited a "System of Obstetrics by American Teachers," which ran through three editions, the last of which appeared in 1907. Besides these three books, he was a frequent collaborator, contributing to the "American Text-book of Obstetrics," the "Hamilton System of Legal Medicine," Keating's "Gynecology," and Foster's "Handbook of Therapeutics." He was also a frequent contributor to medical journals. Some forty papers, all of which bear the stamp of authority, were the products of Dr. Jewett's pen. Although best known as an obstetrician and gynecologist, yet his interest in medicine was general. As a consultant, his diagnostic powers and wide clinical knowledge, his ability to quote the very latest advances in any subject under discussion, made his counsel invaluable to the younger men. He died after a very brief illness, from the effects of a cerebral hemorrhage, August 6, 1910, at the age of seventy-one years. He was a diligent and thoughtful student all his life.

Dr. Jewett of large frame and serious countenance was a figure among men, courteous, commanding, honest, forceful, and fearless, sure of his premises, clear in his deductions, powerful in his presentations, and conservative in his practice.

JOHN OSBORN POLAK.

Jewett, Theodore Herman (1815-1878), general practitioner of South Berwick, Maine, father of Sarah Orne Jewett. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 625-626.

JOHNSON, Charles Earl (1812-1876), a founder of the North Carolina Medical Society, was born March 15, 1812, at "Banden," the colonial home of his family near Edenton, North Carolina. He was graduated from the

University of Virginia and had his medical education at the University of Pennsylvania where he was a private pupil of Prof. Samuel Jackson (q. v.), taking his M. D. in 1835. He practiced in his native county until 1840, when he removed to Raleigh and soon after did good work in an epidemic of fever which occurred in the State capital. Dr. Johnson was one of the founders of the North Carolina Medical Society and its president for two successive years (1856-1857), and an editor of the old "North Carolina Medical Journal." In May, 1861, he was appointed by Gov. Ellis surgeon-general of the North Carolina Troops and during his term of office (1861-1862) he visited every battlefield in Virginia taking medicines and supplies for the sick and wounded. In 1869 Dr. Johnson published an able treatise on "Insanity and its Medico-legal Relations." A notable discussion occurred between him and Dr. S. S. Satchewell in 1854 at a meeting of the State Medical Society. In this Dr. Johnson fully sustained his already growing fame as a debater, and subesquently published his remarks with a former address under the title of "An Address on Malaria."

He twice married. His first wife, Emily A. Skinner, died in 1847, leaving four children. His second wife, Frances L. Iredell, with her five children survived him when he died in 1876.

HUBERT A. ROYSTER.

JOHNSON, Edward (1767-1829), physician and patriot, born in 1767, was deeply interested in municipal affairs in Baltimore, where he served as member of the city council, 1797; judge of the Orphans' Court and associate judge of the City Court, 1804-5; mayor, 1809 1819, and 1823; and chairman of the committee of Vigilance and Safety of Baltimore, 1815. He was the mayor during the yellow-fever epidemic in Baltimore in 1819, and bore the expense of the report issued in 1820. "A Series of Letters and other Documents Relating to Yellow Fever."

He died in Baltimore, April 19, 1829.

JOHNSON, Francis Marion (1828-1893), obstetrician, of Kansas City, Missouri, was born on a farm near Georgetown, Kentucky, August 27, 1828. His parents, Garland and Theresa Johnson, were of Scotch-Irish descent and pioneers in that county. Being the eldest in a large family he attended school only during the winter and worked in the summer to assist his father, gathering together a few dollars by working extra hours. The first money he ever earned as a boy was spent for a copy of "Plutarch's Lives," and this old book with its well worn pages is a treasure in possession of his family. Working during the day and studying far into the night, he learned medicine under the old family physician, Dr. Elliott. He was graduated from Transsylvania University at Louisville, Kentucky, in 1852 and was granted an "ad eundem" degree by the Missouri Medical College in 1861. With a thoroughbred horse which he had raised himself, a few dollars in his pocket and a carpet bag he rode from Georgetown, Kentucky, to Missouri and settled in the little town of Farley in Platte County, a fortunate location, for the country along the Missouri river was full of malaria and a doctor's services were in constant demand.

In 1855 he married Mary Jane Limberlake and had four children, three daughters and one son. About this time mutterings of war were heard and Johnson became a surgeon under Gen. Sterling Price. When Lee surrendered, and not till then, did Dr. Johnson return to his desolated home. Penniless, he again started out to retrieve home and fortune, removing to the little town of Platte City, where he soon had a good practice. His wife died, and in 1870 he married Julia M. Tillery of Liberty, Missouri. Never having been very robust, he determined to go to a city where work would be easier, so on his fiftieth birthday he went to Kansas City, where he remained until his death, January 25, 1893.

Johnson was a thinker and logical reasoner and evolved many ideas which at the time were looked upon as heretical by some of his fellow practitioners. In 1872 he read a paper before the Kansas City District Medical Society in which he maintained a theory of the infectiousness of pneumonia, but met with no endorsement. The wide experience in obstetrics gained in an extensive country practice led him to devote especial attention to that important branch of work and he was elected dean of the college and chosen to fill the chair of obstetrics in the Kansas City Medical College in 1880, a professorship he held until his death. The clinical obstetrical department which was started during Dr. Johnson's incumbency averaged over eight cases of labor for each student, an unusual record at that date in the West.

Shortly before his death he devised an obstetrical forceps which included the "third

curve" of the Tarnier axis traction principle in connection with the long graceful curve of the Hodge forceps, thus supplying a principle, ingenious and practical.

Dr. Johnson had a peculiar physiognomy which was masked by a long beard, giving him an expression of fierceness which much belied his gentle nature and benevolence.

CALEB CLARKE MCGRUDER.

JOHNSON, Henry Lowry Emilius (1858-1916), gynecologist and aeroplane inventor, was born in Washington, D. C., November 11, 1858, son of Henry L. and Emily E. Johnson, and nephew of Goodyear, the famous patentee of the handling of India rubber. He was graduated in medicine at Columbian (now George Washington) University in 1882. From 1889 to 1906 he was professor of surgical gynecology in George Washington University; in 1897 he became professor of gynecology at the Washington Post-Graduate School of Medicine; he was consulting gynecologist to the Providence Hospital, the Woman's Clinic, and the United States Government Hospital for the Insane. He represented the United States Department of State at the International Congress of Hygiene at Berlin (1907); at the International Sanitary Conference of American Republics, at Mexico City (1907); the International Medical Congress, at Budapest (1909). He was one of the organizers of the Pan-American Medical Congress and was vice-president of the First, Second, Third and Fourth Congresses as he was vice-president of the First, Second and Third International Sanitary Conventions of American Republics. Another membership was that of the executive committee, International American Congress of Medicine and Hygiene at Buenos Ayres (1910); also a member of the National Committee, International Hygiene Exhibition, at Dresden (1911).

Johnson was a trustee of the American Medical Association (1898-1899), and was president of the Medical Association, District of Columbia. He was interested in aviation and invented a safety aeroplane (1912), also a ship and aeroplane compass and inclinometer (1912).

In 1901 he married Eugenie Reel Taylor of St. Louis. He died suddenly from heart disease, December 21, 1916, at his home in Washington.

JOHNSON, Hosmer Allen (1822-1891), a physician who helped to found in Chicago the Academy of Natural Sciences and the Northwestern University Medical School, was born in the village of Wales, New York, October 6, 1822. A boyhood spent among wild natural surroundings inclined him afterwards to travel through Switzerland, California and Colorado, sleeping frequently "under the blue blanket," and learning to love the starlit sky. When twelve he was at Almont, Michigan, helping to cut a farm out of the woods when Indians and wolves were more in evidence than civilized man. At nineteen he entered an academy at Romeo, Michigan, preparing for the University of Michigan. There he showed remarkable talent for languages, not excluding the Ojibway tongue. From this university he held his A. B. in 1849 and later A. M. and LL. D., graduating M. D. from Rush Medical College in 1852, and remaining there as professor of materia medica until 1859 when, with others he founded the Northwestern Medical School and was professor, trustee and a member of the faculty until his death from pneumonia, February 26, 1891.

He married Margaret Ann Seward and had two children, one of whom, Frank Seward, became professor of pathology in the Chicago Medical College.

Dr. Johnson was not a voluminous contributor to medical literature though for some years he edited "The Northwestern Medical Journal." The Astronomical Society and the Historical Society, both of which he helped to found, the Academy of Natural Sciences and the Northwestern University Medical School owe much to his initiative and labors.

JOHNSON, Joseph (1776-1862), of Charleston, S. C., physician and historian of the Revolution, the fourth son of William and Sarah Nightingale Johnson, was born in Mt. Pleasant, near Charleston, South Carolina, June 15, 1776. His father, William Johnson, was one of the leaders of the Revolutionary movement in South Carolina and was imprisoned in St. Augustine, Florida, during a part of the Revolution. Dr. Johnson went as a boy to the local schools and to the College of Charleston, taking at the latter two medals for Greek and Latin, which are still in possession of his descendants. From the College of Charleston he went to the University of Pennsylvania from which he received the degree of doctor of medicine in 1797. His graduating essay was "An Experimental Inquiry into the Properties of Carbonic Acid Gas or Fixed Air; Its Mode of Operation, Use in Disease, Most Effectual Method of Relieving Animals Affected by it." He returned to

Charleston where he practiced for about fifty years. He was president of the Medical Society of South Carolina in 1808 and 1809.

On the fifth of October, 1802, he married Catherine Bonneau, the fourth daughter of Francis and Hannah Elfe Bonneau, and had fifteen children. Their third child, Francis, became a doctor. Joseph Johnson died at the house of his twelfth child, the Rev. R. P. Johnson, in Pineville, South Carolina, October 6, 1862, aged eighty-six years.

Among Dr. Johnson's important writings are: "Oration" delivered before the Medical Society of South Carolina at the anniversary meeting, December 24, 1807, and published at their request; "Some Account of the Origin and Prevention of Yellow Fever in Charleston, South Carolina" ("Charleston Medical Journal," 1849, vol. iv.); "The Traditions and Reminiscences of the Revolution," published in 1851. This, the most important of his works, is a book of great historical value; also "The Alleged Connection Between the Phases of the Moon and Quantity of Rain." ("Charleston Medical Journal," July, 1854, vol. ix.)

FRANK B. JOHNSTON.

JOHNSON, Laurence (1845-1893), medical botanist, a reviser of the United States Pharmacopoeia, was born June 7, 1845, in South Butler, Wayne County, New York. His father, the Hon. Thomas J. Johnson, was a native of Saratoga, New York, of Scotch descent; his mother's ancestors came from the north of Ireland. Growing up on the home farm, he acquired strong artistic tastes and a love of nature, as well as of work. He was educated at the district school until he was sixteen and then at Falley Seminary in Fulton, Oswego County, New York. In the winter of 1862, he taught a district school, leaving the following year to enlist in Company A, Ninth New York Heavy Artillery. His first service was the defense of Washington. Disabled by a prolonged illness, he entered the Free Military Academy for the training of officers for colored troops in Philadelphia as a convalescent and was appointed first lieutenant in October, 1864, and assigned to duty in the Eighth United States Colored Artillery at Paducah, Kentucky. His resignation was accepted May 9, 1865. The army interest was life-long and the occasion of a notable collection of histories of the war.

After graduating in 1868 from Bellevue Hospital Medical College, Dr. Johnson began to practice in New York City. With idle time on his hands and strong artistic cravings, he applied to the American Academy of Design and was given free tuition on the basis of a submitted drawing of the human foot. He became expert in drawing, painting, and photography and was offered a post of instructor in anatomical drawing. Dr. Johnson attended the Northwestern Dispensary and in 1879 was connected with the department of diseases of the digestive organs of the Demilt Dispensary; he was also affiliated with the Hospital for Ruptured and Crippled. He was a member of the staff of the Randall's Island Hospital for several years but resigned to become a visiting physician to Gouverneur Hospital, a position which he held up to the time of his death. In 1881, an A. M. was conferred upon him by Wesleyan University, and the trustees of the University of the City of New York elected him lecturer on medical botany in the medical school; he later became professor of clinical medicine there.

He was one of the members of the committee of revision of the United States Pharmacopoeia of 1880, and in 1882 edited the American edition of Phillips' Materia Medica and Therapeutics. His "Medical Formulary based on the United States and British Pharmacopoeias," 1881, presents a clear statement of the preparation of all useful drugs together with many special formulae,—a work of value in the age of polypharmacy. His greatest work which held high rank as a text-book is "A Manual of the Medical Botany of North America," 1884, which is illustrated with plates from his own water colors. An active member of the Medical Society of the County of New York from 1876, he was president during 1886 and 1887; he was also actively interested in the New York Academy of Medicine. In the county society, he aided vigorously in reforming medical education and in securing examinations for license to practice, thus ushering in the new era in medicine in America. Daniel Lewis (q. v.) attributes Johnson's early death to habits of unremitting toil in writing, studying, and planning for public welfare far into the night, often after a day of exhausting labor. Warned by failing strength, he made a journey to Scotland in 1889 and again in 1890, the occasions of a warm friendship with Dr. Hugh Murray of Glasgow.

He married Miss Ada Rowe of Wayne County in 1872; a son and a daughter survived him. On March 18, 1893, Dr. Johnson died of pneumonia; Mrs. Johnson lived only fifteen days after his death.

JOHNSTON, Christopher (1822-1891), Maryland anatomist, microscopist, and surgeon, was of Scotch descent. His grandfather emigrated to Baltimore in 1766 and Christopher was born in that city, September 27, 1822, his mother being Elizabeth Gates, daughter of Maj. Lemuel Gates. On the death of his father in 1835 he was adopted by an aunt and was educated at St. Mary's College, Baltimore, afterwards studying medicine with Dr. John Buckler, receiving his M. D. at Maryland University in 1844, and the same year visiting Europe. In 1847 he joined with Charles Frick (q. v.) and others in founding the Maryland Medical Institute, an excellent preparatory school, "organized to elevate the standard of office instruction in accordance with the design of the National Medical Convention." From 1853 to 1855 he was again in Europe studying in the hospitals of Paris and Vienna, and on his return he was appointed lecturer on experimental physiology and microscopy and curator of the Museum at the University of Maryland. In 1857 he resigned this post to take the professorship of anatomy in the Baltimore College of Dental Surgery, where he remained until 1864. The battle of Gettysburg saw Johnston aiding on the field, rendering zealous service to the wounded. On January 1, 1864, he became professor of anatomy and physiology in the University of Maryland, and from 1869 to 1881 he held the chair of surgery as successor to Prof. Nathan R. Smith (q. v.).

Dr. Johnston early manifested a strong taste for scientific study and research, acquiring great expertness as a microscopist and a skilled artist. One of his earliest papers was on the "Auditory Apparatus of the Mosquito" ("London Quarterly Journal of Microscopical Science," 1855.) He discovered, simultaneously with Jeffries Wyman (q. v.), the fact that the duct of the poison gland of venomous serpents does not enter the pulp cavity. He was a frequent contributor to scientific and medical literature, his largest work being that on "Plastic Surgery" ("Ashhurst's International Encyclopedia of Surgery," 1881).

He was slow and careful in his operations, and ingenious in devising expedients. He was the first surgeon in Maryland to remove the upper jaw complete, 1873 (in Jameson's classical operation—1820—the roof of the antrum was left), and to operate for exstrophy of the bladder (1876). He assisted in founding the Maryland Academy of Sciences and was consulting surgeon to the Johns Hopkins and other hospitals. The Johns Hopkins University, its museums and laboratories had much of his thought and he bequeathed to it his medical and surgical instruments, his microscopical cabinet, his cabinet crystals, and his library.

Dr. Johnston's personal appearance was striking with his commanding figure large and classic head and graceful carriage. He died October 11, 1891, from an attack of diphtheria contracted while operating.

He married Miss Sallie C. Smith, daughter of Benjamin Price Smith, of Washington, District of Columbia; she died a few years before him. They had four sons; the eldest, Christopher, became professor of oriental history and archeology in the Johns Hopkins University.

EUGENE F. CORDELL.

JOHNSTON, George Benjamin (1853-1916), was one of the pioneer surgeons of the South and it was largely through his efforts that the Medical College of Virginia was raised to its present efficient standard; that the Memorial Hospital, the Virginia Hospital and the Johnston-Willis Sanatorium were built in Richmond, and that progressive medical and health legislation were attained in Virginia. Dr. Johnston was active in every sphere of civic life and was a man of far reaching vision, large ideas and splendid accomplishments. He possessed a personality which although dominant was at the same time lovable.

George Ben Johnston was born in Tazewell, Virginia, July 25, 1853. His mother, Nicketti Buchanan Floyd, was the daughter of Dr. John Floyd, Governor of Virginia from 1849 to 1852, and his father was John Warfield Johnston, United States senator from Virginia. Among his ancestors were many pioneers, soldiers and statesmen. General Joseph E. Johnston of Confederate Army fame was his uncle.

Reared among the Alleghany mountains in southwestern Virginia, George Ben Johnston grew strong in body and in mind. He first went to school at the Abingdon Academy, Abingdon, Virginia, and then to St. Vincent's College, Wheeling, West Virginia; from there he went to the University of Virginia, first taking academic studies and then one year in medicine. In 1875 he attended the University of the City of New York and received his M. D. from this institution in 1876. After his graduation he refused several offers to settle in New York and came back to Abingdon,

Virginia, where he practiced medicine for two years, associated with Dr. E. M. Campbell. In 1878 Dr. Johnson came to Richmond and practiced medicine in that city until his death. He first held several minor teaching positions in the Medical College of Virginia and then was elected, in 1884, professor of didactic and clinical surgery and in 1896 the chair was changed to professor of practice of surgery and clinical surgery; again in 1907 to professor of gynecology and abdominal surgery, and in 1913 to professor of surgery. He resigned his chair in 1914 to become a member of the board of visitors of the Medical College of Virginia. Among other honors Dr. Johnston was an ex-president of the Richmond Academy of Medicine and Surgery, of the Medical Society of Virginia, of the Southern Surgical and Gynecological Association, of the American Surgical Association and of the Norfolk and Western Railway Surgeons' Association. He was an ex-member of the House of Delegates of the American Medical Association and a member of its Judicial Council, and a delegate from the American Surgical Association in 1903 to the International Medical Congress at Madrid. He was also a delegate from the United States to the International Periodical Gynecological Congress in 1896. He was a member of the International Surgical Society, a fellow of the College of Surgeons, a member of the Society of the Cincinnati, and received the degree of LL. D. from the College of St. Francis Xavier in New York and from Hampden-Sidney College in Virginia.

Dr. Johnston performed the first operation in Virginia under Listerism (aseptic surgery) in 1879. He contributed to Keene's System of Surgery, to Bryant and Buck's System of Surgery, and wrote many papers, among them being "The Treatment of Osteomyelitis of the Tibia," "Fixation of the Kidney" and a "Description and Report of the Cases of Operation of Splenectomy." His operations on the kidneys and spleen performed in conjunction with his partner, Dr. Murat Willis, were well known; the Johnston-Willis operation for ventral suspension was introduced in 1914.

Dr. Johnston was twice married. In 1881 he married Mary McClung, who died in 1882. On the 12th of November, 1892, he was married to Helen Coles Rutherford of Rock Castle, Va., and they had four daughters. He was a man of domestic tastes, an affectionate husband and father, and his home was always the rendezvous of his relatives, near and remote. In religion he was of the Roman Catholic faith. He was a man of broad sympathy and was especially generous to young doctors beginning their professional careers. Not one or two, but scores of physicians owe their successful start to this unselfish man. He was interested in the health and civic welfare of Virginia and was a member of the state board of health and the Richmond Civic Association, rendering valuable service in both.

In July, 1911, Dr. Johnston had an attack of ptomaine poisoning which was followed by myocarditis and angina pectoris. He improved very greatly and was actively engaged in his profession until about three months before his death. On the morning of December 20, 1916, he felt better and had gotten up to dress, and while shaving had an attack of acute cardiac dilation and died suddenly at his home in Richmond.

BEVERLEY R. TUCKER.

JOHNSTON, William Patrick (1811-1876), pioneer instructor in obstetrics and diseases of women in Washington, D. C., the son of Col. James and Ann Marion Johnston, was born October 24, 1811, in Savannah, Georgia. He was graduated at Yale in 1833 and at Philadelphia studied medicine under Prof. William Horner (q. v.), and while in the drug store of Samuel Griffith acquired a practical knowledge of materia medica and pharmacy. After graduating M. D. in 1836 at the University of Pennsylvania he was appointed a resident physician at Blockley Hospital, Philadelphia. In 1837 he was appointed physician to the Philadelphia Dispensary, and took charge of the Southwestern District. In the autumn he went to Europe staying till 1840, the greater part of the time being spent in Paris hospitals acquiring a knowledge of special diseases.

His marriage to Miss Hooe, of Alexandria, Virginia, induced him to settle, in 1840, in Washington and he was elected professor of surgery in the National Medical College, District of Columbia, but in 1845 was transferred to the chair of obstetrics and diseases of women and children. He was the first physician in Washington to devote special attention to the diseases of women, but he never abandoned general practice. He joined with the other members of the faculty in establishing the Washington Infirmary. After the close of the war of 1861-5 he resumed his course on obstetrics until he resigned in 1871.

He was then made emeritus professor, and on the death of Dr. Thomas Miller (q. v.), became president of the faculty. He was one of the originators of the Pathological Society of Washington in 1841 and vice-president of the American Medical Association in 1866.

Dr. Johnston died of chronic heart disease October 24, 1876. Two of his sons followed their father's profession.

DANIEL SMITH LAMB.

JOHNSTON, William Waring (1843-1902), teacher of medicine and obstetrics in Columbian University, Washington, D. C., was born in that city, December 28, 1843. He was the eldest son of Dr. Wm. P. Johnston (q. v.), who came from Savannah, Georgia, and settled in Washington in 1840, where for many years he enjoyed a large medical practice and was professor of obstetrics in the medical school of Columbian University. The mother of Dr. W. W. Johnston was Mary Elizabeth, daughter of Mr. Bernard Hooe, of Virginia. The early education of young Johnston began at his father's residence, under direction of a private tutor, who prepared him to enter St. James College, near Baltimore, which he did in 1861, at the age of 18 years. Owing to the Civil War this college closed in 1862, and William W. Johnston returned to Washington where he continued his studies under direction of Mr. Charles B. Young, until the autumn of 1863, when he began his medical studies at the University of Pennsylvania. From this institution he obtained his medical degree in March, 1865, and soon afterwards became an interne at the Bellevue Hospital, New York, where he was on duty during the cholera invasion of 1866. Leaving New York, after the expiration of his term of service at Bellevue Hospital, Dr. Johnston went to the University of Edinburgh, where he became the pupil of Dr. John Hughes Bennett, professor of clinical medicine in the Edinburgh Royal Infirmary. From Scotland, Dr. Johnston went to France and finished his medical education in the hospitals in Paris. He returned to Washington in 1868. At once introduced by his distinguished father and bringing with him the latest methods of medical treatment learned in the European hospitals—especially the then new method of treating disease by rest, food and hygiene, rather than by bleeding and drugs, of which he was an early and enthusiastic advocate—he soon acquired a large practice the onerous duties of which he continued with unremitting care and industry until the end of his life.

Apart from the exacting requirements of a busy practitioner he still found time to contribute to medical literature. The productions of his pen, while never voluminous, comprised something over thirty separate papers of recognized merit. Notable among these were his contributions to "Pepper's System of Practical Medicine" (vol. ii, 1885); Hare's "System of Practical Therapeutics" vol. iv, 1897), and "Buck's Reference Handbook of the Medical Sciences" (vol. iii, 1901). These papers related chiefly to diseases of the intestinal tract, a subject in which he had become especially interested. Other papers appear in the Transactions of the Association of American Physicians and of other medical and scientific associations to which he belonged.

Dr. Johnston acquired distinguished eminence, as a teacher of clinical medicine. His work began in 1870, when he was appointed to give laboratory instruction in practical histology and the use of the microscope in the medical department of Columbian University. During the succeeding year he was appointed professor of the theory and practice of medicine in the same institution, a position he continued to fill until his decease in 1902. Besides his didactic lectures at the medical school he gave weekly clinical lectures in the wards of the Children's Hospital for a period of twenty-seven years, and at the opening of the new Columbian University Hospital in 1898, he began weekly clinics in this institution, which were continued during the college term, until the end of his life. His last lecture was given on March 6, the day on which his fatal illness began, and fifteen days before his death at Atlantic City on March 21. Dr. Johnston was not only an able and successful teacher, but also a strenuous advocate of improvement and reform in the general methods of medical education. He especially insisted that the student should devote more time to practical training at the bedside and less to the theoretical teaching of text-books —a reform the wisdom of which has been demonstrated throughout the civilized world.

As a public-spirited citizen Dr. Johnston had been instrumental in promoting the establishment of the "Children's Hospital" of his native city, and was also one of the founders of the "Garfield Memorial Hospital" and served as consulting physician on its medical staff from 1882 until 1897, when he resigned. He was also on the consulting

staff of the Emergency Hospital, the Washington Asylum Hospital, Providence Hospital, the Episcopal Eye and Ear Hospital, and the "Government Hospital for the Insane." It was, however, to the Columbian University Hospital that he was most devoted during the last few years of his life, in recognition of which the medical wards of this new hospital are to be known as the "W. W. Johnston Wards."

A. F. A. KING.

JOHNSTON, Wyatt Galt (1859-1902), bacteriologist, medico-legal pathologist of Montreal, Canada, died in that city June 19, 1902, at the early age of 42. He was the son of Dr. J. B. Johnston, of Sherbrooke, Quebec, and in December, 1895, married Julia, daughter of the late Michael Turnor of Rugely, England. He received his early education at Bishop's College, Lennoxville, and began to study medicine in McGill University in 1880, graduating in 1884. As a student he showed especial aptitude for pathology and was a constant associate of William Osler (q. v.). After graduating he was resident medical officer in the Montreal General Hospital for one year and in 1885 he worked in Virchow's laboratory in Berlin, the following year carrying on research into pernicious anemia with Prof. Grawitz at Greifswald, upon a subsequent visit to Germany working at comparative pathology in Munich. Returning to England, he continued his studies at the Zoological Gardens in London. His first university appointment was demonstrator of pathology at McGill, where he did the work unaided for four years. For personal reasons he resigned this post but continued to work in the Montreal General Hospital, devoting himself to bacteriology and medico-legal work. Dr. Johnston's first important public work was a bacteriological study of the water supply of Montreal and of surface water generally. In 1805 he was appointed lecturer in bacteriology in McGill University; bacteriologist for the provincial board of health; and medico-legal expert for the district of Montreal, in 1897 being made assistant professor in public health and lecturer in medico-legal pathology. His death in June, 1902, when only forty-two, was due to septic poisoning acquired in the autopsy room of the Montreal General Hospital in the previous February. He received a second infection in April, when a thrombus appeared in the internal saphenous vein of the left leg. This was followed by extensive coagulation which extended to the iliac veins of both sides; the immediate cause of death was pulmonary embolism.

Prof. Johnston had a full knowledge of the whole literature of pathology and allied subjects, his success lying in his originality, inventiveness, and discovery of the simplest and most direct methods. When any new one was announced he often found a new and a better one. For example, he devised a rapid and convenient method for collecting samples of water at various depths in such a way as to exclude the possibility of contamination, and one of distinguishing and counting the various animalculæ found in surface water. He used hard-boiled eggs for the diagnosis for diphtheria. His modification of the Widal reaction for the diagnosis of typhoid fever by means of dried serum is well known.

For twenty years Dr. Johnston was connected with the medical faculty of McGill University and with the Montreal General Hospital. His status among scientific men as a trustworthy investigator in bacteriology, preventive and legal medicine added greatly to the reputation of his university and hospital. His written work amounted to some fifty short papers. He was a member of the American Medico-Legal Association.

ANDREW MCPHAIL.

JOHNSTONE, Arthur Weir (1853-1905), Cincinnati gynecologist, investigator and writer on menstruation, was born at Paint Lick, near Danville, Kentucky, July 15, 1853. His father was the son of the Rev. Alexander Johnstone, a Presbyterian, well known as a man of extreme Calvinistic views, and a strong upholder of antislavery principles. Arthur's early education was received at the public schools. He then entered Center College, Danville, where he took his degree in 1872. After leaving college he joined a corps of United States engineers, which was employed on a triangulation of a portion of the Mississippi. He began to study medicine with Dr. John B. Jackson, of Danville, a man with a high reputation for learning, then attended one course of lectures at Tulane University, in 1873, and finally received his M. D. from the University, of New York in 1876, after graduation practicing in Danville with Dr. A. R. McKee. This arrangement lasted but a short time, when Johnstone returned to New York and studied for three months in Carl Heitzman's (q. v.) laboratory, while taking a course in diseases of the eye with Knapp (q. v.) in his clinic. He now returned to a country practice, but again only for a short

time. His strong inclination had always led him towards surgery, and becoming interested in gynecology, which was at that time rapidly advancing along bold surgical lines, he determined to pursue this as a specialty. To this end he wrote to Lawson Tait, at Birmingham, England, asking him whether he would receive him as a pupil, and on what terms. It happened that Tait was, at that time, prejudiced against Americans, and on receiving Johnstone's letter he remarked to Greig Smith, who was with him, that he would make his fee so large it would be prohibitive. He wrote Johnstone, therefore, that his terms were $2,000 for a year. To his surprise Johnstone at once accepted. A personal acquaintance with Johnstone soon sufficed to obliterate all prejudice and antipathy on Tait's part, and he often subsequently referred to Johnstone as his most promising pupil. Johnstone remained with Tait six months, and during this time his paper on "Menstruation," which attracted a great deal of attention, was read before the British gynecological Society, then sitting in Birmingham.

On Johnstone's return he settled once more in Danville, where he started a private hospital, with the intention of building up an exclusively gynecological practice, and he soon secured patients from all parts of the State. He was, I believe, the first person in Kentucky during this period to operate for extrauterine pregnancy, after making a diagnosis. It was at this time (1886) that he joined the American Gynecological Society. About three years later Johnstone formed a partnership with that eminent and much-loved old warrior in the surgical world, Dr. Thaddeus Reamy (q. v.), of Cincinnati. This association, however, was not a happy one and lasted but a year; after its termination he opened another private hospital of his own in Cincinnati, near Mt. Auburn.

In September, 1905, Johnstone was taken ill with appendicitis complicated by intestinal obstruction and general peritonitis. He was operated on twice and died soon after the second operation.

In 1897 Dr. Johnstone married Ethel, a daughter of Major W. H. Chamberlin.

Dr. Johnstone was always a student and an investigator, and his eagerness was both attractive and contagious. Each year saw him seeking fresh knowledge in various schools and post-graduate courses. A list of his many contributions to medical literature may be found in the Transactions of the American Gynecological Society, 1906, vol. xxxi. Among them may be mentioned: "The Relation of Menstruation to Other Reproductive Functions;" "The Endmetrium in the Cycle of the Rut"; "The Anatomy of the Uterus in Horizontal Animals, Showing the necessity for Menstruation in Vertical Classes."

HOWARD A. KELLY.

Johnstone, Robert (1805-1847), surgeon of Cleveland, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 643.

JONES, Calvin (1775-1846), an officer of North Carolina troops during the second war with Great Britain, a physician of marked ability and grand master of the Masonic grand lodge of North Carolina, was born at Great Barrington, Massachusetts, April 2, 1775. His father was Ebenezer Jones, a soldier in the Army of the Revolution, and his mother was Susannah Blackmore. The family's earliest progenitor in America was Thomas Ap Jones, a Welshman, who settled at Weymouth, Massachusetts, in 1651. From him, Ebenezer Jones was fourth in descent. Of the early life of Calvin Jones we know little. We get a slight glimpse of the surroundings of his infancy in a letter to him from his father's sister, Mrs. Mary Collins, who says: "I came to your father's house to stay with your mother while your father and Uncle Joseph went to fight for their dear country. You were then 16 months old." A letter from his father declares: "Your mother and I made slaves of ourselves that our children might have education." We are unable to ascertain in what institutions Calvin Jones received his education, but that he was possessed of a varied store of knowledge in state-craft, medicine, surgery, science, history, botany, and polite literature, there is ample proof. The study of medicine he began in boyhood, and he made such wonderful progress in that science that he was able to stand an examination on the subject at the early age of seventeen. A certificate, or medical license, now owned by his descendants, reads as follows:

These may certify that Calvin Jones, on ye 19th of June, 1792, offered himself as a candidate for examination in the Healing Art before the United Medical Society. He was likewise examined and approved of by the said Society as being well skilled in the Theory of the Physical Art, and by them is

recommended to the Publick, as per Order of James Batten, president.

DOCT. DAVID DOTY, "Secretary."

We have never been able to learn where this United Medical Society was situated. Before leaving New England, Dr. Jones practiced his profession with marked success, as we learn from general letters of recommendation and introduction from physicians with whom he had been associated before removing to North Carolina. It was about the year 1795 that Dr. Jones settled in Smithfield, in Johnston County, North Carolina. He soon gained the esteem and confidence of the general public in his new home, likewise attaining high rank among the most progressive and enlightened medical men of North Carolina. In the course of time, Dr. Jones was called into public life by the voters of Johnston County, being twice elected a member of the North Carolina House of Commons, serving in the sessions of 1799 and 1802. He was an active, useful, and influential member of these bodies. His speech (November 20, 1802) against the proposed appropriation to establish a penitentiary, in the nature of a mild reformatory, was an argument of great force which was reported in shorthand by Joseph Gales, editor of the "Raleigh Register," for the use of his paper (see issue of December 14th) and it was later re-published in a small pamphlet. The session of 1802 ended the services of Dr. Jones as a member of the House of Commons from Johnston County, but, after his removal to Raleigh, he was honored with a seat in the same body as a representative from the county of Wake.

So far as is known, Dr. Jones was the first physician in North Carolina to discard the old treatment by inoculation as a preventive of small-pox, and to substitute therefor vaccination. So up-to-date was Dr. Jones that he was extensively practicing this treatment before the experiments of its discoverer, (Dr. Jenner) were completed in England. In 1800, while still living in Smithfield, Dr. Jones announced through the newspapers that he would begin a general practice of vaccination—or inoculation as it was still called—in the Spring of the following year. Later he decided to postpone such action until he could get the benefit of reports of more recent experiments elsewhere.

In conjunction with a number of other wellknown physicians of the State, Dr. Jones was one of the organizers of the North Carolina Medical Society in the year 1799. On the 16th of December, in that year, certain medical gentlemen met in Raleigh and perfected an organization. Dr. Jones was elected corresponding secretary or "secretary of correspondence," and served in that capacity during the life of the society. This organization held meetings in Raleigh during the month of December in the years 1799, 1800, 1801, 1802, 1803, and 1804. The meeting in the year last named adjourned to reconvene at Chapel Hill, the seat of the University of North Carolina, on July 5, 1804. During its short-lived existence, many enlightening medical essays were read before it by its learned members, and much useful knowledge was thereby disseminated. Among other things, the society collected a botanical garden and natural history museum. Many years later, Dr. Jones, on the eve of his removal to Tennessee in 1832, turned over to the University of North Carolina a collection of this nature, which may have been the same. This collection contained a great variety and wide range of objects—from small botanical specimens to mastodon teeth and the bones of other prehistoric animals.

Dr. Jones was not only an accomplished physician, but practiced surgery with notable success, many of his operations being of the most delicate nature—on the eye and ear, operations now usually performed by specialists. He was also the author of a medical work entitled "A Treatise on the Scarlatina Anginosa, or what is vulgarly called the Scarlet Fever, or Canker-Rash, replete with everything necessary to the pathology and practice, deduced from actual experience and observation, by Calvin Jones, Practitioner of Physic." This work was published at Catskill, New York, by the editors of the "Catskill Packet," Mackay Croswell and Dr. Thomas O'Hara Croswell, in 1794. It was about 1803 that Dr. Jones left Smithfield and took up his residence in Raleigh. A few years later he was elected mayor of the capital city—or "Intendent of Police," as the municipal chief magistrate was then called. For a while Dr. Jones devoted some of his time to journalism. In the Fall of 1808 he became associated with Thomas Henderson, Jr., in publishing and editing the "Star," under the firm name Jones & Henderson, and later Thomas Henderson & Company. On January 1, 1815, he disposed of his interest in the "Star" to Colonel Henderson.

Interest in military matters was one of his life-long characteristics. Almost immediately after his arrival in North Carolina, and be-

fore he removed to Raleigh, he was an officer of a regiment in Johnston County. Among the papers left by him is an autograph letter from President John Adams, dated Philadelphia, July 5, 1798, addressed to "The Officers of the Johnston Regiment of Militia in the State of North Carolina," and thanking them for their regiment's patriotic tender of services in the event of a war with France, then imminent, but which was happily averted.

War with Great Britain being averted in 1807, the services of the cavalry company commanded by Captain Jones were not needed then, but he continued his labors in training this troop and brought it up to so high a state of discipline that his talents were recognized by his being promoted to succeed Adjutant-General Edward Pasteur, when that gentleman resigned on June 7, 1808. It was during the administration of William Hawkins that the War of 1812-15 came on. Soon after the beginning of that conflict, Adjutant-General Jones, seeking more active service, sent in his resignation on January 23, 1813, and accepted a commission (dated December 14, 1812) as major-general in command of the Seventh North Carolina Division of Militia, his jurisdiction extending over the forces of eight counties. On a proposed invasion of the coast, by the British he collected a large force and repaired to the coast with such celerity that the British admiral abandoned his purpose to march inland, and sailed away. In the Fall of 1814, General Jones was commissioned quartermaster-general of the detached militia of North Carolina which marched to the relief of Norfolk, Virginia, and this was his last participation in military affairs. Peace coming soon thereafter, he thenceforth devoted his talents to the more pleasing pursuits of a tranquil life.

In the cause of public education, few more indefatigable workers than General Jones could be found in North Carolina. For thirty years from 1802 until his removal to Tennessee in 1832, he was a member of the Board of Trustees of the University of North Carolina. In the Raleigh Academy he also took a deep interest, and was a trustee of that school for some years. It was about the year 1832 that General Jones removed with his family to Bolivar, Tennessee, though he had paid visits to that locality before. He owned about 30,000 acres of land in that state. Here he erected a spacious mansion, which he called "Pontine," this name probably being derived from the Pontine Marshes, adjacent to the city of Rome. At Pontine the closing years of his life were spent, "retired from public employment, and enjoying, with ample wealth around him, the "otium cum dignitate of the typical Southern planter". He died September 20, 1846.

While a practicing physician in Raleigh, Dr. Jones had become engaged to be married to Ruina J. Williams, a young woman of rare loveliness, who was the daughter of Major William Williams of "The Forks" in Franklin County, not far from the county of Warren. Before the union could be consummated, however, she fell a victim to consumption, passing away on September 20, 1809, in the twenty-first year of her age. Nearly ten years later, on April 15, 1819, when forty-four years of age, Dr. Jones married the widowed sister of Miss Williams. This was Mrs. Temperance Boddie Jones, née Williams, widow of Dr. Thomas C. Jones of Warrenton.

General Jones was a man of striking appearance. He was 5 feet 10½ inches in height, deep-chested, and weighed about 240 pounds. His eyes bore a kindly expression and were hazel in color, his hair was brown, his forehead high, his nose slightly Grecian, and his mouth clearly portrayed the firmness and decision which marked his character through life. Viewed from any standpoint, he was a strong man—strong morally, mentally, and physically.

MARSHALL DELANCEY HAYWOOD.

JONES, Ichabod Gibson (1807-1857), of Columbus, Ohio, teacher in the Eclectic School at Worthington, was born in Unity, Waldo County, Maine, in 1807. In 1831 he came from Maine to Worthington, Ohio, where he remained until 1834, when he removed to Columbus, in which city he lived until his death. His tastes inclined him to internal medicine and obstetrics, almost to the exclusion of surgery, which he studied only to attain proficiency in the more common operations incident to parturition. His primary education was obtained in local schools. At the age of twenty he studied medicine with his uncle, Dr. Gibson, of Boston, and then entered New York University from which, when twenty-four, he obtained the M. D. degree, and in 1831 was appointed teacher of practical medicine and therapeutics in the Eclectic School at Worthington, Ohio, a position held until 1834.

He was a vigorous advocate of vaccination, which then as now was opposed by many who were swayed by prejudice or the hope of

notoriety. The opposition came mainly from practitioners of his own school, and Dr. Jones joined the regulars in combating it.

He was tall, very slender; had brown hair, irregular features, and an erect carriage. To the stranger his manner was austere and his expression rather that of melancholy, incident perhaps to discomfort from dyspepsia, from which he suffered almost constantly for many years prior to his death. Through his own suffering he became almost a fanatic on the subject of diet, and often restricted his patients so much that some of them said they were in greater danger from starvation than from their diseases.

Through his lectures in the Eclectic school he naturally became interested in botany, writing several papers descriptive of indigenous plants and trees, of which the most notable, perhaps, is a description of the grasses of this region; and he prepared an herbarium of the flora of central Ohio, the only complete work of the kind of his time.

He wrote many papers on professional subjects, and in 1853 published a voluminous work on "Practical Medicine and Therapeutics," differing from ordinary works of the kind only in treatment, as it embraced the doctrines of the Eclectic school.

In 1833 he married Cynthia Kilbourne, a daughter of Col. James Kilbourne, the founder of the village of Worthington. There were four children; Louisa, James Kilbourne, Emma, and Elizabeth.

Dr. Jones died in Columbus, Ohio, in 1857 from cancer of the stomach.

STARLING LOVING.

JONES, James (1807-1873), New Orleans obstetrician, was born in Georgetown, District of Columbia, Nov. 18, 1807, son of Edward Jones, of New York, and Louisa, daughter of Dr. Matthew Mans, of Pennsylvania, a surgeon in the Continental Army during the Revolutionary War. His paternal ancestors came from Wales with William Penn and settled at Marion Township, near Philadelphia. One uncle, John Jones (q. v.), was largely instrumental in organizing the medical department of the Revolutionary Army; another, Thomas Jones, practiced medicine in New York City; a third, James Jones, was killed in a duel with Judge Livingstone, of the Supreme Court, the result of a political quarrel. James Jones' education was received at the classical academy at Georgetown, under the Rev. James Carnahan, later president of Princeton. Entering Georgetown College in 1818, he remained there nearly three years, in 1821 becoming a pupil in the academy of the Rev. Stephen H. Tyng. In 1823 he went to Columbian College, Washington, graduated in 1825 and received his A. M. in Jan., 1827. In Feb., 1827, he began to study medicine at Georgetown with Thomas Henderson, professor of the theory and practice of medicine in the Medical College of the District of Columbia. Jones attended two courses at the University of Pennsylvania, where he was graduated in 1828 under Physick, Gibson, Chapman, Dewees and Hare. After a residency in the Philadelphia Almshouse for one year, he began practicing in Georgetown in 1829, but in Oct., 1831, he moved to New Orleans where he spent the remainder of his life. Here he held the professorships of theory and practice of medicine and obstetrics, and also lectured on chemistry, constructing much of his own apparatus. He was, besides, a skilful botanist.

He was elected professor of obstetrics and diseases of women and children in the Medical Department of the University of Louisiana in 1836, and held this position until 1839 when he was transferred to the chair of practice of medicine, which he occupied until 1866, when he resumed the chair formerly held. He was dean of the Medical Department from June, 1841, to June, 1842, and from April, 1848, to May, 1849. From 1857 to 1859 Jones was editor of the "New Orleans Medical and Surgical Journal" and he was one of the founders of the Louisiana State Medical Society.

He married Mary Elizabeth Butler in 1835 and had nine children.

For thirty-seven years he was the co-laborer and close friend of Warren Stone, sr. (q.v.). He died at his home in New Orleans Oct. 10, 1873, of apoplexy.

JONES, James Robert (1848-1916), an incorporator and professor of medicine in Manitoba Medical College, was born in Toronto, Canada, February 15, 1848, and died in Winnipeg, Canada, January 11, 1916, thus being nearly 68 years of age. He received his preliminary and undergraduate medical education in Toronto, where he took the degree of M. B. in 1877. He then went to London, England, where he took his L. R. C. P. He was for a year house physician in the London Hospital, for a part of a year held a similar position in the Royal Free Hospital and for eighteen months he was medical superinten-

dent of the Soho Square Hospital for Women. In 1881 he returned to Canada and settled in Winnipeg, where he practiced till his death.

Dr. Jones was one of the original incorporators of Manitoba Medical College and was the first professor of internal medicine, a chair he held until his death. He was the first president of The Manitoba Medical Association and also the first president of The Winnipeg Medical Association, and was once president of The Canadian Medical Association. He took a keen interest in the bringing to a successful issue the establishment of Dominion Registration and was one of Manitoba's representatives at all negotiations leading up to its consummation. He was a member of Dominion Medical Council from its inception till his death and was president of that body for one year. He was a member of the staff of the Winnipeg General Hospital and was one of the three members of a City of Winnipeg to report on its problem of commission appointed by the council of the hospital accommodation, besides being a member of the Council of the University of Manitoba for many years. In fact, Dr. Jones's greatest interest in life outside of his profession was education, and this led him to take membership in the Board of Studies of the University of Manitoba, the Advisory Board of the Department of Education of the Province of Manitoba, Board of St. John's (Anglican) College, and the Board of Rupert's Land Ladies College. Also he was a member of the Manitoba Club, a conservative in politics and an Anglican in religion.

In 1887 he married Margaret Dennistoun, second daughter of the late James Dennistoun, Q. C., of Peterborough, Ont., by whom he had two sons, James and Max. The latter died in infancy. The former took a medical course at Oxford and, at the outbreak of the war, joined the Royal Army Medical Corps and was still in service at the time of his father's death.

JASPER HALPENNY.

JONES, John (1729-1791), surgeon, organizer of the medical department of the Army of the Revolution. This man of ordinary name was of extraordinary ability. He lived before the fashion of double-barrelled appellations, and Mease, his biographer, tells us that when "Some of the physicians of New York entered into a resolution to distinguish themselves from their fellow citizens by a particular mode of dressing their hair," John walked about plainly coiffed, refusing the "new-fashioned bob" and in consequence was cut in consultation for a while. Jones was of Welsh extraction, his grandfather, Edward Jones, having married Mary, the daughter of Thomas Wynne. John was born in Jamaica, Long Island, in 1729; his two grandfathers were physicians, his father, Evan, one also. The latter married Mary Stephenson of New York and had four sons, John being the eldest, and very fortunate in good opportunities for learning. First came medical tutelage at the age of eighteen, under the famous Cadwalader (q. v.) of Philadelphia; then, in London, he attended the lectures of William Hunter, and studied under Percival Pott; in Paris under the great French reformers, Petit and Le Dran, and in Edinburgh under the elder Monro, taking his M. D. from Rheims University in 1751. It was as a surgeon that Jones became noted after settling in New York and his chroniclers say of him that he was the first in that city, to do the operation of lithotomy, and he did it so well as to cause a demand for his services in the middle and eastern states of America. James Mease (q. v.), writing of him, says "he had acquired a facility in operating to which few surgeons have arrived. I have seldom known him longer than three minutes in a lithotomy and he has sometimes finished the whole in one minute and a half." He became distinguished in colonial annals as surgeon to the troops in the French War of 1755 and on his return was made professor of surgery in the medical school of the College of New York. Dr. Jones made a study of obstetrics while in Europe and later gained a considerable reputation as an accoucheur, lecturing on the subject in the College of New York, being one of the first lecturers on this branch in the country. Asthma, his great enemy, was always troublesome, so he took another journey to Europe and found living in London fog gave alleviation. No doubt he had great satisfaction also in freshening up his professional side in visiting his old surgical masters.

He was largely instrumental in organizing the medical department of the Revolutionary Army, but was physically unable to do active service during the war. Having to go to Philadelphia, he found his asthma so much better that he stayed there and was made a physician to the Pennsylvania Hospital when Redman (q. v.) resigned in 1780. He attended President Washington in an illness in 1790 and Franklin in his last illness, but in 1791 was himself summoned by death. He

died suddenly in sleep at the age of sixty-two, June 23, when good hopes had been entertained of his recovery from an apparently slight indisposition.

His best work, and that for which he is commonly quoted, is his "Plain Remarks Upon Wounds and Fractures designed for the Use of the Young Military Surgeons of America," New York, 1755, reprinted in Philadelphia, with a memoir by Dr. James Mease, 1795. This little book became the "vade mecum" of continental surgeons during the Revolutionary War. In it Jones attempted little more than to condense the teachings of Pott and Le Dran, but there are a few notes of originality, the most conspicuous being a case of trephining in delirium eighty days after a slight head injury. The dura was opened and drained and the patient recovered. This was the first book written on surgery in the United States. In 1876 he published in Philadelphia, "The Diseases incident to Armies, with the Method of Cure; translated from the original of Baron Von Swieten; to which are added, The Nature and Treatment of Gunshot Wounds, by John Ranby." Besides these writings Dr. Jones was the author of a thesis submitted to the University of Rheims, 1751; "Observations on Wounds," New York, 1765; "Account of the Last Illness of Dr. B. Franklin," 1790; "A Case of Anthrax," 1791.

JONES, Johnston Blakely (1814-1889), of North Carolina. Among those who have given life and talents wholly to the good and upbuilding of North Carolina, none did more than Johnston B. Jones, who was born in Chatham County, North Carolina, September 12, 1814. His father, Edward Jones, a native of Ireland, was a lineal descendant of Jeremy Taylor and came to North Carolina when young and attained prominence as a lawyer, serving as solicitor-general to the state for over thirty years. Johnston Jones received his early education in Raleigh, under a noted educator, Mr. Joseph G. Cogswell, afterwards spending several years at the University of North Carolina but not taking a degree. He began his medical studies in Charleston, South Carolina, but owing to delicate health was advised to go abroad, so, choosing Paris, he studied medicine for two years. During his student days in the French capital he was known as "the handsome American"—in fact, from youth to age he was remarkable for a physical beauty which seemed but the outward expression of the luminous mind within. At the expiration of his stay in Paris he made a six months' tour of Scotland and Ireland, visiting kinsfolk and friends. Soon after his return to America he attended medical lectures at the Medical College of South Carolina, at Charleston (1836-37), and received his M. D. there in 1841. The same year he began to practice in the little town of Chapel Hill, North Carolina, the home of the State University, where he remained until 1868, then removed to the city of Charlotte where he practiced until his death, March 1, 1889.

He died a poor man so far as worldly goods go, but rich in the respect and love of those who had known his kindness and experienced the benefit of his skill. He was one of the prime movers in the organization of the North Carolina Medical Society, and always took the deepest interest in its welfare. His mind was acute, vigorous, original and analytic, and to great professional learning he added extensive and accurate information on many subjects. Much of his practice was in the department of diseases of women, in which he had a considerable vogue.

In 1841 he married Ann Stuart, and was survived by two sons, one of whom was Dr. Simmons B. Jones of Charlotte, North Carolina, and by two daughters.

LIDA T. RODMAN.

JONES, Joseph (1833-1896), best known for his writings on "Diseases in the Southern States," was born on September 6, 1833, in Liberty County, Georgia, the son of the Rev. Charles and Mary Jones Jones. As a boy he had private tuition and five years at the University of South Carolina, Columbia, taking his A. B. from Princeton College in 1853, A. M. in 1856, and his M. D. from the University of Pennsylvania in 1856. The University of Georgia gave him her LL. D. in 1892. The Savannah Medical College chose him as her professor of chemistry in 1858. Three years later he was for one year professor of natural philosophy and natural theology in the University of Athens, Georgia, then professor of chemistry in the Medical College of Georgia at Augusta. During the war he was six months in the cavalry and for the rest of the time full surgeon-major in the Confederate Army.

Keen in his studies of disease, he made investigations in most of the southern states, being more in the center of activities by his service as professor of chemistry and clinical medicine in the university of Louisiana

and as president of the board of health in that state. He had the usual difficult experience of all sanitary inspectors, especially at the ports. After a continuous battle of four years with the maritime and railroad interests, the court voted quarantine to be a legitimate exercise of police rights. The whole life of Dr. Jones was devoted to the thankless task of promoting civic and military hygiene in the city.

His writings included "Digestion of Albumen and Flesh," 1856; "Physical, Chemical and Physiological Investigations on Solids and Fluids of Animals," 1856 (his M. D. thesis); "Observations on the Chemical, Physical and Pathological Phenomena of Malarial Fever," 1859; "Inquiries on Hospital Gangrene," 1869; "Explorations and Researches concerning the Destruction of the Aboriginal Inhabitants of America by Various Diseases, etc.," 1878; "Observations on the Losses of the Confederate Armies from Wounds, etc.," 1861; "Contributions to the Natural History of Specific Yellow Fever," 1874; "Observations on the African Yaws and Leprosy," 1877; "Sanitary Memoirs of the United States Sanitary Commission," New York, 1890; "Medical and Surgical Memoirs;" "Contributions to Teratology," 1888; "Explorations of the Aboriginal Remains in Tennessee."

It can be imagined that such a widely interested man was foremost in founding the Southern Historical Society. He was also honorary member of the Virginia Medical Society; of the Physicians and Surgeons of Philadelphia, and a member of the Louisiana Medical Society.

He married, in 1858, Caroline S. Davis of Augusta, Georgia, and two years after her death in 1868, Susan Rayner Polk, daughter of the Bishop of Louisiana. His eldest son, Stanhope, became a doctor but died in 1894. Five of his other children were Charles Colcock, Hamilton Polk, Caroline Mary Cuthbert, Frances Devereux and Laura Maxwell.

He died February 17, 1896.

JONES, Mary Amanda Dixon (1828-1908), Brooklyn teacher and surgeon, was born in Dorchester County, Maryland, February 17, 1828, the daughter of Noah and Sarah Turner Dixon and the granddaughter of the Rev. James Dixon. She was graduated at Wesleyan Female College, Wilmington, Delaware, in 1845. The following year she was elected professor of belles lettres and physiology in her alma mater, preparing, it is said, her textbooks on physiology and the history of literature. In 1850, she joined the faculty of the Baltimore Female College for two years, and then became principal of a young ladies' seminary in southern Maryland. In 1854 she married John Quincy Adams Jones, a lawyer; three years later they had a son. She began to study medicine aided by Henry F. Askew (q. v.) and Thomas E. Bond (q. v.), attended the Hygeio-Therapeutic College of New York where she was graduated in 1862; in 1875 the degree of M. D. was given her by the Woman's Medical College of Pennsylvania, after three winter and spring courses. She also studied at the New York Postgraduate Medical School. Dr. Jones began to practice in Brooklyn in 1864. From 1882 to 1891, she was gynecologist to the Woman's Hospital of Brooklyn. Meanwhile, from 1872 to 1875, she studied microscopy under John Gibbons Hunt (q. v.) and pathology under Carl Heitzman (q. v.), describing two diseases, endothelioma and gyroma. While studying in various hospitals in Europe in 1886, she visited Granville Bantock, Lawson Tait, Carl Schroeder, August Martin, Theodore Bilroth, Franz C. L. W. von Winckel, C. Gerhardt Leopold, Jules Pêan, and others. She was first in this country to advocate and perform total hysterectomy (panhysteromyomectomy) for myoma of the uterus.

Thirty or more papers detail her surgical and clinical experiences, chiefly concerning the removal of the uterine appendages and fibromata. Under the guidance of Heitzman she wrote on pathology, availing herself of his descriptions. She was an associate editor of "The Times and Register," Philadelphia, and of "The Woman's Medical Journal," Toledo, Ohio. Dr. Jones was peculiar in person, flashy, and tawdry in appearance, but undoubtedly a student. Lack of judgment and of intimate contact with the better members of the profession may have been responsible for a certain mental obliquity with which she is accredited. The Nestor of surgery in Brooklyn declared that "she was quite a pachyderm." In resorting to a suit for libel against allegations of malpractice by the "Brooklyn Eagle," the exposé caused her exile in the city of New York in 1895, where she died in 1908.

A son, Charles Noah Dixon Jones, born April 26, 1857, in Cecil County, Maryland, took his M. D. in 1883 from the College of Physicians and Surgeons of New York and practiced medicine in Brooklyn and New York City. He died October 30, 1919.

JONES, Nelson Edwards (1821-1901), Ohio author, was born in Liberty, Ross County in that state, September 20, 1821. He was graduated from the Cleveland Medical College in 1846, and on June 9 of the same year married Virginia Smith of Cleveland. In 1852, he settled in practice in Circleville, Ohio, a primitive spot with fine timber, much game, and a prehistoric ground of great interest, where he became the leading obstetrician. From the outbreak of the Civil War until peace, he served as surgeon of the board of enrollment, 12th District of Ohio, and for thirty one years was examining surgeon for pensions. He died from a hemorrhage following an accident, in December, 1901.

Dr. Jones was a sturdy conservative in things medical, relying upon the "vis medicatrix naturae," in an age of polypharmacy. His many articles written for the journals of the day were inconoclastic. A great deal of his latter day writing was on natural history subjects. His "Squirrel Hunters of Ohio, or Glimpses of Pioneer Life," 1898, is a valuable picture of the family in pioneer life, especially the hunters, in the days of the canal, the coach, and the steamboat, before the coming of the railroad and telegraph. The unconventional illustrations by the author add to its interest.

JONES, Oswald Meredith (1859-1918), was born in Carnarvon, Wales, in 1859, and became an eminent surgeon of British Columbia. He began his medical training in the London Hospital; he passed into the navy, at the suggestion of Sir Andrew Clark, where he became conspicuous for his surgical ability. It was in his first commission, on H. M. S. "Warspite," that he came to Victoria, British Columbia, about 1890. Here he married a daughter of Mr. Brady, a well-known mining engineer of Kootenay. In this city he began his civilian practice and his reputation as a skilled surgeon soon spread up and down the Pacific Coast. Dr. Jones was a fellow of the Royal College of Surgeons, a fellow of the American College of Surgeons, being one of the charter members at the time of the inception of this organization, also a member of the British Medical Association. He was on the board of examiners for the Dominion of Canada, and also for the Province of British Columbia. He was recognized as a sagacious adviser on medical matters.

He played a heroic part in the World War, and although unable, from physical disability, to serve at the front, he nobly did his duty when the wounded returned. In this service he exhausted his narrow margin of vitality, and to his unceasing devotion was due his untimely death. His great surgical ability was called into special demand; in addition to his regular practice he attended hundreds of cases of wounded men,—scores of cripples, who were battered and creeping about on crutches, through his skill, being restored and literally "made whole." Modest, unassuming, courageous, he shirked no duty nor failed in any emergency. His personal charm and sympathy endeared him to his patients.

He died of pneumonia April 3, 1918, at Victoria, B. C. At a memorial service in Christ Church Cathedral on April 7th, nurses, doctors, and returned soldiers, occupied the middle of the nave and the rest of the church was packed with patients; the bishop preached.

His eldest son, at the beginning of the World War a medical student, went overseas with the Army Medical Corps to serve in France, and was there at the time of his father's death. Dr. Jones's death was felt especially by the officers of the Navy to whom his house was always open; and the whole medical profession put on record at a meeting held April 5, 1918, the irreparable loss they felt at the death of this useful and unselfish physician of the Dominion.

JONES, Philip Mills (1870-1916), reorganizer of the Medical Society of the State of California, its secretary, founder and the editor of its "Journal," was born at Brooklyn, New York, January 17, 1870, the son of Lysander Mills and Pauline Both-Hendrickson Jones. He was a student at the Polytechnic Institute of Brooklyn until 1886, then for a year at the New York University, taking his M. D. at the Long Island College Hospital in 1891. After practicing medicine at Brooklyn until 1900 he went to California to do archeological work for the University of California and was engaged in studying the ethnology of the California Indians until 1902. Jones was one of the early Roentgenologists of California, although he practiced as an ophthalmologist, becoming in time a free-lance,—radiographer, promoter of constructive legislation, newspaper writer and ethnologist. His was an alert personality coupled with a keen mind, sound understanding, and a great capacity for work.

He had a ready pen and enthusiasm for public medicine, and was also an effective

and forceful speaker. Thus it came about that he was instrumental in reorganizing the medical society of the state in 1902 and in launching the "California State Journal of Medicine," its official organ, remaining both secretary and editor until his death from pneumonia, November 27, 1916. For the society he devised a system of malpractice defense, for the journal he reformed the advertising methods in vogue at the time. He started a crusade against unethical advertisements that caused great bitterness at first, but eventually brought credit to the "Journal" and his standards were adopted generally by state medical journals throughout the United States. As an evidence of Jones's versatility, persistence and industry, it is to be mentioned that he studied law and passed the bar examination when forty-five years of age, keeping on to success and leading his class after one failure. This was to assist him in handling the legal phases of the malpractice suits against the Medical Society.

From 1903 to 1908 Dr. Mills represented his state society in the house of delegates of the American Medical Association and from the latter date until his death served the association as a member of the board of trustees. Through Dr. Jones's efforts the California profession developed a strong organization, professionally, socially and scientifically.

In 1915 Dr. Jones married Helen Louise Spalding, daughter of Edward B. and Frances A. Spalding.

Jones, Ralph Kneeland (1823-1888) of Bangor, Maine, active practitioner. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1812, vol. ii, page 57.

JONES, Samuel Jones (1836-1901) an oto-ophthalmologist of Chicago, Ill., was born at Bainbridge, Pennsylvania, March 22, 1836. The son of Dr. Robert H. Jones, a native of Donegal, Ireland, and of Sarah M. Ekel Jones, of Swiss-American ancestry, he received the degree of Bachelor of Arts at Dickinson College, Carlisle, Pennsylvania, in 1857. In 1860 he took from his alma mater the degree of A. M. and in 1884 that of LL. D. "honoris causa." In 1860, at the University of Pennsylvania, his medical degree was conferred on him after a three years' course of study, and at once he entered the navy as assistant surgeon where he served until 1868, having been advanced to the rank of surgeon. Then he resigned and went to Europe to study ophthalmology. Returning to America, he settled in Chicago, and soon was made professor of ophthalmology and otology in the Northwestern University Medical School—a position which he held for many years. In this capacity he gave clinical instruction at Mercy Hospital and at the Southside Free Dispensary. He was also ophthalmic and aural surgeon to St. Luke's Hospital. For several years he was editor of the "Chicago Medical Journal and Examiner"—a publication which prospered greatly under his management. Dr. Jones was also a member of numerous medical societies, both general and special. In 1876 he was a delegate from the Illinois State Medical Society to the Centennial International Medical Congress, held in Philadelphia. In 1881 he was a delegate from the American Medical Association and the American Academy of Medicine to the Seventh International Medical Congress, which met in London. In 1887 he was president of the Otological Section of the Ninth International Medical Congress, at Washington. Dr. Jones was twice vice-president of the American Academy of Medicine, and in 1890 its president.

Dr. Jones never married. He was a large, stately man, extremely courteous and rather formal. About five feet ten inches high, he weighed 200 pounds. He was a reddish blonde, with dark brown hair and beard, and "eyes of a dancing blue, or blue-gray." His office contained two, and sometimes three, reception rooms, for different classes of patients, and his fees were high. His only hobby was horses, and still more horses. He would never proceed to a lecture at the College or a clinic at the Hospital, except when drawn in a stately carriage by a beautiful pair. A staunch Republican in politics, he took no public part in political affairs, except in matters pertaining to the public health—especially the anti-noise crusade and the pure food propaganda. In neither of these affairs was he very successful,—a fact by no means due to any fault of his, but rather to the obstinacy of the city authorities. His skill as an ophthalmic operator was undeniable.

Dr. Jones died at Chicago, Oct. 4, 1901.

THOMAS HALL SHASTID.

Jones, Toland (1820-1894), surgeon, of London, Ohio. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii, pp. 57 & 58.

JONES, Walter (1745-1815), learned physician of Virginia, born in Northampton County, Virginia, in 1745, he was educated at William and Mary College, graduating in 1760 and studying medicine at, and graduating M. D., from the University of Edinburgh, in 1769, the subject of his thesis being "De Dysenteria." He is said to have been held in high esteem by Cullen and his other professors, and was described as "the most shining young gentleman of his profession in Edinburgh, and one who would make a great figure wherever he went." He settled and practiced in his native county, and maintained the highest standing as a physician and scholar, and on April 11, 1777, received the appointment from Congress of physician-general to the hospitals of the Middle Military Department, but held the position only two months, resigning the first of July following. He was elected to and served in Congress in 1797-99, and in 1803-11. It was said of him by an intimate acquaintance that "for the variety and extent of his learning, the originality and strength of his mind, the sagacity of his observations, and captivating powers of conversation, he was one of the most extraordinary men I have ever known. He seemed to possess instinctively the faculty of discerning the hidden cause of disease, and applying with promptness and decision peculiar to himself the appropriate remedies."

He left one son, Walter, when he died on his plantation in Northumberland County, Virginia, December 31, 1815.

JONES, William Palmer (1819-1897), of Nashville, Tennessee, alienist, was born in Adair County, Kentucky, October 19, 1819, son of William Jones, of Lincoln County, Kentucky, whose ancestors were Welsh. His mother was Mary, daughter of Robert Powell, a Virginia farmer and a major in the American Revolution. Left a widow with nine children, she cared for them with great devotion until she died in 1851 at the age of forty-five. He early determined to study medicine and attended the Louisville Medical Institute, afterwards receiving an M. D. both from the Medical College of Ohio and the Memphis Medical College. In 1840 he began to practice in Edmonton, Kentucky, but the same year moved to Bowling Green, Kentucky; in 1849 he settled in Nashville, Tennessee, where he remained until the close of his life.

In 1852 he established the "Parlor Visitor"; he was an editor of the "Southern Journal of Medicine and Physical Sciences" and also of the "Tennessee School Journal." He helped in founding Shelby Medical College (1858), where he was professor of materia medica; from 1862 to 1869 he was superintendent of the Central Hospital for the Insane near Nashville, one of the first insane asylums in the country for the colored race.

In 1876 Dr. Jones was elected president of the Nashville Medical College and was made professor of psychology, medicine and mental hygiene in that institution. He served in the State Senate and introduced the law providing equal educational advantages for children of all races.

He married Elizabeth J. Currey of Nashville in 1851.

Dr. Jones died at his home in Nashville, September 25, 1897.

JORDAN, Ewing (1847-1920), biographical historian of the University of Pennsylvania, was born March 18, 1847 in Philadelphia, the son of Francis and Emily Woolf Jordan. He took his A. B. at the University in 1868 and his A. M. and M. D. in 1871. He was a resident at the Pennsylvania Hospital and visiting physician to the Philadelphia and Catharine Street Dispensaries. As first assistant physician at the Pennsylvania State Hospital for the Insane at Norristown, he admitted the first patient. Dr. Jordan did not succeed as a practitioner of medicine, apparently being temperamentally unfit for the irregularity, uncertainty, and responsibilities of the life. He found his niche when he was appointed by the alumni association of his alma mater to compile with Persifor Frazer a biographic matriculate catalogue of his University, and there opened up for him a life of research, extensive correspondence, and painstaking accuracy, which filled his days with specific interests. A biographer who knew him intimately wrote, "Research into the histories of the students of the University in past years became almost a profession with him, though purely a labor of love and without remuneration." But for him, a vast mass of data would have been lost. He published a catalogue of the University matriculates who figured actively in the Civil War, on both sides, —a striking example of care and accuracy. He furnished data for many biographies for American Medical Biographies, Kelly and Burrage, Balto. 1920.

He died at his brother's home in Philadelphia, April 28, 1920.

JOYCE, Robert Dwyer (1828-1883), Irish physician and poet, of Boston, was born in Limerick County, Ireland, in 1828. The Joyce family, from which Robert Dwyer Joyce was descended, had established itself not far from the city of Limerick, and at the time of the poet-physician's birth was living in Glen Oisin. Dr. Joyce received his early education at an ordinary country school and Queen's College, Cork, and after teaching for some time studied medicine in the same city. During this period he dipped into poetry occasionally and there was a clear pre-figurement of his future poetic career. In the "Dublin Freeman's Journal" we read of him: "During the interval between 1857 and 1865 he lived first in Cork and afterwards in Dublin, and supported himself partly by writing and partly by the prizes and scholarships of the college, for he never competed for a scholarship he did not win." For a time, while in Dublin, he devoted himself to medical practice, as far as it came to him, and to medical study while still continuing to devote himself to literature. He was professor of English literature at the preparatory college of the Catholic University of Dublin. He seems to have realized that the opportunities open to him in Ireland were rather limited, in his profession at least, and accordingly when about thirty-five he came to this country and settled in Boston, and it was not long before he had acquired a good practice, when he set himself once more to the cultivation of literature. His first venture of any ambition was a volume of "Ballads, Songs and Romances." In the meantime he had written a prose work called "Legends of the Wars in Ireland." Some of these charming old poetic legends introduce historical matter of considerable importance. On the other hand, some of them reflect his professional interest. "Rosaline, the White," for instance, is the kind of pseudo-medical story with which Conan Doyle began his career as a writer of fiction. Joyce's real triumph as a literary man did not come until the publication of "Deirdre, an Irish Epic." About three years after "Deirdre" a second long poem entitled "Blanid" was published. This was his last work. It was published in 1879, when its author was in his fifty-second year, and further works of even higher order were confidently anticipated from him by his friends. Dr. Joyce's health began seriously to fail about the middle of the year 1882. He died October 24, 1883.

MARGARET K. KELLY.

JOYNES, Levin (1819-1881), medical teacher and writer of Virginia, was born in Accomac County, in that state on May 13, 1819, and at the age of sixteen years was graduated A. B. from Washington and Jefferson College, Pennsylvania, in 1835. After spending two years at the University of Virginia, he began the study of medicine, first attending lectures at the University of Pennsylvania, and afterwards at the University of Virginia, from which he received an M. D. in 1839. After graduating he went to Europe and spent two and a half years attending lectures, chiefly in Dublin and Paris. Returning to his native country in 1843, he settled there, and the following year removed to Baltimore, from which city he was called to Philadelphia, in 1846, to assume the professorship of physiology and legal medicine in the Franklin Medical College. In 1849 he returned to his own county, and took up practice again. This he continued to do until he was elected professor of the institutes of medicine and of medical jurisprudence in the Medical College of Virginia in 1855. The following year he was elected dean of the faculty, and held these two positions until the end of the session of 1870-71, when, on account of failing health, he resigned. When the Civil War became imminent, he gave his allegiance to his native state, but always a conservative, and, having accepted the position of assistant surgeon in the forces of Virginia, he resigned when the Medical Department of the Confederacy was thoroughly organized.

He was an instructive and accomplished teacher; a perfect encyclopedia of knowledge. His authority on all medical subjects was rarely questioned, and never, to the writer's knowledge, was he worsted in debate.

He was president of the Medical Society of Virginia in 1878-9.

He was twice married: in December, 1854, to Rosa F. Bayly, of Richmond, who died in 1855, and in June, 1858, to Susan V. Archer, also of that city, who with one son, survived her husband. Dr. Joynes died at his home on January 18, 1881, of malignant disease of the antrum and surrounding parts.

His writings extended through his whole professional career. The following are some of them: "Obstetrical Auscultation" ("American Journal of Medical Sciences," January, 1845); "Ancient Superstition" ("The Stetho-

scope," October, 1851); "The Legal Relations of the Fetus in Utero" ("Virginia Medical Journal," September, 1856); "Hemorrhagic Malarial Fever," ("Richmond and Louisville Medical Journal," March, 1877); "Medical History" ("Virginia Medical Monthly," vol. i); "Infantile Paralysis" (Ibid., vol. iv). These and many others were his contributions, all of which showed the marks of thorough preparation in the study of the subject and exactness of the manuscript.

ROBERT M. SLAUGHTER.

JUDD, Gerrit Parmele (1803-1873). A medical missionary to Hawaii Dr. Judd, was born in Paris, Oneida County, New York, April 23, 1803, a seventh descendant of Thomas Judd, of Kent, England, who came to America in 1634 and was one of the founders of Farmington, Connecticut. He attended lectures at Fairfield, Herkimer County, New York, from 1820-1825, and also studied with his father, Dr. Elnathan Judd. He was a member of the Medical Society of the College of Physicians and Surgeons of the Western District, New York. In 1827, with fourteen associates, he sailed from Boston in the brig "Parthian." This was the second reinforcement of missionaries of the American Board of Commissioners for Foreign Missions to the Sandwich Islands. This voyage lasted for 145 days. They arrived at Honolulu March 31, 1828. Judd entered the service of the Hawaian Government May 10, 1842. The motive which induced him to take this step was a desire to be more useful to the nation for whose welfare he had left his native land.

On his arrival in 1828 at Honolulu, island of Oahu, he began immediately to fill his duties as the attending physician of the mission. He performed many surgical operations which were the first of their kind that had been attempted. At the end of ten years he had thoroughly mastered the Hawaiian language and edited a small book called the "Anatomia" of some sixty pages with nineteen plates illustrating the intricacies of the human body, which he, in conjunction with a native, had drawn and engraved. This work was remarkable in the number of new Hawaiian words coined, as the ignorance of the Hawaiian in regard to the human body made it impossible otherwise to describe it. The "Hawaiian Spectator" of April, 1838, vol. i, page 13, contains an account written by the doctor of the climate and healthfulness of these islands, as evidenced by his ten years' experience among the natives and foreigners. He points out that owing to the cool sea breezes the temperature never becomes excessive and from the small variation in temperature the islands were certainly healthful.

He married Laura Fish of Clinton, New York State, September 20, 1827, by whom he had nine children, all born in Honolulu.

He died of apoplexy, July 12, 1873 in the coral stone house which he had built in Honolulu and named "Sweet Home."

JUDSON, Adoniram Brown (1837-1916), orthopedic surgeon, of New York City, was born at Maulmain, Burmah, April 7, 1837. He was the eldest son of the missionary, Adoniram Judson, and a descendant of William Judson, who came from Yorkshire, England, to Massachusetts Bay in 1636. He was graduated at Brown University in 1859, and attended recitations held at Harvard Medical School by Dr. H. J. Bigelow and Dr. O. W. Holmes in 1860. He was commissioned an assistant surgeon in the United States Navy by President Lincoln in 1861, after passing the official examination, and before completing his medical studies or receiving the degree of M. D. He was promoted to be past assistant surgeon in 1864, and received the degree of M. D. from the Jefferson Medical College, Philadelphia, in 1865, and, the following year was commissioned surgeon in the navy. In 1868 he received the degree of M. D. "ad eundem," from the College of Physicians and Surgeons, New York, and resigned from the navy to settle in New York, where he practiced medicine, becoming a specialist in orthopedic surgery. In 1869 he was appointed inspector on the New York City Board of Health, and served as assistant superintendent before resigning office in 1877. He held the office of pension examining surgeon of New York City from 1877 to 1884 and from 1901 to 1914. He was medical examiner of the New York State Civil Service Commission, 1901 to 1909; orthopedic surgeon to out-patient department, New York Hospital, 1878 to 1908; president of the American Orthopedic Association, 1891; a member of the American Medical Association; a fellow of the American College of Surgeons, American Academy of Medicine, and New York Academy of Medicine; also a member of Lafayette Post, G. A. R.

His contributions to literature were chiefly confined to matters connected with the public health and the theory and practice of his specialty. His public health articles include: reports on the "Course of the Epizoötic among American Horses in 1872 and 1873" and on

the "History of Asiatic Cholera in the Mississippi Valley in 1873." He contributed an original study of the "Cause of Rotation in Lateral Curvature of the Spine," to the Transactions of the New York Academy of Medicine in 1876. Among his other orthopedic papers may be enumerated the following: "Ischiatic Support of the Body in the Treatment of Joint Diseases of the Lower Extremity," 1881; "Practical Inferences from the Pathological Anatomy of Hip Disease," 1882; "The Rationale of Traction in the Treatment of Hip Disease," 1883; "The Management of the Abscesses of Hip Disease," 1885; "Treatment of White Swelling of the Knee," 1886; "The American Hip Splint," 1887; "Practical Points in the Treatment of Pott's Disease of the Spine," 1888; "More Conservatism Desirable in the Treatment of Joint Diseases of Children," 1889; "The Rotary Element in Lateral Curvature of the Spine," 1890; "Orthopedic Surgery as a Specialty," the president's address before the American Orthopedic Association, delivered at Washington, D. C., 1891; "The Weight of the Body in its Relation to the Pathology and Treatment of Club-Foot," translated into French, German, Italian, and Spanish, 1892; and "The Influence of Growth on Congenital and Acquired Deformities," 1905.

He married Anna Margaret Haughwout of New York, November 19, 1868.

Dr. Judson died September 20, 1916.

JUDSON, Oliver Albert (1830-1898), army surgeon and contributor to the history of the Rebellion, was the son of Rev. Albert and Mary Burnham Judson—descendants of colonial leaders of New England. He was born in Cornwall, Connecticut, September 28, 1830. A private tutor prepared him for college, but ill health prevented matriculation. He studied medicine in the office of Prof. Thomas D. Mütter (q. v.) of Philadelphia, whom he assisted in his clinical lectures, and he attended Jefferson Medical College, graduating in 1851. He was on the medical staff of the Philadelphia Hospital from 1861 to 1863 and physician to the Philadelphia Dispensary and to the department of diseases of the skin at the Howard Hospital.

Judson was commissioned brigade surgeon of the United States Volunteers by Lincoln in 1861 and served in the Army of the Potomac as staff surgeon under Generals Hooker, Naglee, Grover, Peck, Casey, and Emory. After the Seven Days' Battle near Richmond, he took charge of the Carver United States Hospital at Washington, continuing until the end of the war. In 1865, he resigned from the army, brevetted lieutenant-colonel and colonel. He contributed largely to the "Medical and Surgical History of the Rebellion." After resigning from the army, he practiced in Philadelphia and was actively interested in the Children's Hospital and in the Asylum for the Blind where he was a manager.

In 1866, he married Elizabeth Boyce of Georgetown, D. C. After 1882, he spent much time in foreign travel, remaining over four years in Europe.

Dr. Judson died from apoplexy March 30, 1898.

JUETTNER, Otto (1865-1922), medical biographer of Cincinnati, was born at Nimptsch, near Breslau, Germany, February 3, 1865, the son of Amandus and Augusta Haenel Juettner. After a gymnasium course at Breslau and at Carlsruhe, Germany he came to America in 1881, taking his A. B. from St. Xavier College, Cincinnati, in 1885, and his Sc. M. in 1891; his M. D. was received from the Medical College of Ohio in 1888. Juettner settled in Cincinnati. In 1903, he became the director of the Cincinnati Post-Graduate School of physical therapeutics and in 1909, professor of clinical medicine and physical therapeutics at the Cincinnati Polyclinic and Post-graduate School. Dr. Juettner was permanent secretary of the Western Association for the Preservation of Medical Records; a Fellow of the American Academy of Medicine, a member of the American Electro-Therapeutic Association, American Physio-Therapeutic Association, American Medical Editors Association, Ohio History Society, German Literary Club and president of the Cincinnati Branch of the American Folk Lore Society, besides numerous foreign societies. During the World War, he was a captain in the medical corps of the army.

Among his well-known writings are, "Modern Physio-therapy," 1906, "Physical Therapeutic Methods," 1909, "Daniel Drake and his Followers," 1909, "A Narrative of Medicine in Ohio," 1912, "Life of John L. Richmond," 1913, "Life of Alexander Dunlap," 1913, and "A Treatise on the Practice of Medicine based on the Physical Therapeutic Methods," 1915.

He married Estelle Regina Bode, (A. B., A. M. University of Cincinnati) in 1913.

In October, 1915, Dr. Juettner became the victim of a complete speech and graphic aphasia; he died August 25, 1922.

KANE, Elisha Kent (1820-1857), physician, explorer, scholar, scientist, was born on the third of February, 1820, in Walnut Street, Philadelphia, the eldest of the seven children born to John Kent, jurist, and Jane Leiper Kane. The spirit of adventure and daring seems to have been in him from his cradle and the embryo scientist was unappreciated by worried schoolmasters and received as a boy a good many hard knocks. He had the free life of a country lad and when sixteen was sent to the University of Virginia to fit himself to be a civil engineer but an attack of acute rheumatism followed by heart disease forced him to give up during the second year. He had the good luck to study natural science under Prof. Rogers, engaged just then on the geology of the Blue Mountains, and accompanied him in his journeyings. He then made a determined effort for an M. D. degree, which he took with highest honors from the University of Pennsylvania in 1842 after studying under Dr. William Harris. Boyish in appearance, not yet twenty-one, he was made resident physician in the Pennsylvania Hospital, Blockley, and found time to explore still further than his colleagues the nature of a new substance found in the renal secretion which M. Nauche of Paris had named Kyestine and announced as a final test in cases of suspected utero-gestation. The result of the Blockley Hospital research was published in the "Medical Intelligencer," March, 1841, and Kane shortly after wrote a graduation thesis on the subject in which, as Dr. Samuel Jackson said, that which was still a matter of controversy was investigated and permanently settled. In May, 1843, Kane became assistant surgeon in the United States Navy. He served in China, on the coast of Africa, in Mexico (where he was wounded), in the Mediterranean and on the first Grinnell Arctic expedition in the search for Sir John Franklin. He wrote and published a narrative of the expedition in 1853. The ships met with many disasters and Kane's medical skill did much to help and hearten the scurvy-stricken crew. He also joined the second expedition in 1853 with Dr. Isaac I. Hayes (q. v.) as surgeon. The "Advance" touched at various Greenland points to obtain Esquimaux recruits and finally reached 78° 43′ north, the highest point attained by a sailing vessel. In 1855, after tremendous hardships including desertion by a Danish crew, Kane was obliged to abandon the ship and by indefatigable exertions succeeded in moving his boats and sick some sixty miles to the open sea. He reached Cape York and successfully arrived at Upernavik in August. The explorer and his companions were enthusiastically received here. Arctic medals were authorized by Congress and the Queen's medal presented to officers and men. Kane had the Founders medal of 1856 from the Royal Geographic Society and that of 1858 from the Société de Géographie. The chart exhibiting the discoveries of the expedition was at first issued without Kane's name attached to any land or sea it embraced, but Col. Force, exercising his authority in the distribution of honors, had Kane's Sea printed on a body of water between Smith's Strait and Kennedy Channel.

His health had been terribly broken by hardships endured, and in the hope of recovering he went to England. Finding no relief, suffering with heart disease, he set out on a painful journey to Cuba where his mother and brother joined him, but after a few weeks of pleasure in their company, this heroic young navigator set out in that ship which sails into the land of shadows and does not return. He died at Havana, February 16, 1857, following an attack of apoplexy, aged 37 years.

Of his marriage there is no public record, but there is extant a curious little volume called "The Love-life of Dr. Kane," containing the correspondence and a history of the acquaintance, engagement and secret marriage between Elisha K. Kane and Margaret Fox, in October, 1856, just previous to his departure for England. Truly the warm glow of affection in the letters forms a good contrast to any other account of Kane's life story found in his "United States Grinnell Expedition" (1854) or in the second volume in 1856. Yet a third aspect of him, in his home life, may be gained by reading William Elder's "Biography" of him from his boyhood's days to that day when men of science and art and rich and poor marched sorrowfully beside the coffin of this able man.

KASSABIAN, Mihran Krikor (1870-1910), Philadelphia roentgenologist, a martyr to his profession, was born on August 25, 1870, at Caesarea, Cappadocia, Asia Minor. Almost from birth to death he was surrounded by danger. In his home country he was exposed to epidemics of cholera, experienced the terrors of earthquake and was surrounded by the horror of massacre. In his adopted country he enlisted in the hospital corps of the regular army in the Spanish American War

and was one of the first to take up the study and use of the Roentgen Ray. His early education was received in an American Missionary Institute, where he afterwards became an instructor; he early became interested in photography and attained great skill in that branch of study. His ambition was to become a missionary and with that end in view he went to London to study theology and medicine, in 1893. After a year spent there in the study of theology he came to America and again took up work in photography and also the study of medicine, receiving his degree at the Medico-Chirurgical College of Philadelphia in the spring of 1898. During his college life he was never idle; all his spare time and every vacation was spent in earning the money to give him an education. Soon after graduating he was appointed skiagrapher and instructor in electro-therapeutics in the Medico-Chirurgical College of Philadelphia, serving in this capacity until 1902. In 1903 he was appointed director of the Roentgen ray laboratory of the Philadelphia Hospital and held this position until his death. Roentgen had recently described his discovery and told the world of its wonderful properties and its possible value as a diagnostic agent. Dr. Kassabian was immediately interested and with his usual enthusiasm he took up the practical application of the rays in an attempt to help the development of this wonderful agent. Ignorant of the dangers and cognizant only of his duty and the possibility of new discovery, he was constantly exposed to the action of the rays. Precaution of any sort was unheard of and it was during the first few years of his work that the dermatitis started that later caused his death.

The use of X-rays in forensic medicine interested him greatly. He was an excellent expert witness; his thoroughness, fairness and skill did much to establish the value of this agent before the courts. Dr. Kassabian was a charter member of the American Roentgen Ray Society, and was its vice-president as well as vice-president of the American Electro-Therapeutic Society. He was given the appointment of X-ray expert to the tuberculosis congress and of representative of the American Medical Association to international meetings in foreign countries. He wrote "Electro Therapeutics and the Roentgen Rays," which went into its second edition before his death.

After having become a naturalized citizen of the United States, he re-visited his former country and there married a lady of his own nationality. A charming and intelligent woman, she nursed her husband with the utmost devotion through the protracted and terrible suffering which ended only with his death. This occurred in Philadelphia, Pennsylvania, on July 14, 1910.

Keagy, John M. (1795?-1837), physician, educator and early advocate of the "word method" in teaching children to read. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 647.

KEARSLEY, John (1685-1772), emigrated from England to Pennsylvania in 1711, and acquired a very large practice in Philadelphia, where he had for apprentices Dr. Zachary, Dr. Redman, and Dr. Bard. Kearsley was prominent in public affairs, serving as a member of the Pennsylvania Assembly. He also possessed considerable ability as an architect, as shown by Christ Church in the city of Philadelphia, designed by him.

In 1750 Dr. Adam Thomson (q. v.) published his pamphlet entitled "On the Preparation of the Body for the Small-pox." Dr. Kearsley attacked Dr. Thomson's conclusion in a publication entitled "Remarks on a Discourse on Preparing for the Small-pox" (1751); which in turn was replied to by Dr. Alexander Hamilton (q. v.), of Annapolis, Maryland, in "A Defense of Dr. Thomson's Discourse." He wrote also "The Case of Mr. Thomson," 1760.

Kearsley died in January, 1772, aged eighty-seven, leaving a large part of his property to found Christ Church Hospital, a still flourishing institution for the support of poor widows who are members of the Episcopal Church.

FRANCIS R. PACKARD.

KEATING, John Marie (1852-1893), pediatrist of Philadelphia. William V. Keating (q.v.), professor of obstetrics in the Jefferson Medical College, married in 1851 the daughter of Dr. René La Roche (q. v.), a writer on yellow fever, and April 30, 1852, their son John Marie Keating, was born in Philadelphia. From the Polytechnic the boy went to the University of Pennsylvania, graduating there in medicine in 1873 and serving afterwards as resident physician at the Pennsylvania Hospital. As physician to the Blockley Hospital and lecturer there on diseases of children he carried on the good work done by his father and was, moreover, gynecologist to the St. Joseph's Hospital. Mothers and children, how

to make them healthy and happy, was the chief life-work and pen-work of the genial John Keating, especially in editing the "Archives of Pediatrics" and "The International Clinics," and in working as the president of the American Pediatric Society. He was wholly absorbed by his work and a progressive failure of health which necessitated an annual residence in Colorado was undoubtedly brought about partly by his unsparing use of his energies. When his brief yearly visits to Philadelphia came, if he was asked to go to the hospital he used to say the sight of such an institution made him feel "so horribly homesick." At his last visit he appeared to be so well that his health seemed to be restored. A slight cold developed into pneumonia and on November 17, 1893, the kindly and courageous doctor died.

His wife was Edith McCall, daughter of Peter McCall of Philadelphia, and he had three daughters and a son.

His most ambitious work was his "Cyclopaedia of Diseases of Children" in which he succeeded in associating with himself many of the best known men of America and England, producing a valuable and representative book. Some of his other works were: "Mother's Guide for Management and Feeding of Infants" (1881); "Maternity, Infancy and Childhood" (1887); "A Dictionary of Medicine;" "Diseases of the Heart In Infancy and Adolescence" (1887). He wrote also "With Gen. Grant in the East" (1880); after accompanying the general in a trip round the world.

KEATING, William Valentine (1823-1894), was born in Philadelphia, April 4, 1823, of old Irish and French stock,—both grandfathers having been officers in the celebrated Irish Brigade of the French Army during the reign of the Bourbons. He was graduated at St. Mary's College, Baltimore, in 1840, and in Medicine at the University of Pennsylvania in 1844, under the preceptorship of Dr. Charles D. Meigs (q. v.) having among his fellow graduates Joseph Leidy, Joseph Parrish (second) Moreton Stillé and John Curwen (q. v. to all). He began to practice in Philadelphia, giving special attention to obstetrics. He lectured in the Philadelphia Association for Medical Instruction, and in Prof. Agnew's Philadelphia School of Anatomy, and was clinical lecturer at Jefferson Medical College. In 1856 he edited Churchill's "Diseases of Children" and Ramsbotham's "Obstetrics." An original work of his own on the same subject, which he took to Paris in 1861 for revision, was stolen in a trunk from a railway station and the labor of years irretrievably lost. Upon the death of Dr. Meigs, in 1860, he was elected to the chair of obstetrics in Jefferson Medical College, but before he entered upon his duties his health, undermined by his large practice, gave way and he was compelled to relinquish his position and to go abroad, with little expectation of further practice. The rest, however, restored him to health and he returned during the progress of the Civil War to work with greater vigor than ever. He was appointed acting surgeon in the U. S. Army and surgeon on the staff of the Satterlee Army Hospital in Philadelphia, and from there was transferred to the post of medical director of the Broad and Cherry Streets Hospital, which was opened after the Battle of Gettysburg. He was also attending physician at St. Joseph's Orphan Asylum and St. Joseph's Hospital; of the latter he was one of the founders in 1844. He was a member of various medical societies, including the American Philosophical Society, and the Academy of Natural Sciences. At the time of his death he was medical director of St. Agnes' and St. Joseph's hospitals. On April 18, 1894, while delivering one of a course of lectures to the student nurses, an organization he had originated at St. Joseph's Hospital, he was seized with cardiac oppression and died almost immediately. This occurred on the fiftieth anniversary of his appointment to the staff of the institution.

He married in 1851 Susan, daughter of René La Roche, M. D. (q. v.), of Philadelphia, the eminent authority on Yellow Fever. His eldest son was John M. Keating, M. D. (q. v.), of Philadelphia.

PERCY KEATING.

KEDZIE, Robert Clark (1823-1902), sanitarian of Lansing, Michigan, was born at Delhi, New York, January 28, 1823. His parents were of Scottish descent and when he was a small boy moved to three hundred acres of virgin forest west of Monroe, Michigan. In 1841, with a borrowed capital of twenty-five dollars, he entered Oberlin College, and on graduating, in 1845, taught in Rochester (Mich.) Academy for two years. In 1851 he was graduated in the first class of the medical department of Michigan University and settled in Vermontville, Michigan, until he enlisted for the war. In 1861 he entered the army as surgeon of the Twelfth Regiment of Michigan Volunteers. After the battle of Shiloh he was

taken prisoner while caring for his wounded, and on release was so ill that he returned home. On his recovery he accepted the chair of chemistry in the Agricultural College at Lansing and in 1863 moved his family there. He was professor of chemistry, Michigan Agricultural College, in 1867; president of the Michigan State Medical Society in 1874.

Dr. Kedzie was a large man physically, mentally and morally; large head, high brow, firm chin, prominent nose, blue penetrating eyes, quick in movement and speech, his countenance kindly and his expression winning. When he began his work at Lansing there was a widespread belief that the waters in flowing wells lined with iron tubing were magnetic and their exploitation for gain was common. Dr. Kedzie made an exhaustive study of the phenomena and showed that they were due to the earth's magnetism collected on the metal tubing and not in the water. Magnetic wells for medicinal purposes vanished, to be heard of no more. He demonstrated that the destruction of lives and property due to explosions of kerosene oil arose from improper methods of detecting explosive grades of oil. He showed the Legislature the proper methods and induced them to pass a law enforcing their adoption, and destruction of life and property ceased. He also conducted the studies which proved that sugar beets would grow profitably in Michigan, thus opening the way for a business of many millions yearly. By sanitary conventions under the direction of the Michigan State Board of Health, he induced every community by its leading citizens to study its own sanitary conditions. Later he promoted farmers institutes, now numbering several hundreds, by which chemical science was applied to little communities of farmers, so helping them to larger prosperity, and some thirty-two valuable papers on "Municipal Health" testify to his keen oversight of the public good.

In 1850 Dr. R. C. Kedzie married Harriet Fairchild of Ohio. A son, Frank Kedzie, succeeded his father in the chair of chemistry at the Michigan Agricultural College; the father died November 7, 1902, from apoplexy, at Lansing, Michigan. His valuable papers, chiefly state reports, included: "Magnetic Conditions of Mineral Wells," "Detroit Review of Medicine and Pharmacy," vol. vi; "Poisonous Paper," Report of Michigan State Board of Health, 1873; "Meteorology of Central Michigan," Transactions of Michigan State Board of Health, 1874; "Use of Poisons in Agriculture," Ibid., 1875; "Yellow Fever at Memphis," Ibid., 1880; "Relations of Soil Water to Health," Transactions of Pontiac Sanitary Convention, 1883.

LEARTUS CONNOR.

Keerl, Henry (1755-1827), surgeon in a Hessian regiment, druggist in Philadelphia. See Cyclopedia of American Medical Biography, H. A. Kelly Philadelphia, 1912, vol. II, page 65.

KEIRLE, Nathanial Garland (1833-1919), of Baltimore, establisher of a rabies clinic, was born October 10, 1833, in that city. He took his A. B. at Dickinson College in 1855 and later his A. M. and was graduated in medicine from the University of Maryland in 1858. He was a resident student in the Almshouse and resident physician in the Baltimore Infirmary and the Bayview Asylum, attending physician to the skin department of the Baltimore Special Dispensary, for twelve years physican in charge of the Dispensary of the College of Physicans and Surgeons, demonstrator and professor of pathology and medical jurisprudence, later emeritus professor, in the College of Physicians and Surgeons, Baltimore. After 1887, he was medical examiner (coroner) for the city. His great work was his introduction, (in 1897) and efficient directorship of a Pasteur department for the treatment of rabies at the Baltimore City Hospital, rendering an invaluable, life-saving service to a large community, his percentage of loss being one third of one per cent. He contributed the article on rabies to the "Twentieth Century Practice of Medicine." He was president of the Clinical Society of Maryland in 1887-88. He died at his home, May 2, 1919.

KELLEY, Eugene Robert (1882-1925), sanitarian, was born in Bancroft, Maine, November 5, 1882, the son of George Washington and Clara Blanch Hinch Kelley. His ancestors were among the early settlers of Cape Cod. He was graduated from Bowdoin College, A. B., in 1902 and from the Johns Hopkins Medical School, M. D., in 1906. Bowdoin College granted him an honorary D. Sc. in 1925. After his medical education, Dr. Kelley served as an intern at the Carney Hospital, Boston (1907), and then went to the State of Washington, where he became associated with the Public Health Department as assistant commissioner in 1909. From 1911-1915 he served as commissioner of Public Health to that state. In the early part of 1915 he was

called to the Massachusetts State Department of Health and took up his duties as director of the division of Communicable Diseases, advancing, in 1918, to the position of commissioner of Public Health of Massachusetts, an office which he held until his death in 1925.

During his ten years' service to the Commonwealth of Massachusetts he made many advances in public health and established a national reputation. When the epidemic of influenza appeared in 1918 he developed a convalescent serum which was used extensively. He also outlined and set in motion a ten-year program for the control of tuberculosis in the State. He had a keen interest in the responsibilities of his office, an extensive knowledge of the earlier pioneer achievements of the Massachusetts State Board of Health, and recognized at once the importance of new discoveries such as the Wassermann test, the uses of arsenic in the treatment of syphilis and diphtheria toxin and anti-toxin. Under his direction the State laboratcries were enlarged and arrangements were made for serological and other tests and the distribution of specific remedies to physicians at large without cost; in short, "he was the father of many of the most effective administrative public health practices in this country and abroad." Dr. Kelley, however, was always opposed to any form of state medicine which might interfere with the practicing physician. He aimed at and succeeded in making his department helpful without encroaching on the rights of the medical profession. He was a ready and forceful public speaker, advancing the cause of public health at many medical meetings.

Dr. Kelley served as secretary of the Conference of State and Provincial Health Authorities, 1916-1918, and as president in 1921-1922. He was also president of the Massachusetts Conference of Social Workers, 1923-1924, a member of the American Public Health Association, the Massachusetts Medical Society, and the Massachusetts Association of Boards of Health, as well as other scientific societies. He was a Congregationalist, a Mason, and a member of the Zeta Psi fraternity. On June 9, 1909 he married Grace Elizabeth Boutelle of Boston, Massachusetts.

Although it was not evident to the public and he appeared to be robust he was never in good health and had long periods of illness. An operation, a few years before his death, failed to relieve him of much physical discomfort. In spite of his handicaps, he continued to work strenuously. By nature a cheerful man and driven by a tremendous spontaneity of effort, toward the end of his life he became depressed, partly on account of illness and partly due to the worries connected with his position. He felt that the assistants in his department were underpaid and he made many efforts to have their salaries increased, without success. Finding at the age of forty-two that life had become unbearable he committed suicide by hanging, at his home in Dorchester, a suburb of Boston, September 27, 1925. His widow and two children survived him.

HENRY R. VIETS.

KELLOGG, Albert (1813-1887), botanist, was born December 6, 1813, in New Hartford, Connecticut, and died at the home of his friend, W. G. W. Harford, in Alameda, California, March 31, 1887. He began the study of medicine with a physician at Middletown, Connecticut, but his health failed, and threatened pulmonary disease compelled him to resume the out-door life of the farm, where he had spent his boyhood days; and later, the same condition drove him to seek the milder climate of the south. He resumed his studies at the Medical College of South Carolina, at Charleston, but before he had completed them was obliged to exchange the coastal climate for that of the interior, and completed his medical training at Transylvania University, Lexington, Kentucky, where he received the degree of M. D. For several years he practiced his profession unsuccessfully in various parts of Kentucky, Georgia, and Alabama—unsuccessfully, not from lack of skill or opportunity, but because of his unwillingness ever to present a bill for his services. At this time he made the acquaintance of Audubon, the famous naturalist, and was induced to accompany him in an exploration of the southwest, as far as Texas, where he was in the fall of the year 1845. From this time he was more interested in natural science than in medicine. After revisiting his New England home, he traveled in Ohio and other parts of the basin of the Mississippi, and was again in the east when the California gold fever broke out. Moved by a spirit of adventure, and attracted, no doubt, by the prospect of opportunities for scientific investigation in a virgin field, he joined a party of gold-seekers, and went to California by way of the straits of Magellan, arriving at Sacramento in August, 1849. He was at this time already an enthusiastic botanist, and collected plants

wherever the vessel made stops during the voyage.

A few years after his arrival in California he took up his residence in San Francisco, where he spent the remainder of his life. He was one of the founders of the California Academy of Sciences, in April, 1853, and from that time until his death his history is closely associated with that of the Academy. The pages of its earlier published Proceedings teem with his descriptions of new plants, more than two hundred in all. His isolation from other workers in the same field, and his lack of facilities, made his results of less value than they might otherwise have been, yet his name is honorably and inseparably connected with the botany of California. In 1867 he was surgeon and botanist to an expedition under the charge of Professor George Davidson, to examine the geography and resources of Alaska, purchased that year by the United States; and during the summer he visited not only the coast of Alaska but some of the neighboring islands. Most of his time in his later years was spent at the rooms of the California Academy, preparing drawings of California plants, particularly trees and shrubs. More than four hundred drawings had been completed at the time of his death; a few of these were published, in 1889, with text by Professor Edward Lee Greene, under the title "Illustrations of West American Oaks." In his artistic work he sometimes sacrificed beauty to accuracy, yet much of it exhibited both.

To all who knew him, Dr. Kellogg's nobility of character made a strong appeal. Always forceful in his defense of the right, he was nevertheless a man of child-like simplicity, gentleness, and unselfishness. He was dreamy and imaginative, an ardent lover of nature in all her manifestations. Of the many friends who have left on record their impressions of the man, none has failed to mention these traits, unfortunately rare.

Professor John Torrey (q. v.), in proposing the name "Kelloggia" for a rather inconspicuous but very distinct genus of plants from the Sierra Nevada, explained that it was "dedicated to Dr. Albert Kellogg, of San Francisco, one of the earliest and most zealous of botanists resident in California."

Dr. Kellogg's brother, George Kellogg (1812-1901), was the well known inventor whose daughter, Clara Louise Kellogg, was the first American woman to win recognition abroad as an opera singer.

JOHN H. BARNHART.

KELLY, Aloysius Oliver Joseph (1870-1911).

A. O. J. Kelly, general practitioner, teacher and pathologist, was a rising authority and a man of unusual personality and ability in the medical profession of Philadelphia during the first decade of the 20th century. Dr. Kelly, the son of Dr. Joseph V. Kelly and Emma Ferguson, was born in Philadelphia on June 13, 1870, and died there on February 23, 1911. At the age of eighteen he received his A. B. degree from La Salle College, Philadelphia, and three years later the degree of Master of Arts. He was graduated in medicine at the University of Pennsylvania in 1891. He was a resident in St. Agnes' Hospital, Philadelphia, from 1891 to 1892. From 1892 to 1894 he studied in Vienna, Heidelberg, Dublin and London, meeting Chvostek, Weichselbaum, and Paltauf. This early training was particularly along pathological lines. In 1894 he began to teach and practice medicine in Philadelphia. On returning from Europe he became recorder in the medical dispensary of the Hospital of the University of Pennsylvania, and from that time until his death he was connected with the teaching of medicine in the University, where he held the positions of: instructor in physical diagnosis, 1896-1899; instructor in clinical medicine, 1899-1903; associate in medicine, 1903-1906; and from 1906 until his death assistant professor of medicine. He was connected with various Philadelphia hospitals; in 1894 pathologist to St. Agnes' Hospital; a year later physician to St. Mary's Hospital and director of the laboratories of the Polyclinic. In 1897 he was assistant physician to the University Hospital and physician to St. Agnes' Hospital, positions held at the time of his death, in addition to being pathologist to the German Hospital and the Woman's College Hospital of Philadelphia. In 1900 he became professor of the theory and practice of medicine in the University of Vermont, where he introduced modern clinical teaching and improved methods of instruction.

He was remarkable as a clinician as well as a pathologist, and occupied the chair of pathology in the Woman's Medical College of Pennsylvania during the last five years of his life. He thus had unusual opportunities to control a wealth of pathological material; he made numerous contributions to pathological literature, among the most important of which may be mentioned his papers on "Multiple Serositis"; "The Association of Chronic Obliterative Pericarditis with Ascites"; "Nature and Lesions of Cirrhosis of the Liver";

and in the same year, "Infections of the Biliary Tract." Unusual as teacher, clinician, pathologist and investigator, he was perhaps best known as an editor. From 1903 to 1907 he edited the "International Clinics," and in the latter year was selected to edit the oldest medical journal in America, "The American Journal of the Medical Sciences." Under his painstaking and skilful editorship the influence and popularity of the journal rapidly increased. At the time of his death he was a leading figure in American medical journalism. He wrote for several important medical text books; to the first edition of Osler's "Modern Medicine" he contributed the section on "Diseases of the Liver, Gall Bladder and Biliary Ducts." At the time of his death he had partially completed, with the late John H. Musser (q. v.), a three volume work by many authors entitled "Practical Treatment." His noteworthy literary achievement was the publication, a few months before his death, of a complete text book on the "Practice of Medicine."

He contributed about thirty-five important scientific papers to various journals. In addition to those referred to the following are among the most noteworthy; "The Diagnosis and Treatment of Incipient Locomotor Ataxia," International Clinics, vol. ii, 7th series; "Ueber Hypernephrome der Niere," "Beitrage zur. path, Anat. u. algem. Path.," vol. xxiii; "Clinical Significance of Pulsation in the Veins," "Phila. Polyclinic," Sept., 1898 vol. ii; "The Histology and Histogenesis of Certain Tumors of the Parotid Gland, with Special Reference to those of Endothelial Origin," "Phila. Monthly Med. Journal," Feb., 1899; and "Acute Lympatic Leukemia, with Reference to Its Myelogenous Origin," "University of Pennsylvania Med. Bull.," Oct. 1903.

Dr. Kelly excelled as a clinical teacher. Free from egotism, dignified and courteous, he brought to his clinic an enthusiasm coupled with a profound knowledge which made a lasting impression upon his hearers. His capacity as an organizer and executive made him of exceptional value to the many scientific societies with which he was identified. He was a prominent member of the Association of American Physicians, the College of Physicians of Philadelphia, and the Congress of American Physicians and Surgeons. He was an original member of the Interurban Clinical Club. He was active in the affairs of the American Medical Association as well as in the county and state medical societies, and for years he served faithfully the pediatric, neurological and the pathological societies of Philadelphia.

For nearly five years he was aware that the grave form of diabetes mellitus from which he suffered must soon prove fatal. Instead of sparing himself and expecting sympathy, he confided his misfortune to none, but with unremitting zeal and never failing cheerfulness carried on his many duties.

He married Elizabeth McKnight in 1896 and she was ever a source of great help and comfort throughout the busy, but sad years. They had no children.

Dr. Kelly was a devout Roman Catholic, numbering among his personal friends the late Archbishop Ryan, and the late Bishop of Harrisburg, and the Right Rev. John W. Shanahan.

GEORGE MORRIS PIERSOL.

KELSEY, Charles Boyd (1850-1917), of New York, pioneer rectal specialist in the United States, was born at Farmington, Connecticut, November 19, 1850, son of the Reverend Charles and Eliza Boyd Kelsey. His father was a clergyman of strong character—a rugged type of dissenter, always ready to back up his opinion with a good fighting defense. This character descended to his devoted son. A fine product of the American public school system, he followed it to its highest classes, graduating from the Free Academy, now the College of the City of New York, in 1870, and in 1873 received his medical degree from the College of Physicians and Surgeons. He was house-surgeon at St. Luke's Hospital 1873-1876; assistant demonstrator of anatomy in the College of Physicians and Surgeons 1874-1879. Kelsey was professor of diseases of the rectum in the University of Vermont, Burlington, 1889-1890, and from 1890 occupied the chair of professor of pelvic and abdominal surgery in the New York Post-Graduate School and Hospital, of which institution he was also a director. His ability in his special field of rectal surgery was widely recognized. He was the pioneer in rectal surgery in America, as was Allingham in England, and his writings filled a needed place in literature, being always graphic, lucid, brief and well illustrated, while in the lecture room he had the power of holding his hearers from his first word to his last. He was the author of the following text books: "Diseases of the Rectum and Anus," "Office Treatment of Hemorrhoids and Fistulae;" and his most important book, "Surgery of the Rectum," an octavo of 420 pages, which reached its sixth edition in 1902.

In April, 1876, he married Carolyn Terry, of Rochester, New York.

Dr. Kelsey died at his home in New York, August 4, 1917. The qualities that made Dr. Kelsey a strong character and such a valued member of his profession, were his indomitable will, clear vision of truth and his extraordinary fighting quality which asserted itself at every turn in his life when decision for right action was to be made and supported. His denunciation of the fripperies of medical practice were so outspoken that he sometimes alarmed timid souls, but his advice to students was clear and practical and he was always ready when any wrong needed righting or personal friendship needed an ally.

ROBERT ABBE.

KEMPSTER, Walter (1841-1918), of Wisconsin, was born in London, England, May 25, 1841. He was the youngest son of Christopher Kempster and Charlotte Treble Kempster. Christopher Kempster came to the United States and settled in Syracuse, New York, when Walter was seven years old. He was a man interested in reforms and was associated with Gerrit Smith and William Lloyd Garrison in the Abolitionist movement. He was also active in the early years of the Young Men's Christian Association and interested in prison reform. At the outbreak of the Civil War, Walter Kempster was scarcely twenty. He enlisted as a private in the 12th New York Volunteers; was in camp on the White House grounds, Washington, and remembers a visit of Lincoln to the camp, at which time Lincoln spoke to him, remarking upon his youthful appearance. Private Kempster, having already interested himself in the reading and study of medicine, was soon detailed for hospital duty. He was appointed hospital steward in April, 1862. He assisted in organizing the Patterson Park Hospital at Baltimore which had at times over 1200 soldiers under its care. In January, 1863, after engagements near Fredericksburg, Virginia, he was commissioned first lieutenant and was present at Gettysburg and in the engagements of General Lee's retreat. He suffered an injury at Mine Run, which led to his resignation and he then continued his medical studies and graduated at Long Island College Medical School in June, 1864. From this time until the close of the war he was acting assistant surgeon U. S. A.

Dr. Kempster acted as assistant superintendent of the New York State Asylum for Idiots in 1866-7 and in the latter year he received an appointment as assistant physician at the State Hospital at Utica. This institution, one of the first and most famous state asylums under the direction of Dr. John P. Gray (q. v.), possessed the first laboratory for the study of brain pathology established in the United States, and Dr. Kempster gave much time to macroscopic and microscopic anatomy of the brain. He also acted as assistant editor of the "American Journal of Insanity." In collaboration with Dr. Gray, he developed the photography and projection of slides upon a screen showing microscopic appearances of the brain. In 1873 Dr. Kempster was appointed superintendent of the Northern State Hospital at Oshkosh, Wisconsin, where he served fourteen years, with success both from a scientific and administrative standpoint. He showed his microscopic preparations before the International Congress in 1876 arousing much interest and appreciation. In 1891 he was a member of a congressional commission for investigating conditions of emigration; visited Russia to study these conditions, also in 1892 he visited Turkey, Palestine and Persia, studying the origin of epidemics, which often reached the U. S. from those countries.

In 1894, as health commissioner of Milwaukee, in combating an epidemic of smallpox and enforcing quarantine, he incurred the enmity of a committee of aldermen who recommended his removal. He was ejected from his office by force, brought suit to maintain his rights and was found to have been unjustly and illegally removed and was awarded full compensation. As health officer he made extensive studies of unhygienic conditions in bakeries and candy-factories and in establishments where food is prepared.

Dr. Kempster often served as an expert witness in civil and criminal cases. With his former chief, Dr. John P. Gray, he was a leading witness for the prosecution in the historic case of Guiteau, in which Spitzka, Godding and Kiernan took the other side.

His life was one of earnest endeavor after eminence, which he obtained in more than ordinary measure as a soldier, a brain pathologist, state hospital superintendent, and health officer of a great city.

His death occurred at Milwaukee, August 21, 1918, in his seventy-eighth year.

RICHARD DEWEY.

KENNEDY, Alfred L. (1818-1896), physician and chemist, came of Scotch ancestry, and was born in Philadelphia, October 25, 1818.

He was educated in the public schools of that city, then for three years was with Professor John Millington, civil and mining engineer. Kennedy became a chemist and was assistant professor of chemistry in the Pennsylvania Medical College (Philadelphia) in 1839; lecturer on chemical physics in 1840; lecturer on general and medical botany and medical jurisprudence and toxicology in 1842; lecturer on medical chemistry in the Philadelphia School of Medicine in 1843. For three years he was in the office of David Francis Condie (q. v.), and studied medicine at the University of Pennsylvania, graduating in 1848 with a thesis on "Solubility of the Gasses." He went to Europe and studied physiology, physiological chemistry, geology and botany in Paris and Leipzig, his preceptors being Magendie, Claude Bernard, C. G. Lehman, Constant Prevost and Adrien de Jussieu.

He returned to America in 1849 and became lecturer on industrial botany in the Franklin Institute, Philadelphia. From 1849 to 1852 he was lecturer on medical chemistry in the Philadelphia College of Medicine; and in 1852 was appointed lecturer on agricultural chemistry in the Franklin Institute. In 1842 he had organized the Philadelphia School of Chemistry and was principal from its beginning; in 1853 the name was changed under a new charter to the Polytechnic College of the State of Pennsylvania with Kennedy its president from that time until 1895. He also practiced medicine and during the Civil War was volunteer surgeon of the 2nd Army Corps at the Gettysburg hospital (1863), and a colonel of Volunteer Engineers (1863-1865). He was a founder of the Pennsylvania State Agricultural Society; and was one of the organizers of the Society for the Prevention of Cruelty to Animals in Philadelphia.

He wrote "Practical Chemistry," Philadelphia, 1852. Dr. Kennedy was unmarried. He was accidentally burned to death at the age of 77 in Philadelphia, on January 31, 1896. He lived alone in rooms in an office building where he was surrounded with papers and manuscripts. The origin of the fire was unknown, but it was supposed that Dr. Kennedy set fire to the papers while lighting the gas, was overcome by the smoke and was unable to make his escape.

KERLIN, Isaac Newton (1834-1893), of Pennsylvania, a pioneer in the care of the feeble-minded, was born in Burlington, New Jersey, May 27, 1834. He was educated in the public schools and in the John Collins Academy in his native town, and studied medicine under the preceptorship of Dr. Joseph Parrish (q. v.), graduating from the University of Pennsylvania in 1856. He was appointed resident physician at Wills Eye Hospital in 1857, and from there went to the assistant superintendency of the Pennsylvania Training School for Feeble-minded Children, October, 1858. He enlisted in the army in 1862, but was later called from the ranks by Surgeon-General H. Smith and placed in charge of the night work of an impoverished hospital at Hagerstown, Maryland. Having held several positions of responsibility in the army, in November, 1863, he was recalled to the Pennsylvania Training School to be superintendent. He took up the work at a discouraging time, and early saw that, without association and intercourse the best results could not be obtained, and at a meeting at Elwyn in 1876 a national association was formed with Dr. Seguin (q. v.) as president and Dr. Kerlin as secretary, an office which he held almost uninterruptedly until his death. Other members were rapidly added, and the association soon included all in the country who were prominent in the care and training of the feeble-minded. He began a series of autopsies at the Elwyn institution, and accomplished a considerable work during his life-time, laying a foundation for much more in the future. He believed that the feeble-minded of all grades were the wards of the state and early advocated the erection of detached buildings adapted to their care. In the spring of 1883 the first of these buildings was opened for 112 children. At the close of his labors, besides the central school department buildings providing school rooms and accommodations for 400 feeble-minded children of the teachable class, there stood also, on the grounds at Elwyn, four detached buildings accommodating 400 children of the custodial and unteachable class. As his work reached the limit he had set for thorough and economical management, his labors began to show their effect upon his health and strength. The trustees of the institution, appreciating his services, gave him liberal time for recuperation; but the resolute energy which had characterized his life allowed him to be happy only when busy, and he struggled for four years with the combined cardiac and renal disease which during this period threatened his life. He was prevented by the numerous cares of a rapidly growing institution from writing any extended work on juvenile

mental defects. His numerous short articles were characterized by profound knowledge of his subject, a ready wit, and a striking originality of expression, which made them not only instructive but entertaining. He published a paper on classification of the feeble-minded, based upon their mental powers. He also issued a statistical paper on the causation of idiocy, based on a critical examination of 100 cases. As secretary of the National Association, he was in close correspondence with specialists abroad; he spent the summer of 1889 in examining foreign institutions to acquire new ideas for his work at Elwyn.

He married, in 1865, Miss Harriet C. Dix, of Massachusetts, whose cordial aid and sympathy were acknowledged factors in his success.

He died October 25, 1893, and was buried, at his request, in a beautiful grove on the grounds of the charity in whose creation he had taken so active a part. His name and his fame have grown with the buildings on the Elwyn grounds, and they are his monument.

KEYES, Edward Lawrence (1843-1924), of New York, one of the pioneers of modern genito-urinary surgery, was born in Charleston, South Carolina, August 28, 1843, the son of Caroline and Erasmus Darwin Keyes, general in the U. S. A. and a descendant of an old New England family. Edward was prepared for Yale by private tutors and after graduating in 1863, served as captain in the army on his father's staff. The war over, he studied medicine in the University of the city of New York and got his M. D. in 1866. He spent the following eighteen months in Europe, mainly at the University of Paris, studying especially genito-urinary, venereal, and skin diseases. Upon his return, he was appointed professor of dermatology in the Woman's Medical College and lecturer in dermatology at Bellevue Hospital Medical College where in 1870 he delivered the first course of lectures on dermatology given in the United States. That year he also became associated in practice with Prof. W. H. Van Buren (q. v.). He served as visiting surgeon to the City Hospital until 1875 when he was transferred to Bellevue, and as professor of dermatology, syphilology, and genito-urinary surgery, established the first ward in this country for genito-urinary cases. During the next fifteen years, his influence as a teacher of syphilis and genito-urinary diseases reached the whole country. Keyes' most striking and important original contribution to medical science was his method of treating syphilis with continued small doses of mercury, previously found toxic when administered in large doses. This treatment was used almost exclusively until supplemented by subcutaneous and intramuscular injections. He was also notable as one of the very first prostatectomists; Fuller, with McGill, Fryer, and Squier, began his work along this line while an assistant in Dr. Keyes' office.

Keyes wrote "The Tonic Treatment of Syphilis," 1877; "Venereal Diseases," 1880 (subsequently issued by Keyes and Chetwood); and numerous papers on suprapubic prostatectomy, stricture, urinary fever, and stone. He also contributed important articles on genito-urinary diseases and the section on urinary calculus in Ashurst's Encyclopedia of Surgery. With Van Buren he wrote the well known textbook on genito-urinary diseases and syphilis, first published in 1874 and still used as a textbook in medical schools; after Van Buren's death, revised editions appeared under Keyes' name alone and with that of his son. He was the founder and first president of the American Association of Genito Urinary Surgeons; president of the New York Pathological Society, the New York Dermatological Association, and the American Association of Neurology and Syphilology; vice-president of the New York Academy of Medicine; and a member of the International Dermatological Society and the Association Francaise d'Urologie. Pope Pius X conferred upon him knighthood in the Order of St. Gregory.

On January 24, 1924, he died at his home in New York after a brief illness from pneumonia. His dominant characteristic was a broad humanity; in his teaching and practice, he always established personal relationships; a delightful sense of humor brightened his conversation; in his work he was supremely honest. His oratorical ability shone forth in his speech at the opening of the Forty-third Street Building of the New York Academy of Medicine and of the Brady Urological Institute at the Johns Hopkins University.

Dr. Keyes married Sarah M. Loughborough. Their son, Edward Loughborough Keyes, is the worthy successor of an eminent father and is professor of urology in the Cornell University Medical School and has served as president of the American Urological Association,

the American Association of Genito-Urinary Surgeons, the Society of Sanitary and Moral Prophylaxis, and the American Social Hygiene Association.

KEYSER, Peter Dirck (1835-1897), ophthalmologist of Philadelphia, was born in Philadelphia, February 8, 1835, obtaining his collegiate education at the Delaware College, graduating as A. B. in 1852, and later as A. M. He studied chemistry for two years under Dr. F. A. Genth of Philadelphia, and made analysis of minerals, the results being published in the "American Journal of Science," and afterwards incorporated in Dana's "Mineralogy." Then he spent several years as a medical student in Germany, and at the beginning of the Civil War entered as captain of the ninety-first Pennsylvania regiment, until after the battle of Fair Oaks, when he resigned on account of ill health and injuries and again visited Europe, studying medicine in Munich, taking his degree in 1864 at Jena and subsequently visiting clinics at Berlin, Paris, and London. In 1865 he entered upon private practice, and became surgeon in charge of the Philadelphia Eye and Ear Hospital, which he had founded. In 1868 he delivered a course of lectures to physicians on refraction and in 1870, 1871, 1872, he delivered courses of clinical lectures on diseases of the eye, the first in Philadelphia. For many years he served as ophthalmological surgeon to the Wills Eye Hospital. He became professor of ophthalmology in the Medico-Chirurgical College of Philadelphia in 1899, and dean of the institution. His writings were numerous and were chiefly clinical contributions. After a short illness he died March 9, 1897.

HARRY FRIEDENWALD.

KEYT, Alonzo Thrasher (1827-1885), of Cincinnati, inventor of the compound sphygmograph, was born at Higginsport, Ohio, January 10, 1827, the son of Nathan and Mary Thrasher Keyt. His father was of Dutch ancestry, his mother of Quaker stock—a descendant of Edward Penn, of Pennsylvania. A few years after his birth his father removed to Moscow, Ohio. The boy was educated in Parker's Academy in Felicity, Ohio, and in 1845 he began to study medicine with Dr. William Johnston, of Moscow, matriculating at the Medical College, Ohio, in 1847. He had his M. D. in March, 1848, and in 1849 practiced at Moscow, Ohio, but in 1850 removed to Walnut Hills, Cincinnati, where he remained until the end of his life, November 9, 1885.

In manner he was sedate, almost grave, slow and deliberate in action, in accordance with the Dutch blood coursing in his veins. He crossed swords, in a lively journal controversy concerning the expediency of creating a vesico-vaginal fistula for cystitis, with the late Professor Parvin (q. v.), a master in dialectics and phraseology. The latter had no advantage in style of expression or cogency of reasoning, although the operation he contended for has become an established one.

In 1873 Dr. Keyt's attention was attracted to the consideration of the graphic method in the portrayal of the movements of the circulating blood. First, experimentation was begun with M. Mavy's spring instrument, but it did not take long to discover that the spring did not furnish all the undulations of the blood-column to the slide. To elucidate the problems of the circulation a double instrument was required—one that would take two tracings, the heart and an artery, or two arteries, the one above the other, upon the slide, with a chronographic trace below, so that the difference could be recorded and the difference in time between the two tracings be computed. Such a mechanism Dr. Keyt devised, a cardiograph and sphygmograph combined, which he termed the compound sphygmograph. This invention has stood the test of time and is today the best adapted for its purpose of any that have been produced. A scheme was arranged by means of which lesions of the mitral and aortic cardiac orifices were represented, and their relations to pulse wave velocity. The developments were recorded by the compound sphygmograph, and the results secured have been confirmed by graphic tracings of clinical cases. These experimental researches formed the basis of a series of articles in the "Journal of the American Medical Association" for 1883. His book, "Sphygmography and Cardiography," (New York, 1887) is an enduring monument to his industry and genius. Between its covers is included more of patient, painstaking effort than is rarely presented to the profession in equal volume. To him is due the discovery that an abnormal delay of the pulse-wave follows upon mitral regurgitation. The value of this revelation to the practical physician is obvious.

On October 10, 1848, Dr. Keyt married Miss Susannah D. Hamlin of Cincinnati. They had seven children. He died suddenly, November 9, 1885, at Cincinnati, from rupture of a cerebral artery.

ASA B. ISHAM.

KIDDER, Jerome Henry (1842-1889), navy surgeon, sanitarian, naturalist, was born in Baltimore County, Maryland, where he spent his boyhood days, then entered Harvard College at the age of sixteen and was graduated bachelor of arts in 1862. He was appointed a medical cadet during the war, and the study of medicine, begun at that time, was continued in Baltimore, and in 1866 he received the degree of doctor of medicine from the University of Maryland. Shortly afterwards he was commissioned an assistant surgeon in the United States Navy in which he served for eighteen years with much distinction. He was promoted to be passed assistant surgeon in 1871, and surgeon in 1876, and resigned his commission June 18, 1884. Dr. Kidder was recognized as one of the most accomplished and efficient surgeons in his corps. He became specially interested in chemical and physicial research and he was ordered to join the scientific party sent out by the United States Government to observe the transit of Venus at Kerguelen Island, in 1874. On his return to Washington he studied the material which he had collected at the Smithsonian Institution. Dr. Kidder was a contributor to the National Medical Dictionary compiled under the editorial supervision of Dr. John S. Billings (q. v.). His principal scientific papers have appeared as follows: Those relating to sanitary and kindred subjects, in the reports of the navy from 1879 to 1882; the "Proceedings of the Naval Medical Society for 1884;" the "Reports of the Forty-eighth Congress" and the "Report of the Smithsonian Institution for 1884;" on the natural history of Kerguelen Island, in "Bulletins Nos. 2 and 3 of the National Museum," published in 1875 and 1876; on fishery matters, in the "Reports and Bulletins of the Fish Commission" subsequent to 1883; and on chemistry and physics in the publications of various scientific societies. He died suddenly from pneumonia in his forty-seventh year.

CHARLES A. PFENDER.

KILBURN, Henry Whitman (1857-1922), Boston ophthalmologist, was born at Lonsdale, Rhode Island, April 15, 1857, the son of John and Amanda Maria Whitman Kilburn. He was a descendant of Thomas Kilburn, who came to this country from Wood Ditton, Cambridgeshire, England, in 1645, and settled in Glastonbury, Connecticut. Dr. Kilburn took his A. B. at Harvard College in 1880 and his M. D. from Harvard Medical School in 1884, supplementing his medical course by a year's study of ophthalmology in Berlin, Germany and by service as house officer at the Massachusetts Charitable Eye and Ear Infirmary, Boston. In 1887 he began practice as ophthalmologist in Boston, acquiring a large clientele and being much in demand as a consultant. For two years Kilburn was ophthalmic surgeon to the Lowell, (Mass.) Corporation Hospital, then he was assistant ophthalmic surgeon at the Boston City Hospital and finally ophthalmologist-in-chief to the Carney Hospital (1897-1907). He wrote: "Analysis of Eight Hundred cases of Astigmatism With Regard to the Direction of the Principal Axes," "Boston Medical and Surgical Journal," February 30, 1896; "A Case of Traumatic Enophthalmos," "Archives of Ophth." July, 1902, and a few other articles for the journals. He was thought to be one of the best refractionists in the community. Although suffering with chorea, which produced frequent spasmodic contractions of the muscles of the face, neck and shoulders, causing apprehension to the timid patient, he was most steady and adroit in fitting glasses and he operated well. He held membership in the American Ophthalmological Society, the New England Ophthalmological Society, being president for one year, the Boston Society of the Medical Sciences and the Massachusetts Medical Society and American Medical Association. He belonged to the Harvard Musical Association and to the University, the Progressive and Episcopalian clubs. For many years he lived in West Medford; in 1916 he gave up practice and spent much of his time in Switzerland and in travel, returning to Boston from time to time.

Dr. Kilburn married Miss Harriet Mason Plummer of Boston, who survived him when he died at Los Angeles, California, December 3, 1922, at the age of sixty-five.

WALTER L. BURRAGE.

KILPATRICK, Andrew Robert (1817-1887), sanitarian of Texas, the son of the Rev. James Hall and Sarah Tanner Kilpatrick, was born March 24, 1817, near Chaneyville, Rapides, Louisiana. He first attended lectures at Jefferson Medical College and the Georgia Medical College, taking his M. D. from the latter in 1837. He practiced in three or four places and finally settled in Navasota, Texas. When only nineteen he proved himself an able obstetrician and in 1868 was professor of anatomy in Texas Medical College.

His chief writings were on the subject of epidemics: "The History of Epidemic Yellow Fever in Woodville, Mississippi," 1844; "Chol-

era in Louisiana," 1849; "Yellow Fever in Louisiana," 1855; "Yellow Fever in Texas," 1867. He was also associate editor of the "Southern Medical Record" and the "Texas Medical Journal."

He married three times; his last wife, whom he married in 1854, being Mary M., daughter of Joel T. Tucker of St. Landry Parish, Louisiana.

KILTY, William (1758-1821), Maryland army surgeon, who united in himself the two professions of medicine and law, was born in London in 1758, and received his literary education at St. Omar's College in France. He studied medicine with Dr. Edward Johnson, of Annapolis, Maryland and in April, 1778, proceeded to Wilmington, Delaware, where he retained the appointment of surgeon's mate in the Fourth Maryland Regiment (Laffell and Scarff). He was appointed surgeon of the regiment. He was captured at the Battle of Camden, and in the Spring of 1781 returned to Annapolis, where he remained until the close of the war, owing to his failure to obtain an exchange. He then studied law. In 1798 he was authorized by act of Legislature to compile the statistics of the state, and in compliance with this he prepared and published, in 1800, the two volumes known as "Kilty's Laws." He settled in Washington the same year, and in 1801 was appointed by President Adams, chief judge of the Circuit Court of the District of Columbia. Some time after this he returned to Maryland and was appointed by the governor, chancellor of that state in 1806. In 1818, by authority of the Legislature, he published, with Harris and Watkins, a continuation of Kilty's Laws. He died at Annapolis, October 10, 1821.

Kilty seems to have been a man of quiet, unassuming life, and his greatest interest was no doubt in his professional and judicial work. At the same time he was very patriotic and took a deep interest in the welfare of his state and country. His most prominent work was his "Report on the British Statutes in Force in Maryland."

Kilty was an original member of the Society of the Cincinnati. Mr. Allen McSherry, a great-great nephew, has a portrait of him made during the Revolution.

EUGENE F. CORDELL.

KIMBALL, Gilman (1804-1892), pioneer ovariotomist, of Lowell, Massachusetts, was born at New Chester (now Hill), New Hampshire, on December 8, 1804, the son of Ebenezer and Polly Kimball, and after education in the schools of his native town began to study medicine at Dartmouth College, where he took his M. D. in 1827, starting practice the next year in the town of Chicopee, Massachusetts. Two years in a small town taught him his limitations and, aspiring to be something more than mediocre in surgery, he spent one year under Auguste Bérard and Dupuytren at Paris. Then followed sixty-one years of service to suffering humanity in Lowell, Massachusetts, particularly when chosen surgeon to a hospital erected by mill owners for their operatives. In 1842 he succeeded Willard Parker (q. v.) as professor of surgery at Woodstock, Vermont, and held the same chair in the Berkshire Medical Institution at Pittsfield, Massachusetts. At the breaking out of the war he accompanied Gen. Butler to Annapolis and Fortress Monroe, first as brigade surgeon then as medical director, and helped greatly in organizing the hospitals until, twice prostrated by malaria, he had to resign.

As early as 1855 he operated for the removal of ovarian tumors, a proceeding then still regarded as too daring by most surgeons. In New England, outside Boston, it had hardly been done at all, so Kimball required a good deal of courage when he set out to rescue the some forty per cent of women likely to die of the disease. Even before this, in 1853, he was a pioneer in extirpation of the uterus for fibroids. About 1870, writes his friend, Dr. F. H. Davenport, he joined Dr. Ephriam Cutter (q. v.) in the treatment of fibroids by electrolysis. Outside of gynecology he did two amputations at the hip-joint (one successfully), a ligation of the internal iliac artery, unsuccessful, of the external iliac, the femoral, the common carotid and subclavian arteries, all successful. Kimball gave up work only when his health obliged him so to do a few years before his death. When he died at Lowell on July 27, 1892, his eighty-seven years had not impaired his mental vigor and his interest in things medical was as keen as ever.

He was twice married; first to Mary, daughter of Dr. Henry Dewar of Edinburgh, Scotland, then to Isabella Defrier of Nantucket, Massachusetts.

His writings were chiefly on subjects connected with ovariotomy and the treatment of fibroids and may be found in the "Boston Medical and Surgical Journal," 1855, 1874 and 1876, and in the "Transactions of the American Gynecological Society." Both Yale and Williams gave him an honorary M. D., and

Dartmouth her honorary A. M.; he was a fellow of the College of Physicians and Surgeons of New York; vice-president of the Massachusetts Medical Society in 1877-78, and president of the American Gynecological Society in 1883.

KING, Albert Freeman Africanus (1841-1914), obstetrician of Washington, D. C., who discovered that malaria is caused by the bite of a mosquito, was born in Oxfordshire, England, January 18, 1841, the son of Dr. Edward King and Louisa Freeman. His father, an enthusiastic worker in the colonization of Africa, dubbed his son for this reason Africanus. From 1847 to 1851 King attended school in Bichester near Oxford; he came to Virginia with a brother and two sisters in 1851 when his father arrived with immigrants, carrying out a colonization scheme. The father and one daughter are buried at Alexandria, Virginia; a brother, Dr. Claudius E. R. King, is a practitioner in San Antonio, Texas. King studied medicine and was graduated in 1861 at the National Medical College (now the Medical Department of the George Washington University) in Washington, D. C. His early efforts to practice at Haymarket, Virginia, were interrupted by the outbreak of the Civil War, when he attended the wounded after the Battle of Bull Run. He was acting assistant surgeon in the Lincoln Hospital, on the site of the present Lincoln Park in Washington. He took a degree in medicine at the University of Pennsylvania in 1865, and on returning South settled in Washington, D. C. He was at the theatre, witnessed Lincoln's assassination, and scaled the footlights to the box, and helped carry the dying president to a house across the street. This same year (1865) found him enrolled as a lecturer on toxicology in his alma mater. In 1870-71 he was an assistant in obstetrics, and in 1871, at the age of thirty years, he became professor of obstetrics and diseases of women and children, a position held until 1904, when gynecology and pediatrics were divorced from the cognate obstetrics, and King was continued in the latter chair until he died. His professorship of obstetrics thus lasted for forty-four years! He was Dean of the Medical Department of Columbia College (George Washington University) from 1879 to 1894 and was notably precise and methodical in everything pertaining to the college order. Upon the completion of the college year in Washington it was his custom to visit the University of Vermont and give a brief "intensive" course in obstetrics. Following this came the short vacation with wife and three children. He held an obstetric service in Columbia Hospital, was president in 1883 of the Medical Society of the District of Columbia, and of the Washington Obstetrical and Gynecological Society 1885, 86, 87—he was also connected with a number of other societies which affect a general membership. King was an interesting, forceful speaker, urbane in manner and with a strong sense of humor which was especially apt to crop out in a debate.

His methodical habits showed in the indexing of the Transactions of the Washington Medical Society from 1838 to 1866; he wrote the biographical sketches of Dr. D. W. Prentis (1899), Dr. W. W. Johnston (1902) (q. v.), and the Dr. Walter Reed address for the Memorial meeting, Dec. 31, 1902, as well as one upon Dr. Thomas C. Smith (1913).

Dr. Bovée, his biographer, finds eighty-two titles to his papers ("Washington Medical Annals," 1915, xiv, 107). His first paper, on May 30, 1864, was on menstruation, in which he contended that it is a disease. His manual of obstetrics, published in 1882, had a large vogue and was at the time of his death about to enter its twelfth edition.

King's title to be remembered lies not in the prominent position he occupied among the older medical men who upheld the best traditions of the profession in the District of Columbia, but rather in these three factors: first of all as the teacher of great numbers of medical aspirants over a long period; secondly as author of an excellent widely circulated text book; and lastly and most important, in the years 1881 and 1882 he conceived the idea that malaria was regularly transmitted by mosquitoes, and he stuck to it.

His conception that malaria was caused by the mosquito bite was a clear, positive and direct apprehension of the truth, one of those brilliant flashes in the Stygian night which often precede the slow gathering light of the day shed from the laboratory. The simple testing of the inexpensive, easily applied preventive measures King recommended would at once have established the truth of his claims in the absence of all microscopes and laboratories, and would as well, at one fell swoop, not only have eliminated malaria, but yellow fever and filariasis! L. O. Howard, the distinguished entomologist, recalls a conversation he and C. J. Riley had with King about 1881, when they supplied the doctor with facts relative to the life his-

tory of the mosquito, while they listened skeptically and unconcerned to the young doctor's exposition of his novel theory. King gives 19 reasons for holding that the mosquito causes yellow fever. The original mosquito paper was read before the Philosophical Society of Washington, Feb. 10, 1882, with the title "The Prevention of Malarial Disease, illustrating "inter alia" the Conservative Function of Ague." The comment of so brilliant a mind as Dr. J. S. Billings (q. v.), who was present, was that "the most that could be claimed was that they accomplished an accidental inoculation with malarial poison," "aliquando dormitat bonus Homerus."

I abstract the following memoranda from King's paper in the "Popular Science Monthly," Sept., 1883, pages 644 to 658: He first reviews the idea of insect origin of disease and cites Kircher, Linnaeus and Nyander. He refers to the mosquito as the carrier of the filaria as shown by Manson in China, and others. He quotes Finlay's theory that yellow fever is caused by the mosquito (1881), remarking in approval that "it is to be noted that the spread of the disease ceases with the frost; so also do the peregrinations of the mosquito." As to malaria he says, "in this paper my chief design is to present what facts I may be able in support of the mosquital origin of malarial disease—in fact of ague." He recalls Josiah Nott's (q. v.) claim in 1848 that yellow fever was of insect origin, and says that Nott also suggested "the mosquito of the lowlands" as a more likely cause of malarial fever than the marsh vapors of Lancisi. He drives home his argument with these nineteen cogent reasons, which I abbreviate, to prove that the mosquito is the responsible factor in malaria:

1. Malaria affects low moist localities. So do mosquitoes.

2. Malaria hardly ever develops at a temperature lower than 60° F. This temperature is necessary for the development of the mosquito.

3. The active agent of malaria is checked by a temperature of 32° F. The mosquito is killed or paralyzed at this temperature.

4. Malaria is abundant and increasingly virulent as we approach the equator. So are mosquitoes.

5. Malaria has an affinity for dense foliage. Mosquitoes also seek foliage as a protection.

6. The barrier of a forest will obstruct the path of malaria. It also prevents the migration of mosquitoes.

7. Malaria is carried by atmospheric currents, probably as far as 5 miles. The mosquoto is likewise so transported.

8. Malaria develops after the turning up of the soil, making of excavations, and the digging of canals. King here cites an outbreak of malaria in Hongkong as an example. These conditions are favorable for the development of mosquitoes.

9. A body of water of considerable size will check the passage of malaria.

10. When countries become cleared up and settled, malaria disappears.

11. Malaria keeps near the surface of the ground, but when blown by winds may rise to considerable heights.

12. Malaria is most dangerous when the sun goes down. This is the time mosquitoes are abroad and active.

13. A person sleeping exposed and in the night air is more liable to malaria, also to mosquito bites.

14. In a malarial district an open fire affords a comparative security in and out of doors.

15. The air in cities renders malarial poison innocuous; mosquitoes also are less abundant in cities.

16. Malaria is most prevalent late in the summer and in the early autumn.

17. Malaria is arrested by trees, walls, curtains, gauze, veils and mosquito nets; so are mosquitoes.

King then cites Sir Francis Day, who says that travelers, besides being warned against night and morning temperature, should be instructed at night to employ mosquito curtains, "through which malaria can seldom or never pass!" Also Dr. Macculloch declares that with a gauze veil or conopeum it is possible to sleep in the most pernicious parts of India without hazard of fever.

18. Malaria spares no age but affects infants less frequently. This is because they are kept in the house and are protected by a netting to keep flies away.

19. The white race is most susceptible—this is due to the acclimatization of the negro.

He advises as a prophylaxis against malaria: (a) Personal protection by gauze, curtains at night, window screens, impermeable clothing, and inunctions of the body with a terebinthinate or camphorated or eucalyptol ointment. (b) Domiciliary protection by trees and walls at a distance from the house, the presence of lamps and electric lights to act as traps and pyrethrum to smoke. (c) Mu-

nicipal protection by drainage of swamps and pools, and the planting of forests, cordons of electric lights to attract the insects, and the destruction of the insects themselves.

I ask, could any demonstration have been more complete? The presentation of the problem is perfect, and its solution lay within the easy grasp of King's contemporaries had they heeded his words.

He received the degree of A. M. (1884) and LL. D. (1904) from the University of Vermont.

He married Ellen A. Dexter of Boston, October 17, 1894.

He was taken ill in his class room on December 13, 1914, and died in two days.

HOWARD A. KELLY.

KING, Alfred (1861-1916), the most resourceful surgeon of his era in Maine, was born in Portland, Maine, July 2, 1861, and died there very suddenly, June 2, 1916, from septic pneumonia originating in an infected tooth. He suffered from toothache on Tuesday before his death, operated for the last time on the following Friday for abdominal cancer, took to his bed that afternoon, and departed from the scenes of his surgical triumphs on Sunday. To the community his sudden death was a terrible shock. He was the son of Marquis Fayette and Frances Olivia Plaisted King, was educated in the public schools of Portland and obtained in 1883 an academic degree at Colby University, where he loved history, wrote agreeable letters and made one friendship which lasted for life, with Asher Crosby Hinds, of whom mention will be made in proper season as creating a distinct episode in the career of Dr. King. After passing the examinations at the Medical School of Maine and obtaining his doctorate in Medicine in 1886, he served as interne at the Maine General Hospital where for a year he displayed an eagerness for surgery unusual in so young a man. Leaving there in 1887 he was elected city physician, and began practice, obtaining success from the start. About this time, too, he married Nellie Grace True of Waterville, Maine, who survived him. He was soon appointed demonstrator and instructor in anatomy at the Medical School of Maine and gradually promoted to be instructor and professor of surgery, winning his steps by merit and skill. As a teacher and lecturer he spoke with a melodious voice and in an attractive and enthusiastic manner.

He went to Europe for five or six summers, and during one of these vacations wrote to his medical friends in Portland some of the most delightful letters imaginable, concerning what he had seen in hospitals abroad. His chief descriptions refer to brain surgery under Sir Victor Horsley, fibroids with Keith, the electrical treatment of uterine fibroids by Apostoli, studies in skin diseases with Kaposi, microscopical analysis of the blood in Vienna, tuberculosis in Berlin in Koch's laboratory and painless surgery under Schleich.

Dr. King established a private hospital in Portland in 1904, enlarged it the next year, and up to the time of his death he had performed within it three thousand operations, including the most serious in modern surgery. With this was connected a training school for nurses from which more than 50 skilled women were graduated, after a well formulated three years course.

He wrote a paper on "Osteopathy" which had precise value, pointing out that the osteopaths lay stress on minor truths, and obscure the larger: how they decry with stony indifference all other sects, yet when in turn they are criticized, they declare themselves abused and injured. As a surgeon, Dr. King was bold, daring in the extreme, and oftentimes extremely rapid. His aim was small loss of blood, and as little shock as possible. Careless in his dress, he was careful in his asepsis at operations. He had the misfortune of defending several suits for alleged malpractice, one in which, six years after the treatment, a patient persuaded a jury that redness on her neck was due to the careless use of the X-rays; another in which X-rays had not been utilized, as they should have been, in a case of fracture, and a third in which a surgical dressing was found in the abdominal cavity at a third operation. It might just as well have been left by the second operator as by Dr. King, who had the misfortune to be the first one to open the abdominal cavity.

His career in politics, which would have ruined almost any other physician, seemed to have no effect upon the popularity of Dr. King except, if anything, to increase it. After the retirement of the Congressional successor to the Hon. Thomas Brackett Reed, Dr. King came vigorously forward in favor of the candidacy of his college classmate. Hon. Asher Crosby Hinds, wrote letters favoring him as the best man for the place, and at the nominating convention presented him in a very clever speech. He played the good

game of politics from that time to the end of his life, and continued his college friend in Congress and even nominated his successor who was later triumphantly elected to Congress.

He owned farms in Maine and in his vacations proved himself of personal benefit to the towns in which they were situated. Every farmer round about consulted him and got helpful agricultural advice.

JAMES A. SPALDING.

KING, Dan (1791-1864), pamphleteer and writer, of Rhode Island, was born in Mansfield, Connecticut, January 27, 1791, and studied medicine at New Haven and in his native town. Beginning practice at Brewster's Neck, Connecticut, he soon removed to Charlestown, Rhode Island, where at first he eked out a precarious income by operating a small factory, making "nigger cloth." In 1841 he removed to Woonsocket, Rhode Island, thence, in 1848, to Taunton, Massachusetts. In 1859 he removed to Pawtucket, Rhode Island, intending to give up practice, but on the departure of a son for the war, he went to Greenville, Rhode Island, to take the latter's practice. He died November 13, 1864 in Smithfield, Rhode Island.

Dr. King's reputation is based rather upon his activity as a polemical pamphleteer and publicist than as a practitioner of medicine. In 1857 he wrote "Spiritualism Unmasked," followed next year by "Quackery Unmasked," which is regarded as his most important work. He also wrote against tobacco and alcohol. While in the General Assembly as representative from Charlestown, Rhode Island, his state paper on the condition of the Narrangansett tribe of Indians aroused interest. He was a strong Suffragist, an intimate friend of Thomas Dorr, and in 1859 published in Boston "The Life and Times of Thomas Wilson Dorr, with Outlines of the Political History of Rhode Island."

G. ALDER BLUMER.

KING, David (1774-1836), senior, promoter of the Rhode Island Medical Society, was born at Raynham, Massachusetts, April 2, 1774, and died at Newport, Rhode Island, November 14, 1836. He was graduated with high rank from Brown University, at that time Rhode Island College, in 1796, studied medicine for the prescribed three years with Dr. James Thacher (q. v.), of Plymouth, Mass., and settled in Newport, Rhode Island, in 1799. He received an appointment as surgeon at Fort Walcott, Newport harbor, and was busily engaged in combating the yellow fever epidemic in Newport in 1819. Known as one of the earliest promoters of the Rhode Island Medical Society and its president from 1830 to 1834, he was director of the Redwood Library and a prominent physician at Newport. In 1821 Brown conferred her M. D. upon him.

King's son David (q. v.) became a noted bibliophile in Newport.

KING, David (1812-1882), junior, bibliophile of Newport, Rhode Island, born in that city May 10, 1812, was the sixth in descent from Philip King, of Raynham, Massachusetts (1680). His father, David King (1796-1836) (q. v.), was a distinguished physician, his mother, Ann, was the daughter of General George Gordon, of the Revolution. King went to Brown University, where he was graduated salutatorian in 1831; he received his M. D. at Jefferson Medical College in 1834. For three years he successfully competed for the Fiske prizes of Rhode Island; his essays, published in Boston, were: "Purpura Haemorrhagica" (1836); "Cholera Infantum" (1837); "Erysipelas" (1839). Four years at intervals were spent in Europe. King was a noted bibliophile, and like his friend, Dr. Toner (q. v.), of Washington, possessed a large library rich in professional literature, besides works and manuscripts pertaining to the history of the American Colonies, and valuable editions relating to jurisprudence, politics and government; the study of these was his recreation. "From special sources in England and elsewhere he procured documentary evidences and copies of state manuscripts relative to the early founders of Rhode Island, previously unknown to historians." The catalogue of his library, published in New York in 1884, numbered 252 pages. He was one of the founders of the American Medical Association, 1847; president of the Rhode Island Medical Society, 1848-9; president of the state board of health, 1877-82, and was the author of "Historical Sketch of Redwood Library," 1860, and of "Historical Sketch of the Island Cemetery Company at Newport," 1872.

In 1837 he married Sarah Gibbs, daughter of the Rev. Samuel Wheaton, of Newport, who, with three sons and four daughters, survived him.

King died March 7, 1882, at Newport.

KING, John (1813-1893), pioneer eclectic and pharmacologist, was born January 1, 1813, in New York, son of Harman King and Marguerite A. La Porte, daughter of the Marquis de La Porte who came to America with Lafayette to fight in the American Revolution. In youth he wished to study medicine, but was opposed by his father and was apprenticed to learn engraving; but as this affected his health, he was allowed to study medicine with Wooster Beach (q. v.); he was graduated at Wooster Beach's medical school in New York. In 1835 he lectured at the Mechanics Institute, New York, on magnetism, its relations to the earth, geology, astronomy and physiology. In 1836 he issued a copy of the "Medico-Botanic Advocate", intended to promulgate the American Reformed System of Medical and Surgical Practice; although ten thousand copies were circulated the enterprise ended there. In 1840 he settled in Cincinnati and in 1849 went to Memphis, Tennessee, as professor of materia medica, therapeutics and medical jurisprudence in Memphis University, resigning to accept the chair of obstetrics and diseases of women and children in the Eclectic Medical Institute of Cincinnati, a position he held until near the close of his life.

He wrote on podophyllin (resin of podophyllum), macrotin (resin of cimicifuga), irisin (from iris versicolor); he introduced, also, hydrastis and sanguinaria. He invented a pelvimeter, a spraying instrument, and a double catheter. His chief work was the "American Eclectic Dispensatory," the third edition of which appeared in 1856; other writings include "American Eclectic Obstetrics" (1855); "Woman; Her Diseases and Their Treatment" (1858); the "Microscopist's Companion" (1859); the "American Family Physician" (1860); and his book on "Chronic Diseases."

In 1833 he married Charlotte L., daughter of Russell Armington, of Lansingburg; they had eight children; she died in 1847. In 1853 he married Phebe A., widow of Stephen H. Platt and daughter of John S. Rodman of Penn Yan, New York.

In 1891 King was made ill by gas entering his apartment from a nearby building where it was manufactured; he never fully recovered, and died June 19, 1893, at his home in North Bend, Ohio. A granite monument erected in his memory marks the place where he lies in the cemetery of that town.

KINLOCH, Robert Alexander (1826-1891), surgeon, of Charleston, South Carolina, was born at Charleston, on February 20, 1826. In 1845 he was graduated with distinction from Charleston College. Three years later he took his M. D. from the University of Pennsylvania, after which two years were spent in the hospitals of Paris, London and Edinburgh. Returning home he began to practice in his native city, but when the war broke out entered the Confederate ranks as surgeon. During his military career he served at various times upon the staffs of Generals Lee, Pemberton and Beauregard and was also detailed as a member of the medical examining board at Norfolk, at Richmond, and at Charleston. Subsequently he held the position of inspector of hospitals for South Carolina, Georgia and Florida. Upon the close of the war he resumed practice in Charleston, and in 1866 was elected to the chair of materia medica in the Medical College of the State of South Carolina. Three years later, in 1869, he was transferred to the chair of the principles and practice of surgery, and subsequently to that of clinical surgery, which he occupied at the time of his death. In 1888 he was elected dean of the faculty and continued to serve until he died.

He was a member of the Medical Society of South Carolina, the American Surgical Association, and associate fellow of the Philadelphia College of Physicians. For a short time he served as editor of the "Charleston Medical Journal," in which he published many of his medical contributions.

Kinloch's chief title to distinction rests upon his work as a surgeon. From the beginning of his career he was self-reliant, bold, and determined, possessed of a rare skill in execution and perfect poise in the face of unforeseen emergencies, qualities which compelled the success of later life. On one occasion when quite a young man he was called upon to remove the inferior maxilla of a patient. It was customary to request some older man to share the responsibility and in this instance Dr. John Bellinger (q. v.) was invited. After waiting an hour for Dr. Bellinger, Dr. Kinloch remarked, "Well, gentlemen, we will proceed with the operation." His surprised friends exclaimed, "What! without Dr. Bellinger?" "Yes," replied Dr. Kinloch, "I came to do this operation and I propose to do it." He was the first in the United States to resect the knee-joint for chronic disease, his operation preceding that of Dr. Gross (q. v.) by three or four months

and also the first to treat fractures of the lower jaw and other bones by wiring the fragments, and among the first to perform a laparotomy for gunshot wounds of the abdomen without protrusion of the viscera. In this case thirteen perforations were sutured, one being overlooked and discovered after death.

As a professor and as dean Dr. Kinloch strove to elevate the standards of medical education and chafed under restrictions which he could not overcome. "The standard of the College could and should be elevated. It is painful for me to make such an announcement. It is more painful for me to say that I am powerless to improve the situation," was what he once said.

Dr. Kinloch married Elizabeth Caldwell, of Fairfield County, South Carolina, in 1856, and had four daughters and four sons, of whom two, George and Edward Jenner, studied medicine.

He died of pneumonia following an attack of la grippe on December 23, 1891.

ROBERT WILSON, JR.

KINNICUTT, Francis Parker (1846-1913), New York physician, practitioner and teacher of medicine for more than forty years, was born on July 13, 1846, in Worcester, Massachusetts, son of Francis Harrison and Elizabeth Waldo Parker Kinnicutt. His father's family traces its origin to Roger Kinnicutt, who came to this country about 1635. His mother's family on the male side goes back to Captain James Parker, who came over at about the same time and was one of the original proprietors of the Groton Plantation, Massachusetts. As a boy Dr. Kinnicutt studied in private schools in Worcester and there prepared for college, entered Harvard with the Class of 1868, and received the degree of A. B. with his class in 1868, and the degree of A. M. in 1872. After graduation Dr. Kinnicut went to New York and began the study of medicine in the College of Physicians and Surgeons and was granted the degree of M. D. in 1871. He served as resident interne on the staff of Bellevue Hospital, and in 1872 went abroad to continue the study of medicine in Vienna, Heidelberg and London. In 1873 he returned to New York City and there began the practice of medicine. He was for many years associated with Dr. William H. Draper (q. v.), a distinguished physician of New York.

As a teacher Kinnicutt was always connected with the College of Physicians and Surgeons, the medical department of Columbia University, and during the many years of this association he occupied many positions. He was physician to the out-patient department of Bellevue Hospital; clinical assistant in the department of diseases of the nervous system; physician to the out-patient department of the New York Hospital; attending physician to St. Luke's Hospital for many years, and later consulting physician, physician to and trustee of the New York Cancer Hospital; attending physician to the Presbyterian Hospital, a position he occupied at the time of his death. He was professor of clinical medicine in the College of Physicians and Surgeons, beginning in 1893, and also a trustee of the College. He was president of the Alumni Association of the College of Physicians and Surgeons in 1890, '91 and '92. An original member of the Association of American Physicians, he was elected president of the Association for the year 1906-07. He was a member of numerous medical societies in New York City, the chief of these being the Medical and Surgical Society and the Practitioners' Society, and of obth of these he had served as president.

Most of his writings were in the nature of very carefully prepared communications to medical journals, the results of his large clinical experience in private practice and hospital work. The following may be mentioned: Edited reports American Neurological Assn., 1875; "Therapeutics of the Internal Secretions," a paper for the Association of American Physicians, 1897; "Diseases of the Thyroid Gland," in American System of Practical Medicine; "Treatment of Diseases of the Heart by the Nauheim Method," in New York "Medical Record"; "Pancreatic Lithiasis" in "American Journal of the Medical Sciences"; "Haemophilia"; "Therapeutic Value of Calcium Salts in Gastric Tetany." Joint editor, with Dr. Nathaniel Bowditch Potter, of the English translation of Sahli's "Diagnostic Methods."

Doctor Kinnicutt was interested in travel and for many years prior to his death always visited some distant land during the summer months. He knew Europe well and had journeyed extensively in England, Norway, Sweden, France, Holland, Germany and Italy. He spent one winter of rest in Egypt, going slowly up the Nile. In addition to his many medical responsibilities, Kinnicutt was for several years before his death an active member of the board of trustees of the Children's Aid Society of New York City. He was also

a member of several of the social clubs of New York City,—the Century, University, Harvard and City.

He was married on November 19, 1874, to Eleanora Kissel, daughter of Gustav Hermann and Charlotte Stimson Kissel. Two sons were born, Francis Harrison Kinnicut, November 13, 1875, Gustav Hermann Kissel Kinnicut, January 23, 1877. At a meeting of the Practitioners' Society on May 2, 1913, where he had just read an interesting paper on "General Sepsis of Oral Origin," Kinnicutt died suddenly and peacefully surrounded by his intimate professional friends.

Dr. Kinnicutt's painstaking investigation of medical problems, his clear and careful methods of teaching, his unselfish devotion to his patients, and his capacity for friendship, were the qualities which his students admired and respected, and which endeared him to them, as well as to his patients and his friends.

WILLIAM KINNICUTT DRAPER.

KIPP, Charles John (1835-1911), a German-American ophthalmologist of Newark, New Jersey, was born at Hanover, Germany, in October, 1835, coming to the United States at the age of nineteen. Here he received his medical degree at the College of Physicians and Surgeons in the City of New York in 1861. He served in the army from 1862 until considerably after the close of the war; being acting assistant surgeon in 1862, assistant surgeon in 1863, major and surgeon in 1864, brevet lieutenant-colonel and surgeon in 1865. In November, 1867, he resigned. In 1869 he settled in Newark ,New Jersey, as an ophthalmologist. He founded the eye and ear clinic at St. Michael's Hospital and the Newark Eye and Ear Infirmary. He was chief surgeon of the Newark Eye and Ear Infirmary and consulting surgeon to the German, St. Barnabas, Bayonne, Mountainside, and Somerset Hospitals. In 1885 and 1886 he was president of the New York Ophthalmological Society, in 1886 of the New Jersey Medical Society, and from 1901 till 1906 of the New Jersey State Tuberculosis Sanatorium. In 1907 and 1908 he was president of the American Ophthalmological Society, president of the Otological Society, and vice-president of the American Medical Association. He was a member of the Heidelberg Ophthalmological Congress.

According to Peter Callan, of New York, "He was the first to recognize the frequent connection between optic neuritis and otitic thrombosis of the lateral sinus" and "he was the first to report in America a case of cysticercus in the ocular conjunctiva." According to Dr. Harry V. Wurdemann, "One of Dr. Kipp's notable achievements in science was his discovery of a form of eye disease caused by malaria, to which he was the first to call attention in the early nineties." Dr. Kipp was a frequent contributor to periodical literature, and also to the medical encyclopedias. Perhaps his most important writing is the section on Diseases of the Ear in the International Handbook of Surgery.

He died of pneumonia at Newark, January 13, 1911. THOMAS HALL SHASTID.

KIRKBRIDE, Thomas Story (1809-1883), Philadelphia alienist, was born July 31, 1809, near Morrisville, Bucks County, Pennsylvania. He was a descendant of Joseph Kirkbride, of the parish of Kirkbride, County of Cumberland, England, a member of the Society of Friends, who came to this country with William Penn. Dr. Kirkbride received his education at Trenton, New Jersey, under the Rev. Jared D. Tyler, and afterwards took a course of higher mathematics at Burlington with Professor John Gummere. In 1828, at 19 years of age, he began the study of medicine, with Dr. Nicholas Belleville of Trenton, as his preceptor, and attended three full courses of lectures in the medical department of the University of Pennsylvania, graduating with honors in March, 1832, in April of the same year he was appointed resident physician to the Friends' Asylum for the Insane at Frankford, Philadelphia, and in March, 1833, he was elected resident physician to the Pennsylvania Hospital, where he remained two years and had charge of the "west wing" devoted to the treatment of the insane. He left the hospital in 1835 and settled in Philadelphia in the general practice of medicine, in which he was highly successful, obtaining a recognized reputation in the treatment of insanity. He was also physician to numerous charitable institutions, including the House of Refuge, the Magdalen Hospital and the Institution for the Blind. At this time the Pennsylvania Hospital erected a new building on Haverford Road and 42nd Street, to be especially devoted to the care and treatment of the insane. It was completed January 1, 1841. In October of 1840 he was elected physician-in-chief and superintendent of this new institution, called "The Pennsylvania Hospital for the Insane," and remained in that position until his death.

He was one of the organizers of the Association of Medical Superintendents of American Institutions for the Insane at Philadelphia, in October, 1844, its first secretary and treasurer, and subsequently president of the association for eight years. He was conservative, of strong common sense, and his opinions justly carried great weight. In 1844 he published a work entitled "Rules for the Government of those Employed in the Care of the Insane." The July and October numbers of the "Journal of Insanity" for 1854 contained two articles by Dr. Kirkbride on "The Construction, Organization and General Arrangements of Hospitals for the Insane," subsequently, (in 1856), issued as a special work, which has become a standard authority. He was a contributor to "The American Journal of Insanity," and to the "American Journal of the Medical Sciences." Dr. Kirkbride was elected a fellow of the Philadelphia College of Physicians in 1839, and was a member of the State Medical Society of Pennsylvania and of the County Medical Society of Philadelphia; also a member of the American Philosophical Society, and an honorary member of the British Medico-Psychological Association.

Dr. Kirkbride was of medium height, with a fine physique, a well-shaped head, and a countenance expressive of benevolence and warmth of heart. His voice was gentle, and his presence and demeanor were such as to win at once the confidence of his most wayward patients.

He died December 16, 1883.

Kirkpatrick, Robert Charles (1863-1897), Surgeon to the Montreal General Hospital. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, pages 664-665.

KIRTLAND, Jared Potter (1793-1877), a naturalist of Cleveland, Ohio, was born in Wallingford, Connecticut, November 10, 1793. In early life he was adopted into the family of his grandfather, Dr. Jared Potter, a physician of Wallingford. His father, Turhand Kirtland, removed in 1803 to Poland, Mahoning County, Ohio, leaving his son Jared in the home of his grandfather. The boy received his early education in the district and academic schools of Wallingford and Cheshire. Even at this period he is said to have manifested a predilection for the natural sciences, and studied botany and scientific agriculture systematically. In 1811 the death of his grandfather, who left the young Jared his medical library and a sum of money sufficient to pay for his medical education in Edinburgh, enabled him to study medicine with Dr. John Andrews of Wallingford and Dr. Sylvester Wells of Hartford, Connecticut. At this period, too, he made the acquaintance of Prof. Benjamin Silliman (q. v.), of Yale College, who took an interest in the bright boy and offered him many facilities for the study of chemistry. Unfortunately the outbreak of the war with England at this time compelled the abandonment of the plan of completing his education in Edinburgh, and in 1813 he became the first medical matriculant in the first class at Yale College. Ill health, however, compelled him to stop studying awhile, but later he took a course of lectures at the University of Pennsylvania, but subsequently returned to Connecticut and was graduated M. D. from Yale College in March, 1815. During his attendance at Yale he took special courses in botany with Prof. Ives (q. v.), and in mineralogy and geology with Prof. Silliman, and devoted some time likewise to the study of zoology. Immediately after graduation Dr. Kirtland began practice in Wallingford, dividing his time between practice and the study of scientific agriculture, botany and natural history. For five years he practiced in Durham, Connecticut. At this time he married Caroline Atwater, of Wallingford, and had two children. The death of his wife and one of his daughters, which occurred in 1823, was a severe trial which unsettled him for a time and revived a desire to remove to Ohio, and in that year he settled with his father in the town of Poland. Here, almost in spite of himself, he found an active practice forced upon him, though it had been his desire and intention to devote himself to agricultural pursuits. In 1815 he married Hannah F. Toucey, of Newton, Connecticut. At the close of a term of service in the Legislature, Dr. Kirtland resumed practice in Poland, but in 1837 became professor of the theory and practice of medicine in the Ohio Medical College at Cincinnati, a position he filled for the next five years, and then having resigned his position in Cincinnati, removed with his family to Cleveland, and accepted and filled until 1864 the chair of the theory and practice of medicine in the newly organized Cleveland Medical College.

Dr. Kirtland was actively interested in the work of the Medical Convention of Ohio, and was president of that body in 1839. He was

equally active in the organization of the Ohio State Medical Society, was its first vice-president in 1846, and its president in 1848.

In spite of his eminent medical character, it was in the field of the natural sciences that Dr. Kirtland secured his most extended and most enduring fame. Even as a boy he had manifested great interest in botany, natural history and scientific agriculture, and in 1834 he announced in the "American Journal of Art and Science" (vol. xxvi) his discovery of the "Existence of Distinct Sexes in the Naiads," a species of fresh water shell-fish, heretofore believed to be hermaphrodite. This discovery produced a considerable sensation in that day, and was denied by many naturalists, but its truth was finally confirmed by Agassiz (q. v.) and by Karl T. E. von Siebold. In 1837 Dr. Kirtland was appointed an assistant to Prof. W. W. Mather in the geological survey of the state of Ohio, authorized by the Legislature, and spent the summer in collecting specimens in all departments of natural history for an extended report upon that subject. This survey was suspended before completion, and the legislature even refused to reimburse Dr. Kirtland for the expenditures which he had made from his own pocket in the performance of his part of the work. He accordingly retained the specimens already procured, and ultimately presented them to the Cleveland Academy of Natural Science, organized fn 1845 chiefly through his influence and example. This society in 1865 became the Kirtland Society of Natural History. In 1853, in company with Spencer F. Baird and Dr. Hoy, he traveled extensively throughout Ohio, Michigan, Illinois, Wisconsin and even Canada, engaged in the study of the natural history of these states, and in 1869-70, though now seventy-seven years of age, he made a trip to Florida, for similar purposes.

As early as 1840 Dr. Kirtland had purchased a farm on the shore of Lake Erie, about five miles west of Cleveland, and now devoted his declining years to scientific agriculture, the cultivation of fruits and flowers and the management of bees, his private grounds became one of the show-places of the neighboring city. Even in the art of taxidermy Dr. Kirtland was an expert, and numerous specimens from his hands are found in the museums of both the United States and England.

In 1861 he received from Williams College the degree of LL. D. He was a regular correspondent of Agassiz, Spencer F. Baird, Joseph Henry, Marshall P. Wilder and numerous other scientists.

Dr. Kirtland died on his farm at Rockport, December 10, 1877, at the advanced age of eighty-four years.

An excellent portrait is in Western Reserve Medical College, and a bust by Dr. Garlick may be seen in the Museum of the Western Reserve Historical Society in Cleveland.

HENRY E. HANDERSON.

KISSAM, Richard Sharp (1808-1861), ophthalmologist, was born in New York, October 2, 1808. He was the son of the lithotomist, Richard S. (1763-1822) who studied in Edinburgh, was graduated there in 1789 and in 1791 settled in New York City. The next year he declined the chair of botany in Columbia College. For 30 years he was surgeon to the New York Hospital. He was reported to have done 65 lithotomies with but three deaths. Young Richard went to school at South Farms, Connecticut and about 1824 he entered Union College, Schenectady, and later Washington College, Hartford, Connecticut, in 1827 becoming a student of Dr. Cogswell (q. v.), and in 1828 attending at the Retreat for the Insane. He was graduated at the College of Physicians and Surgeons, New York, in 1830, his dissertation being on Iritis. For several years he practiced surgery at Hartford, Connecticut, founded the "Eye and Ear Infirmary" and achieved a widespread reputation as an operator for cataract. Trinity College, Hartford, conferred the degree of A. M. on him in 1850. In 1834 he removed to New York, taking up the practice of his cousin, Dr. Daniel W. Kissam. The operation of transplantation of the cornea was performed by him in 1838 with at first apparently good results, but failure in a few weeks. During 1844-45 he gave instruction in surgery and was appointed professor of the principles and practice of surgery in Castleton (Vermont) Medical College, but declined the appointment.

He published a nurses' manual and young mother's guide, 143 pp. Hartford, 1834. He married a Miss Cooke of Hartford.

Kissam was dignified yet unostentatious, of the most prepossessing manners, scrupulously neat, fascinating by his wit and humor in ordinary conversation, or drawing upon the more scientific treasures of his highly cultivated mind as occasion required.

He died November 28, 1861.

HARRY FRIEDENWALD.

KLEINSCHMIDT, Carl Hermann Anton (1839-1905), professor of physiology in Georgetown University. In a small town called Petershagen, situated on the Weser in North Germany, Carl Kleinschmidt was born in 1839. He was educated at the public schools, enjoying the benefits of a gymnastic course at the Royal College, Minden, Prussia. He came to Georgetown, District of Columbia, with his parents in November, 1857, when about eighteen, where he assisted his father in a little store, but continued his studies and soon mastered the English language. His education was first directed towards theology, but his aptitude for medicine and surgery attracted the attention of Dr. John Snyder, of Georgetown, who persuaded his parents to let him study under him, so he entered Georgetown University and was graduated in 1862. The war between the States was then actively going on and influence was offered to obtain him a position in the United States Army. On account of his intimate association with southern people, his sympathies were with them, and he was appointed assistant surgeon in the Confederate ranks. He was in most of the bloody conflicts in which the army of Northern Virginia was engaged, with all its hardships and trials and devotion to suffering humanity; he was at Gettysburg with the rear guard during Lee's retreat; at the Wilderness and the terrible series of battles that followed, and finally at Appomattox, after which he walked nearly all the way to Georgetown, arriving destitute of almost everything. Then he went abroad and took a course at the Berlin University and returning began active practice in Georgetown.

In 1874 he assisted in the reorganization of the Central Dispensary, and was appointed lecturer on diseases of the eye and ear in the summer course of Georgetown University. In 1876 he was appointed professor of physiology in the medical department of Georgetown University and maintained his connection with it to the end of his life. He was a most excellent teacher and through his omnivorous reading, the works of the great German masters were made accessible to the students and the functions of the different organs portrayed in apt language by the lecturer, aided by physiological experiments and by charts and drawings from his own hands.

He was elected president of the Medical Society in 1886, and president of the Medical Association of the District of Columbia 1895-1896. In 1889 Georgetown University conferred upon him the degree of Ph. D. He died in Washington, May 20, 1905.

Dr. Kleinschmidt was not a prolific writer. He was the author of a timely address on "The Necessity for a Higher Standard of Medical Education," Washington, 1878, and an excellent report on "Typhoid Fever" presented to the Medical Society of Washington, District of Columbia, 1894. He also assisted S. C. Busey (q. v.) and J. M. Toner (q. v.) in the preparation of numerous and valuable monographs.

GEORGE M. KOBER.

KNAPP, Jacob Hermann (1832-1911), New York ophthalmologist and oto-laryngologist, founder of the Ophthalmic and Aural Institute at New York, founder and for a long time one of the editors of the "Archiv für Augen und Ohrenheilkunde," and inventor of numerous ophthalmic and aural instruments, was born of wealthy parents, March 17, 1832, at Dauborn, Hesse Nassau, Germany, his father being Johann Knapp, member of the German Reichsrath. For a time the subject of this sketch desired to be a poet, but, later, at his father's request, he turned his attention to medicine, especially ophthalmology. After the usual training in the humanities, he began to study medicine in 1851. After a number of years at Munich, Würzburg, Berlin, Leipsic, Zürich, and Giessen, he received his degree in 1854 at the university last mentioned. He then proceeded to study ophthalmology at Paris, London, Utrecht, and Heidelberg, at length becoming assistant to A. von Graefe. In 1860 he qualified as privatdocent for ophthalmology in Heidelberg, and, five years later, was appointed full professor of the subject. He was also founder of the first University Eye Clinic in Heidelberg. His numerous scientific contributions of this period were published in Von Graefe's "Archives." For three years only, however, he filled the Heidelberg chair, for, in 1868, at the age of thirty-six he removed to New York City, where he at once founded a private clinic for diseases of the eye and ear. This clinic was shortly afterward incorporated as the Ophthalmic and Aural Institute. It was open to rich and poor alike, and became the greatest institution of its kind this side the Atlantic.

In 1882 Knapp became professor of ophthalmology in the Medical Department of the University of the City of New York—a position which he held till 1888—when he accepted the like chair in the College of Physicians and

Surgeons, the Medical Department of Columbia University. In 1903 he was made emeritus professor at this institution. For the last few years of his life, Professor Knapp, who had always been vigorous and energetic, began to feel that his powers were failing. He, therefore, like the calm, courageous person that he was, began to set his house in order, preparing for the great journey of no return. He died of pneumonia at his country residence, Mamaroneck, New York, May 1, 1911, being 79 years of age.

A fund was established by the Section of Ophthalmology of the American Medical Association that is known as "The Hermann Knapp Testimonial Fund." This fund, each year, supplies an honorarium "to any member of the section or to any distinguished man who comes before the section, as its guest, by special invitation of the officers and executive committee of the section, and presents an especially meritorious and valuable address or thesis bearing on ophthalmic practice." An appropriate sum raised by voluntary subscriptions is further set aside each year for a period of five years, for the purpose of procuring a suitable bust of Dr. Hermann Knapp, the bust to be placed in a location selected by a committee representing the section.

Knapp was a medium sized man, of firm and elastic carriage, in fact of a somewhat military bearing. His beard was blonde, till grizzled by the years; his complexion florid; and his eyes (as the writer remembers them) like clear blue stones. There was a faint suggestion of a smile in the corners of his mouth—a trait which shows in his portraits. He would often speak out quickly and impatiently. Even then, however, he almost always followed any retort or rebuke by something of a kindlier nature, and the writer has never known of any one who took a deep and abiding offense at even the sharpest words of Hermann Knapp.

As an operator, Knapp was deliberate and yet rapid, as accurate as a fine machine, and the very acme of coolness and steadiness. There was, too, a methodical economy about his operations that made them seem like masterpieces of fine art; never a stroke too many, not even a superflous turning of a finger. As a teacher he was quiet, terse, unobtrusively illuminating. A trace of German accent served merely to pique the attention of his hearers. A master of ophthalmologic history, he employed his colossal knowledge of the deeply respected past with the greatest care and good judgment, bringing it in by bits, not by wearisome cartloads, and only where it had some practical application; where, for example, it set a finer point upon some sentence, or afforded a useful contrast to the methods in use at the present day. As an editor, he was cautious, accurate and painstaking, intolerant of bluster and of brag, of slipshod statement, or loose, inaccurate English. As an inventor of ophthalmic instruments, Knapp stood at the head of the list in this country. Who does not at once recall Knapp's improved lid forceps, permitting bloodless operations on the lid; Knapp's roller forceps for the treatment of trachoma, Knapp's needle-knife for the discission of secondary cataract and the division of incarcerated capsule, Knapp's head-rest for the Helmholtz ophthalmometer, Knapp's ophthalmotrope, his ophthalmoscope, his apparatus for demonstrating the course of the rays in astigmatism, his ocular speculum, his cystottome, his operating chair? And the salient quality of each and every one of Knapp's contrivances was this, practicality. In fact there was very little fuss-and-feathers about Hermann Knapp, no ostentation, no parade. Straight to the point he went, and there an end. Hence he would never listen to a proposal for any kind of dinner, testimonial, or celebration in his honor. Then, too, I am told the following in a private letter by Dr. James A. Spalding, of Portland, Me. "He told me about 1878 that he came to New York with a big pile of letters from all over Europe to leading New York Germans. 'But,' said he, 'when I sighted New York bar and knew that I was near the second largest German city in the world, I tore to bits every letter that I had and cast them into the waters. I hired a house, rented my Institute, and went to work; an utter stranger. In my first year I made $500, in the second $2.000, and, after that, I went up as high as $20,000, and, still later, much higher.'" Another striking quality of the personality of Knapp was his untiring industry, his absolute thoroughness, and many are the stories that are told in illustration of this characteristic. The character of Hermann Knapp was absolutely free from jealousy or envy. Yet the competition, or rather, emulation, between the Ophthalmic and Aural Institute (conducted by Knapp) and the New York Eye and Ear Infirmary (conducted by the almost equally celebrated Noyes) was intense in the extreme.

A salient trait of the Doctor was generosity. Hospitality, money, kindly assistance of various sorts, were always to be had by fellow

ophthalmologists from the gruff, short-spoken, but tender-hearted Knapp. Who can estimate the value of this man's services to the poor of greater New York—services given with a kind of joyous enthusiasm for more than forty years, wholly without price? And who can appraise those still more enthusiastic and even more inestimable services which Knapp for so long rendered as a teacher of teachers, a shaper and developer of operators and writers? Though he himself is gone, his influence is widening.

A complete bibliography of Hermann Knapp would include about 300 titles. For the "Archives" alone, he wrote some hundred and fifty articles, while more than fifty important contributions from his pen were published in the transactions of the American Ophthalmological and Otological societies. A farily complete bibliography of his ophthalmic writings, as well as a fuller sketch of Knapp himself, may be found in the "American Encyclopedia of Ophthalmology," vol. ix, pp. 6850-6860. THOMAS HALL SHASTID.

KNAPP, Moses L. (1799-1879), a member of the first class graduated at Jefferson Medical College (1826), said that his "thesis was the first handed in to the Dean, the first examined, and he was understood by the professors and the class to be the first graduate." George McClellan (q. v.), professor of surgery, had promised a diploma to Knapp, and another professor had promised to another student the honor of being the first graduate, so they compromised by accepting Knapp's thesis as first and awarding his diploma the third place. His thesis on "Apocynum Cannabinum (Indian Hemp)" was the first thesis published by Jefferson. Knapp was professor of materia medica and president of the College of Physicians and Surgeons of the University of Iowa, also professor of materia medica in the Indiana Medical College (organized, 1842, extinct, 1849) 1844-1847.

An affection of the lungs induced him to move to Mexico, where it is said his life was prolonged by a "diet of succulents and fruits (goat's milk, oranges and sweet potatoes, especially)." He died at Cadereyta, Nuevo Leon, Mexico, in 1879.

The volumes of his so-called pathology ("Researches on Primary Pathology and the Origin and Laws of Epidemics," 2 v., 312 pp., Phila., 1857-8) are rather treatises on epidemic cholera, cholera infantum, nursing sore mouth, and the scorbutic diathesis.

HOWARD A. KELLY.

KNAPP, Philip Coombs (1858-1920), Boston neurologist, was born in Lynn, Massachusetts, June 3, 1858, the son of Philip Coombs and Sally Harriette Moore Knapp, ninth in direct descent from William Knapp who came to Massachusetts from England in 1630. Philip was prepared for college at the Lynn High School, took his A. B. from Harvard in 1878, at the age of twenty, and both an A. M. and M. D. from Harvard in 1883, having served as house officer at the Boston City Hospital and at the Boston Lunatic Hospital. In 1885 he was appointed physician to diseases of the nervous system to out-patients at the Boston City Hospital and he held a similar position at the Boston Dispensary from 1886 to 1888. Meanwhile his title at the City Hospital had been changed to visiting physician to diseases of the nervous system and, largely through his efforts, the neurological department was given beds and a regular service inside the hospital. Knapp held the same position at the time of his death, being then senior physician. In 1888 he became clinical instructor in diseases of the nervous system at Harvard and kept the title until 1913, utilizing his growing clinic for the instruction of many classes of students in the school, and also acting as consultant to his confrères on the staff. He was a keen diagnostician, of a scholarly turn of mind and an omniverous reader, both in his specialty and in the realm of general literature. In the year 1895 Knapp was president of the American Neurological Association; from 1905 to 1908 president of the New England Society of Psychiatry and in 1901 of the Boston Society of Psychiatry and Neurology, being a constant attendant at the meetings of these societies and generally taking part in the discussions of the papers that were presented. He had a clear mind and a good command of language; he delighted to maintain the opposite side of a question. Other affiliations of his were: a fellow of the Royal Society of Medicine, a member of the Neurological Society of the United Kingdom, of the New York Society of Psychiatry, the Massachusetts Medico-Legal Society, the American Institute of Criminal Law and Criminology and the American Association of Medical Jurisprudence. He served as trustee and as secretary of the Boston Insane Hospital from 1897 to 1902 and was chairman of the board in the last year; he was a consulting physician to the Massachusetts State Hospital for Insane Criminals. In later years he was much in court as an expert in mental cases,

his testimony being given without fear or favor, although he sometimes allowed the attorneys to irritate him during cross examinations. Knapp began to write in 1887, when he was joint translator and editor of Struempel's Text-book of Medicine. He acted in the same capacity for the editions of 1893, 1901 and 1911. He published "Pathology, Diagnosis and Treatment of Intra Cranial Growths" in 1891 and wrote the section on "Nervous Affections Following Railway and Allied Injuries" for F. X. Dercum's text-book of nervous diseases by American authors, in 1895. Other works by him embraced: "Feigned Diseases of the Mind and Nervous System" in Hamilton's System of Legal Medicine, 1894; "Traumatic Neurasthenia and Hysteria", 1897; "The Treatment of Cerebral Tumors", 1899 and "The Unity of the Acute Psychoses", 1900.

Outside of professional lines Knapp, an ardent student of Italian, was a councilor of the Dante Society for twenty years; he haunted his clubs, knew much about the art of cooking and treasured books on the subject in several languages; he drank strong coffee and started to read recent literature when most people were going to bed; next morning he had what he called a "brunch", which combined breakfast and lunch and got him to office hours with only one meal. By nature taciturn and a bit contentious he was a most witty and entertaining conversationalist with his friends.

He was married December 12, 1893 to Isabel Williams Stebbins, a widow, of Springfield, with several grown up children. At the beginning of the year 1920 he had been a sufferer for two years from recurrent small cerebral hemorrhages with partial paralysis but kept on with his work notwithstanding. The end came at The City Hospital on February 23, 1920 as the result of a large cerebral thrombosis.

WALTER L. BURRAGE.

KNEELAND, Samuel (1821-1888), of Boston, deserves a niche in our medical aula because of a splendid, clear article proving the contagiousness of puerperal fever, at a time when a doctrine of individual personal responsibility was most unwelcome to the profession ("Amer. Jour. Med. Sci.," Phila., 1846, xi. 45-63.) He was born in Boston, August 1, 1821, of a family resident in that city for more than a hundred years. His early education was received at the Boston Latin School; from Harvard he was graduated A. B. in 1840; A. M. and M. D. in 1843. After graduation he studied in Paris two years, then returned to practice in Boston for five years. In 1846 he published an essay, entitled "Contagiousness of Puerperal Fever," which took the Boylston Prize. His paper "Hydrotherapy" ("Amer. Jour. Med. Sci.," Phila., 1847, xiv, 75-108) also received the Boylston Prize. From 1851 to 1853 he was demonstrator of anatomy at Harvard Medical School, and for two years physician to the Boston Dispensary; he translated Audry's "Diseases of the Heart." In connection with his work in zoology Kneeland traveled in Brazil, the Hawaiian Islands, the Lake Superior copper region and in Iceland. From 1866 to 1869 he edited "The Annual of Scientific Discovery" and contributed more than eight hundred articles on scientific subjects to Appleton's American Encyclopædia. Dr. Kneeland was secretary of the American Academy of Arts and Sciences and of the Boston Society of Natural History. He served as surgeon in the Civil War and from 1863 to 1866 he was in charge successively of the University Hospital, New Orleans, and of the Marine Hospital, Mobile. In 1866 he was mustered out of the service with the brevet rank of Lieutenant-Colonel. Then he acted as secretary of the Massachusetts Institute of Technology and professor of zoology and physiology in that institution.

In 1849 he married Eliza Maria, daughter of Daniel T. Curtis, of Cambridge, Massachusetts. He died in Hamburg, Germany, September 27, 1888.

KNIESKERN, Peter D. (1798-1871), botanist, was born June 11, 1798, at Berne, Albany County, New York, and died at Shark River, New Jersey, September 12, 1871. After securing a liberal education by his own efforts, he graduated in medicine at the College of Physicians and Surgeons of the Western District of New York, better known, perhaps, as the Fairfield Medical College, the second medical college established in New York state, and famous in its day. From early life he was passionately fond of botany, and Asa Gray said of him: "few botanists have excelled him in their knowledge of the plants of the region in which he resided, and none in zeal, simplicity, and love of science for its own sake." For some years prior to 1841 he resided at Oriskany, Oneida County, New York; in that year he removed to southern New Jersey, spending six years at Manchester, Ocean County, six at Squam

Village, Monmouth County, and the remainder of his life at Shark River, where he died. He was probably influenced to make his home in the pine-barren region of New Jersey less by professional opportunities than by the peculiar richness of the flora to be found there.

Knieskern was the author of a "Catalogue of plants found in the county of Oneida," in the 55th annual report of the Regents of the University of New York (1842), and "A catalogue of plants growing without cultivation in the counties of Monmouth and Ocean, New Jersey," forming a supplement to the third annual report of the Geological Survey of New Jersey (1857). He was a valued correspondent of several well-known American botanists, and merits particular remembrance because of his influence upon the life of the Oriskany boy who afterward became Dr. George Vasey (q. v.), for many years botanist of the United States Department of Agriculture.

Two sedges, "Carex Knieskernii" and "Rynchospora Knieskernii," both named for him by Prof. Chester Dewey (q. v.), serve to keep his memory green.

JOHN H. BARNHART.

KNIGHT, Charles Huntoon (1849-1913), New York laryngologist, son of Hon. Horatio Gates and Mary Ann Huntoon Knight, was born November 22, 1849, in Easthampton, Massachusetts, where his father, at one time Lieutenant Governor of the State, was a prominent manufacturer. He entered Williams College from Williston Seminary, and was graduated with the class of 1871. While an undergraduate he became a member of the Lambda Chapter of Delta Phi. Among other attainments of his undergraduate days Dr. Knight excelled in athletics. He was proficient in baseball and as an accomplished general gymnast had few equals. His physical development was admirable, and was maintained for many years by regular and systematic exercise. Following his graduation from Williams College he went to New York in the autumn of 1871 and began the study of medicine at the College of Physicians and Surgeons, under the preceptorship of Thomas M. Markoe (q. v.). Receiving the degree of M. D. in March, 1874, after a few months spent in special study, he served a year and a half as interne in the Roosevelt Hospital. In the summer of 1876 he went abroad. At the time of his return the New York Hospital had been removed from the ancient quarters in lower Broadway to a fine new building in Sixteenth Street, and Dr. Knight was appointed for six months medical and surgical house officer in charge to help organize the institution and to train the interne staff. In September, 1877, he began private practice, and the next year became associated with Dr. Freeman J. Bumstead (q. v.).

The department with which Professor Bumstead was associated did not appeal to Dr. Knight. It was not long before he became interested in the diseases of the upper air passages. After several years of study he determined to relinquish general surgery and to devote himself exclusively to that department. Availing himself of the best opportunities for clinical observation, and reading extensively on the subject he soon proved himself a practitioner and an authority of the first rank. He was possessed of quick and accurate perception, sound judgment and remarkable manual dexterity. His contributions to the literature of laryngology and rhinology were of a high order of scientific merit; original, reliable and scholarly, while he was a master of style in the use of language. In addition to his other duties Dr. Knight served as lecturer on diseases of the nose and throat in the New York Polyclinic Medical School and Hospital from 1888 to 1890. He held the chair of professor of laryngology in the New York Post-Graduate Medical School from 1892 to 1898, when he was elected professor of diseases of the throat and nose in the medical department of Cornell University, a position he held until 1910. He was surgeon to the throat department of the Manhattan Eye and Ear Hospital, and consulting laryngologist to St. Luke's Hospital, Bayonne, New Jersey. Among the medical societies in which he maintained active membership were the New York Academy of Medicine, the American Academy of Medicine, the American Laryngological Association, of which he became a fellow in 1885, secretary from 1889 to 1896, and president in 1896-97; the American Medical Association, the Therapeutic Society, New York Pathological Society, the Hospital Graduates Club, and the societies of the alumni of the New York and Roosevelt Hospitals. Besides frequent articles and contributions to publications of various medical societies, Dr. Knight wrote: "A Year-book of Surgery for 1883," and a text-book upon "Diseases of the Nose, Throat and Ear, 1903," of which several editions were published, the latest in 1910.

He was married to Mrs. Lucy Tolford Mackenzie, of New York, on June 28, 1893, and she survived him.

Dr. Knight was not only a brilliant physician and writer, but a man of wide and liberal culture. A lover of art in all forms, he excelled especially as a musician. Possessed of good vocal ability, he was for many years an active and influential member of the Mendelssohn Glee Club of New York, and at one time its president. He was also an expert performer upon the violincello. The chamber concerts given at his home will be long remembered by those privileged to hear them. He invented many useful and ingenious instruments for use in his specialty, several of which are not likely to be improved upon.

Much as Dr. Knight's accomplishments as a physician, scientist and gentleman are to be admired, it was not these things which made him one of the best appreciated and most well-beloved of men. Handsome to look upon, glowing with intelligence, gentleness and strength, every line of his countenance reflected the true character of the man. From his undergraduate days, through the struggles incident to establishing a high professional position in a great metropolis, in the long period of his strenuously active success, and finally, throughout the decade of intense suffering which finally terminated his life there was never a moment in which his splendid courage forsook him or his patience, cheerfulness and self-forgetfulness failed. He died at his home in New York City, April 29, 1913.

KNIGHT, Frederick Irving (1841-1909), Boston laryngologist, was born in Newburyport, Massachusetts, May 18, 1841, the son of Frederick and Anne Goodwin Knight. His education was received at the Newburyport High School and Yale College, where he took an A. B. in 1862. Apparently he had already begun to look towards his profession, for he showed unusual interest in the Soldiers' Hospital—it was during the Civil War—and spent so much time in helping to watch and nurse the patients that he was often spoken of as "Doctor Knight." In 1866 Yale gave him the degree of A. M. Having finished his academic course at New Haven, he entered Harvard Medical School from which he was graduated in 1866. He then entered the City Hospital of Boston, where he passed the usual time as interne, and upon graduating went to New York City. There he associated himself with Professor Austin Flint (q. v.), with whom he studied for one year when, declining an offered partnership, he returned to Boston and became the assistant of Dr. Henry I. Bowditch (q. v.) (Harvard, 1828), a partnership which was continued for twelve years. Meanwhile in 1871-1872 Dr. Knight spent a year abroad at Vienna, Berlin and London, under the personal instruction of the best masters of the day. From the beginning he had devoted his attention to diseases of the chest and the upper air passages, and having perfected his knowledge of these subjects as far as possible he returned to Boston.

In 1872, while in Europe, he was made instructor in auscultation, percussion, and laryngoscopy in Harvard University, and on his return established a clinic in Boston to include laryngology, largely limited to teaching methods of examination. In 1879, after seven years of instruction, the arts of percussion and ascultation were separated from laryngology and the title of Teacher became that of Instructor of Laryngology. In 1880 Harvard established a voluntary fourth year. Dr. Knight gave a course to the class of that year, consisting of three exercises a week for two months. In 1882 he was made assistant professor of laryngology, and in 1886 clinical professor. By this time the whole field of disease was covered in the school by systematic lectures, demonstrations and the clinical use of patients. Although at a period when his mental and physical powers were in every respect at their best, he resigned this position in 1892 in order to allow of the appointment of his friend, Dr. Franklin H. Hooper (q. v.), who had for some time aspired to attain it. The high-minded unselfishness of this act was great, for Dr. Hooper was hopelessly ill. It was not likely that his life would be prolonged sufficiently for him to occupy the place for any great length of time. It was equally probable that if Dr. Knight resigned the position he would not take it up again.

Dr. Knight was connected at various times with the Boston City Hospital, the Boston Dispensary and the Carney Hospital, but resigned these positions to establish a special clinic in laryngoscopy at the Massachusetts General Hospital. He was later consulting physician to the Massachusetts General Hospital.

Dr. Knight was one of the founders of the American Laryngological Association. At the first meeting of the Association held in New York City, June 10, 1879, the first scientific contribution presented was the paper

of Dr. Knight on "Retro-Pharyngeal Sarcoma." He was elected third president of the association and in 1880 founded the "Archives of Laryngology," a magazine devoted to the study of diseases of the upper air passages. The editorial staff was composed of four of the leading laryngologists of the time, namely, Louis Elsberg (q. v.), J. Solis-Cohen, George M. Lefferts and Frederick L. Knight. Terminated at the end of four years, it remains today the most elegant and best edited periodical on laryngology that has ever appeared. Under such management as controlled it, and with the vastly increased number of specialists in the field, there is no doubt that to-day it would be an acknowledged success.

Dr. Knight was a pioneer in the movement against tuberculosis, and he was an incorporator and vice-president of the Boston Medical Library. He was a member of the American Academy of Arts and Sciences, ex-president of the American Climatological Association, a member of the Massachusetts Medical Society.

While abroad he married in Berlin, October 15, 1871, Louisa Armistead Appleton, daughter of William Stuart Appleton, formerly of Baltimore, Maryland; one child, Theodora Knight, survived him, when he died in Boston, February 20, 1909.

D. Bryson Delavan.

KNIGHT, James (1810-1887), deserves credit for having established orthopedic surgery in New York City, and to a certain extent in the country at large, upon a broad basis of philanthropy. He was intensely altruistic and a competent organizer, as his inception and development of the Hospital for the Ruptured and Crippled amply demonstrated. Dr. Knight was born at Taneytown, Frederick County, Maryland, on February 14, 1810. He was the son of Samuel Knight, a manufacturer of military implements, and graduated from Washington Medical College, Baltimore, in March, 1832, moving to New York in 1835. Here he devoted himself to the study of orthopedic surgery at the suggestion of Dr. Valentine Mott (q. v.), after the year 1840. From 1842 to 1844 he assisted in the orthopedic treatment of patients who attended the public clinics of the Medical Department of the University of the City of New York. As early as 1842 he had taken steps toward the establishment of a hospital for cripples, but it was not until after a campaign lasting from 1859 to 1863 that the articles of incorporation of the New York Society for the Relief of the Ruptured and Crippled were filed on April 13, 1863. Dr. Knight was in charge of this work from the first. His own house at 97 Second Avenue was first leased for three years and then purchased as a hospital. In it were twenty-eight beds. During the first year 50 indoor and 788 out-patients were cared for. In May, 1870, the new building at 42nd Street and Lexington Avenue was ready to occupy. Dr. Knight continued in charge of the institution until his death, October 24, 1887.

Knight was a member of the Medico-Chirurgical Faculty of Maryland, the District Medical Society of Ohio, the County Medical Society of the City of New York, the Medical Journal Association of the City of New York, fellow of the New York Academy of Medicine, a life member of the New York Society for the Relief of Widows and Orphans of Medical Men, and also of the American Museum of Natural History, an honorary member of the New York Historical Society, and a fellow of the Academy of Design. He published works on "The Improvement of the Health of Children and Adults by Natural Means" in 1868, "Orthopedia, or a Practical Treatise on the Aberrations of the Human Form," in 1874, and "State Electricity as a Therapeutic Agent," in 1882.

H. Winnett Orr.

KNIGHT, Jonathan (1789-1864), surgeon of Connecticut, was born in Norwalk, Connecticut, September 4, 1789, the son and grandson of physicians. At the age of fifteen he entered Yale College, took his A. B. four years later, in 1808; and then had charge of an academy at Norwich, Connecticut, for two years. At the expiration of this time he was appointed a tutor at Yale. While there the establishment of a medical department was discussed, and Prof. Benjamin Silliman (q. v.), then professor of chemistry in the college, suggested Knight for the chair of physiology and anatomy. To equip himself better for this position, he spent the winters of 1811 and 1812 in Philadelphia, so that in 1813 he was ready to do the work. This position he held until 1838, when, on the death of Dr. Thomas Hubbard (q. v.), he was transferred to the chair of surgery, which he held until shortly before his death, thus occupying a professorship in the Yale Medical School for fifty-one years, earning great fame as a successful teacher. After the death of Dr. Thomas Hubbard he became the

leading surgeon in Connecticut. Especially was he familiar with the literature of surgery. "Conscientious, forebearing, conservative, perhaps in all that time of his supremacy (which continued until his death), he never did an unnecessary or premature operation" is the tribute paid him by his pupil and successor, Francis Bacon (q. v.). Although Dupuytren had cured popliteal aneurysm by compression in 1818 (Bull. Fac. d. Med. de Paris, 1818, vi. 242) to Knight the credit is due of employing digital compression for the cure of aneurysm. This was done in 1848 by relays of assistants from among his pupils at the medical school, who relieved each other at short intervals. After forty hours' treatment, the aneurysm disappeared.

He was twice president of the American Medical Association, his re-election due to the skilful way in which he presided over its first session, using his common sense, without, as he admitted, much knowledge of parliamentary rules. He died on August 25, 1864. Unfortunately, he wrote little, save two introductory lectures and an eulogium on Dr. Nathan Smith. A portrait by Nathaniel Jocelyn was painted in 1828 and is still in existence.

WALTER R. STEINER.

KOLLOCK, Cornelius (1824-1897), who for the last twenty years of his life devoted himself to gynecology and abdominal surgery in the little village of Cheraw, South Carolina, near which he was born December 7, 1824, was well known and consulted in both the Carolinas, and was president of the South Carolina Medical Association in 1887 and president of the Southern Surgical and Gynecological Association in 1894. He was the son of Oliver Hawes and Sarah Wilson Kollock. Student days were passed at Brown University, Rhode Island (A. B. 1845), and his M. D. taken at the University of Pennsylvania in 1848, after which he studied in Paris for two years in the leading clinics. Then he settled down in Cheraw, a town which even when he died had only about one thousand inhabitants including five doctors. A glance at the portrait of Kollock shows he knew his own mind and under what circumstances he could do his best work. He published several papers in the medical journals of Charleston and Atlanta, notably the "History, Pathology, and Treatment of the Epizootic of 1873," in the "Southern Cultivator," of Atlanta. The "Transactions of the American Gynecological Society" show the deep interest he took in professional subjects even when seventy years old.

A Christian man of unflinching integrity and courage, skilful in surgery and in dealing with men his death on the seventeenth of August, 1897, caused universal regret.

He married Mary Henrietta Shaw of Boston, in 1857, and one son, Charles Wilson, followed his father's profession.

KRACKOWIZER, Ernst (1821-1875), New York surgeon, was born December 3, 1821, in a small town in upper Austria. After finishing his college course he began the study of medicine in 1840. The next five years he spent in Vienna, Pavia, and again in Vienna, where he graduated in 1845. He was then selected by Schuh, at that time one of the greatest surgeons of Europe, to participate in a special course on operations, which lasted two years. He removed to a small town to practice his profession, but was within a few months recalled by Schuh to fill the place of his first clinical assistant, and to travel with him over the northern part of Europe. At that time Krackowizer was the first person on whom the anesthetic influence of chloroform was tried in Vienna. In that connection, I, a very young student in a distant part of the country, heard his name mentioned.

Krackowizer was a patriot and took an active part in the revolution of 1848, serving on the battlefield as a surgeon and in the clinic at Tuebingen, where he had been forced to flee from Vienna; finally when his requisition was demanded by Austria and the small kingdom of Wuertemberg was unable to resist, he sailed for the land of the free and landed in New York, June 28, 1850. He settled in Williamsburg, where he was married in 1851, and engaged in a rapidly increasing practice, until he removed to New York City in the autumn of 1857, to live there the rest of his life. He served as visiting surgeon to the Brooklyn City Hospital for several years until his increasing duties in New York made further service across the river impossible. It is easy to imagine that the Brooklyn hospital appreciated what this thoroughly trained surgeon brought from the battle fields and clinics of Europe.

In 1858 Dr. Krackowizer received from a friend in Vienna a laryngoscope which had been invented by Manuel Garcia in 1855 and had been described by Czermak and Tuerck in Vienna in March and June, 1858. This

was the first laryngoscope to reach the Western hemisphere. With it Krackowizer demonstrated the vocal cords for the purpose of proving its possibilities, but being a general surgeon he made no further use of the instrument.

On February 1, 1852, Krackowizer joined Drs. Roth and Herczka in the publication of the "New Yorker Medicinische Monatsschrift" (New York Medical Monthly) which was discontinued after a year. It forms a handsome volume of 388 pages. It was published in the German language, and was meant to circulate among the German physicians of this country and Europe. It contained original papers, histories of important cases, clinical observations, extracts, reviews and criticisms, most of them of a superior order. Dr. Krackowizer's chief contributions to medical literature were: "History of a Tumor Vasculosus on the Occiput of a Child"; "Improvement of the Exarticulation in the Ankle-joint, with Resection of the Malleoli; According to Syme;" "Staphylorrhaphy;" "Detmold's Treatment of Pes Valgus;" "The Modern Views of Syphilis," and "Contributions to the Diagnosis of Hernia."

From the time he landed in New York until his death he was an American, and the language of his adopted country he considered to be the proper means of communication with his fellows, and well he knew how to use it. In his character he blended the good qualities of both nations. He held membership in the following societies: Medical Society of the County of New York, Academy of Medicine, Pathological Society (President); Medical Library and Journal Association, New York Public Health Association, American Medical Association. He was one of the surgeons of the German Dispensary, later of the German Hospital; of the Mount Sinai Hospital; of the New York Hospital, and for two years before his death, of Bellevue Hospital. At the last institution there was a difference between the board of governors and the surgical staff, one of those disagreements that are so common in our large hospitals, the lay governors not holding to their agreement to leave the reorganization of the hospital to the medical board, and Dr. Krackowizer resigned. As president of the Pathological Society and as a member of the Academy of Medicine he took a prominent part in their affairs; he was the life of the German Dispensary; as a citizen he was an esteemed member of the Committee of Seventy and of the Council of Political Reform. He was an able surgeon and a strong man.

He died of typhoid fever at Sing Sing, New York, at the early age of fifty-three years, September 23, 1875.

A. Jacobi.

KRAEMER, Adolph (1864-1911), an oculist of Switzerland and California, author of a volume of the Graefe-Saemisch Handbuch der Augenheilkunde (2d ed.) entitled "Animal Parasites of the Eye," was born at Giessen, Germany, June 20, 1864, and received the degree of Doctor of Philosophy at Basle, Switzerland, in 1892, his dissertation being "Parasites of Fresh Water Fishes." The degree of M. D. he received at Zurich in 1894, on which occasion his dissertation was "Spinal Meningitis." For the next six months he studied gynecology with Pozzi, of Paris. Soon, however, he returned to ophthalmology, which he found much more to his liking. For a time he was assistant in ophthalmology at the University Clinic at Basle, and afterwards, for a somewhat longer period, at Zurich. Then he practiced for a number of years at Heiden, a Swiss watering-place. While there, he contributed numerous ophthalmologic articles to the various German, French and English journals. From Heiden he removed to San Diego, California, U. S. A., where he practiced from 1902 until the end of his life.

In every way the subject of this sketch was a man of striking personality. Six feet high, broad-shouldered, with black mustache and beard, black hair, brown eyes, and a very vivacious expression and manner, he produced at once a decided, as well as enduring impression. He was eager and rapid in conversation, extremely congenial, and yet not fond of society. His studious tastes would seem to have prevented that. His temperament was mercurial, easily elated and easily depressed. In the wonders of nature, however, he found a perpetual solace. His chief recreation being botanizing, he collected a fine herbarium of the plants of Southern California, which he presented to the University of Basle. He was an ardent devotee of outdoor nature, from its smallest to its largest forms, and was on the point of removing his family to the shores of Lake Constance, Switzerland, because of the beautiful scenery there, when the summons came to leave this world, which he had found so beautiful, so full of changing interests.

In 1898 he married Mary Clifford Webster, daughter of John Ordway Webster, of Augusta, Maine. Of the union were born two children, Hilde and Eric. Dr. Kraemer died Jan. 22, 1911.

THOMAS HALL SHASTID.

KREIDER, Michael Zimmermann (1803-1855), a pioneer surgeon of Ohio, was born in Huntingdon, Pennsylvania, the son of Daniel and Salome Carpenter Kreider, and grandson of Michael and Susan Carpenter Kreider; being thus doubly descended from Dr. Henry Carpenter (Zimmermann), a Swiss physician who settled in Germantown in 1698. Michael attended school in Huntingdon, and acquired, for that day in the West, an unusually good education. On the death of his mother in 1820 the home was broken up and with a younger brother he walked over the Allegheny Mountains and made his home for two years with an uncle in Delaware County, Ohio, in 1822 beginning to study medicine with Dr. Samuel Parsons in Columbus. In 1825 after an examination, there being no medical schools in the West at that time, he was given a license to practice by the State Medical Board, and settled in Royalton, Ohio. In 1841, having retired from political office, he took up the practice of surgery with energy and became widely known as a surgeon, probably operating more than any other surgeon in Ohio, outside of Cincinnati. Of physicians, Dr. M. Z. Kreider stood at the head, and in surgery surpassed all others. Far and near he was called upon to perform all the capital operations. He was a self-made man, who by indomitable perseverance and energy attained a commanding position. He was very large, broad-shouldered, well proportioned, with a large nose, bright eyes, and a generally keen and alert expression, with strong and rapid movements. Not only a noted physician, he was a successful preacher and politician as well.

He married, first, Sydney Ann Rees, daughter of Gen. David Rees, and had one son, Edmund Cicero, and four daughters. His second wife was Mary Ann Carpenter, his cousin, by whom he had two children. He contributed frequently to the "Ohio Medical Journal" of Columbus and Cincinnati.

In 1853 he suffered a sun stroke while traveling in Michigan. Diabetes mellitus caused his death, July 20, 1855, at the early age of fifty-two.

GEORGE NOBLE KREIDER.

KUHN, Adam (1741-1817), botanist, professor of materia medica and of theory and practice, in Philadelphia, was born at Germantown near Philadelphia November 17, 1741. His grandfather, John Christopher Kuhn, and his father, Dr. Adam Simon Kuhn, came from Heilbronn, Swabia, to Philadelphia in September, 1733. Adam first studied medicine with his father, then sailed for Europe in 1761 and arrived at Upsala by way of London.

Concerning this young botanist, on the twenty-fourth of February, 1763, the great Linnaeus wrote to Adam Kuhn pére, living in Philadelphia, and in fine Latin thus commending his pupil: "He is unwearied in his studies and daily and faithfully studies materia medica with me. He has learnt the symptomatic history of diseases in an accurate and solid manner. In natural history and botany he made remarkable progress. He has studied anatomy and physiology with other professors." This was high praise from such a master.

Linnaeus named an American plant "Kuhnia (Kuhnia Eupatoriodes) after Adam and when the latter returned to Philadelphia wrote very intimate and graceful letters to him in Latin. One has this in it. "I pray and entreat thee send some seeds and plants among which I ardently desire the seeds of the 'Kuhnia,' which perished in our garden."

Kuhn went to London in 1764 and studied there a while, and in 1767 was in Edinburgh where he took his M. D. that same year on the twelfth of June. His thesis, on "De Lavatione Frigida," was dedicated to his friend Linnaeus. He visited France, Holland and Germany but whether before or after Edinburgh is not very clear. In 1768, after his return to Philadelphia, he became professor of materia medica and botany in the University of Pennsylvania and helped in 1774 in vaccinating a population considerably decimated by small-pox. Kuhn's name as professor of materia medica and botany in the College and Academy of Philadelphia is upon the diploma of John Archer, the first ever granted by a medical college in America, dated 1768, which hangs on the wall of the College of Physicians and Surgeons, Baltimore.

Of Adam Kuhn Dr. Charles Caldwell (q. v.), cold, cautious, and sarcastic, says: "He was by far the most highly and minutely furnished specimen of old-school medical production I have ever beheld. He wore a

fashionable curled and powdered wig; his breeches were black, a long skirted buff or white waistcoat, his coat snuff colored. He carried a gold headed cane and a gold snuff-box; his knee and shoe buckles of the same metal. His footsteps were sternly and stubbornly regular; he entered the sick-room at a given minute and stayed a given time and never suffered deviation from his directions. " 'Doctor, if the patient should desire toast, water or lemonade he may have it?" asked the nurse sometimes. He would turn and reply with oracular solemnity, 'I have directed weak sage tea. Good morning, madam.' "

As a lecturer, in his five or six professorships, "he was faithful and clear in the description of diseases and in the mode of applying their appropriate remedies, avoiding theoretical discussions." It would be pleasant to know more of Kuhn, but the short-length, long-adjectived, pompous biographies in old medical journals do not give much. A discreet young physician, "not remarkable for powers of imagination but his talent for observation profound; a lover of music, abstemious in diet, neat in person," says one biographer.

His other appointments included: Physician to the Pennsylvania Hospital, consulting physician, Philadelphia Dispensary, 1786; one of the founders and in 1808 president of the College of Physicians of Philadelphia; professor of the theory and practice of medicine, University of Pennsylvania, 1789, and on the junction of the two medical schools of the College and University, he was chosen professor of the practice of physic, 1792-1797. Of his writings, with the exception of the thesis mentioned, nothing can be traced save a short letter addressed to Dr. Lettsom on "Diseases Succeeding Transplantation of Teeth." He opposed Rush's "Treatment of Yellow Fever" by publishing his own, over initials, in the "General Advertiser" of September 11, 1793.

He did not marry until he was thirty-nine, after which he had two sons, by his wife Elizabeth, daughter of Isaac Tartman of St. Croix.

When seventy-three he "grieved" his patients by giving up practice, and in June, 1817, began to feel conscious that life was ending. After a short confinement to the house of three weeks, but suffering no pain, Adam Kuhn passed away on July 5, in full serenity of mind and heart.

KUNZÉ, Richard Ernest (1838-1919), originator of the Arizona Cactus Farm, was born in Altenburg, Saxony, April 7, 1838, the youngest of six sons. His father, John Jacob Kunzé, was of an old Thuringian family and held for life the position of Court Horticulturist to Duke Joseph; his mother, Adelaide Collen, was the daughter of a French refugee. Private instruction until fifteen embraced Latin, Greek, French, and English. A lively interest in natural science brought him under the tutelage of Schlenzig the lepidopterist, Apetz the entomologist, and Brehm the ornithologist and African traveler. Lacking the opportunity to enter a university, he joined his brother-in-law in business for a short time. After his father's death, he took passage in September, 1854, for New York on the bark "Eliza" from Bremerhaven, arriving after seven weeks. A guileless youth, he fell an easy prey to thieves upon landing and was robbed of his money. He found employment as a farm-hand, and learned English and the ways of the people. In the meantime he determined to study medicine and returned to New York where as a student of Charles J. Stearn he also acquired medical botany and pharmacy.

He married Ann McNamee of Cardiff, Ireland, September 30, 1857; they had no children. In this year he entered the Metropolitan Medical College and was graduated in 1859; he received a medical degree from the New York Eclectic Medical College in 1868 and became connected with various Eclectic organizations.

In 1875, Dr. Kunzé published his first monograph on "Cactus" (paper read in 1874) in which he describes several species and calls attention to their medicinal value in heart disease. He also wrote the "Cereus Grandiflorus and Cereus Bonplandii," 1876 (paper read in 1875); "Cereus Triangularis" and "Phyllocactus Grandis," 1876; "Cardinal Points in the Study of Medical Botany," 1881; "Germination and Vitality of Seeds," 1881; and sundry papers on medical, botanical, and entomological subjects.

He was a charter member of the College of Archeology and Esthetics, incorporated in 1880, president of the New York Therapeutic Association, and an active member of the Torrey Botanical Club. The death of his wife was a heavy blow, and this grief with failing health caused him to seek relief in a complete change of environment. He accordingly left New York in December, 1895, and spent some time in Colorado, but with-

out the benefit he craved, then he settled on a small ranch near Phoenix, Arizona, where he lived comfortably growing fruits and cacti. He was fond of the desert and was interested in exploring its mysteries; he reveled in his favorite plants and discovered several new species, notably, "Opuntia kunzei," "Echinocereus kunzei," and "Echinocactus arizonicus." Here he originated the Arizona Cactus Farm from which he shipped rare specimens of cacti. Many of the cactus plants found growing in European gardens during recent years came from this source. Articles sent regularly to the Monatsschrift für Kaktenn-kunde in Berlin described the plants sent abroad. When the World War broke out, ocean traffic and the cactus trade were seriously impeded and his finances were embarrassed.

On February 10, 1919, Dr. Kunzé died in his Arizona home, practically helpless for some time, much alone, and with mind beclouded.

He was an unusually active, studious, and original investigator, spending freely to promote his experiments. His life was a long struggle with hardships borne uncomplainingly. He was tall, slim, and angular, and his voice, strong and strident.

His writings have been collected in a group of Kunziana and filed in the Arizona Library of the Southwest Museum, Los Angeles, California. His last article on the Cactus Flora of Arizona was written in 1915 and published posthumously (Col. Eclectic Med. Journ., May, 1919). The manuscript of a book on materia medica, is also shelved there.

JOSEPH A. MUNK.

KYLE, David Braden (1863-1916), laryngologist of Philadelphia, was born at Cadiz, Ohio, October 11, 1863, and died at Philadelphia, October 23, 1916, succumbing to pneumonia when he had been in apparent good health. He was the youngest son of Samuel W. Kyle, whose family came from Kyle in Ayrshire, Scotland. His mother was of English extraction, a descendant of Thomas Cross who emigrated to America in 1746 and served under Washington in the Revolution.

Braden Kyle was educated at Muskingum College, Ohio, and at Jefferson Medical College, Philadelphia, where he was graduated in 1891. In the autumn of the year of graduation he was appointed to the chair of pathology in Jefferson, continuing in office until 1896, when he was elected professor of laryngology in the same college, a position he held until his death. From 1891 to 1893 he was chief laryngologist, rhinologist and otologist to St. Mary's Hospital and then accepted a permanent position of the same character at St. Agnes Hospital. He was an industrious man and did not spare himself in the prosecution of his profession. He taught that disease of the throat and nose originated in systematic conditions, which should be the subject of treatment, and that topical applications were only adjuvants. He had a good habit of personally overseeing the convalescence of his patients and did not trust this important branch of operating to subordinates; therefore he was very busy and did much traveling, for he had a large practice. Kyle's chief contribution to the literature of medicine was his textbook on "Diseases of the Nose and Throat," that appeared in 1899, and of which four subsequent editions were published. Two years previously he had contributed a chapter on diseases of the uvula, pharynx and larynx to Hare's "System of Therapeutics." He invented several instruments for use by throat and nose specialists and contributed many papers to the medical journals, such as "Nasal Hydrorrhoea," 1896; "Nasal Bacteria. the Relation They Bear to Disease," 1899; "The Use of the Suprarenal Gland in Diseases of the Nose and Throat," 1902; "The Chemistry in Saliva in Relation to Hay Fever," 1907.

Dickinson College conferred the honorary degree of Master of Arts on him in 1904. In 1900 he was president of the American Laryngological, Rhinological and Otological Society, and in 1911 he held the same office in the Amreican Laryngological Association.

In 1900 Dr. Kyle married Jeanette E. Smith, daughter of Colonel Thomas J. Smith of Philadelphia.

Dr. Kyle was especially fond of children and had a kindly nature. During the summer vacations he traveled extensively in the West and in British Columbia and, with Mrs. Kyle, frequently hunted big game. He left a distinct impress on American laryngology.

KYLE, John Johnson (1869-1920), laryngologist of Indiana and California, was born May 27, 1869, at Aurora, Indiana, the son of Thomas M. and Anna Johnson Kyle. He was graduated from Miami Medical College, Cincinnati, Ohio, in 1889 and settled in Marion, Indiana, to practice. He was professor of rhinology, laryngology, and otology in Indiana University Medical College (Indiana University) from 1900 to 1912 when he ac-

cepted the same chair in the College of Physicians and Surgeons of the University of Southern California. During the war with Spain, he saw service in Cuba as major and surgeon of the 160th Indiana Volunteer Infantry; in the World War, he was a major in the Medical Reserve Corps, U. S. A.

Dr. Kyle was president of the American Academy of Ophthalmology and Oto-Laryngology in 1910 and 1911 and a member of the Association of Military Surgeons of the United States. He was the author of "Compend of Diseases of the Ear, Nose, and Throat," 1903, and a "Manual on Diseases of the Ear, Nose, and Throat," 1911.

He died, from pneumonia, a bachelor, August 29, 1920.

LACHAPELLE, Emanuel Persillier (1845-1918), of Montreal, editor of "L'Union Medicale, was born Dec. 21, 1845, at Sault-au-Recollet, province of Quebec. His parents were Pierre Persillier-Lachapelle and Marie Zoé Toupin. Dr. Lachapelle received a classical education at the Montreal College, and took a course in medicine and surgery at the Montreal Medical and Surgical School, and after passing his examination very brilliantly, was admitted to the practice of medicine in 1869. In 1872 he was appointed surgeon in the 65th battalion and held that position until 1886. In 1876 he was elected a governor and treasurer of the College of Physicians and Surgeons of the province of Quebec; and in 1885, during the small-pox epidemic, he took a leading part in the working of the Central Board of Health, and was appointed president of the first Provincial Board of Health recently organized. Dr. Lachapelle was the promoter and one of the founders of Notre Dame Hospital, one of Montreal's most useful charitable institutions. In 1884, wishing to free the hospital from debt, he organized a grand "kermesse" which netted about $15,000 in one week. When the establishment of the branch of Laval University in Montreal was decided upon, he became one of its most ardent supporters and contributed in a great measure to its formation. He was elected general president of the Saint Jean Baptiste Society in 1876.

As a journalist, Dr. Lachapelle was favorably known, having been the proprietor and editor of "L'Union Médicale" from 1876 to 1882.

He was doctor in medicine of Laval and Victoria University, secretary of the medical faculty of Laval University, professor of general pathology and medical jurisprudence, as well as hygiene, of the latter institution, and an associate member of the "Société Française d'Hygiene," Paris.

At the time of his death he was in his 73rd year. He went to Rochester, Minnesota, to be under the care of Dr. Charles Mayo, as he had been suffering from cholecystitis. He underwent an operation and seemed to be doing well, but during the heat wave in July, 1918, he suddenly collapsed.

Laird, James M. (1852-1904), of West Virginia. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia, 1912, vol. ii., p. 80.

LAMBERT, Thomas Scott (1819-1897), lecturer and author, was born in 1819 in Masachusetts, and was educated in medicine at Castleton, Vermont, where he took his M. D. in 1845. He lectured extensively on medical and educational themes and was author of "Human Biology," 1854; "Practical Anatomy and Physiology"; "Hygienic Physiology"; "Longevity," 1869; "They are not dead and Restoration by the 'heat method' of those drowned or otherwise suffocated," N. Y., 1879.

Dr. Lambert died from pneumonia, March 31, 1897, aged 78.

Lamson, Daniel Lowell (1834-1894), of Fryeburg, Maine, inventor, mechanical genius. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 677-678.

LANDIS, John Howard (1860-1918), professor of hygiene in the University of Cincinnati, was born in Millville, Ohio, October 10, 1860, son of Dr. Abraham H. Landis and Mary Kumler. His three brothers were: Charles Beary Landis, congressman, 1897-1909; Judge Kenesaw Mountain Landis, and Frederick Landis, congressman 1903-1907, and author of "The Glory of His Country," and other books. Dr. Landis was graduated at the Logansport (Indiana) High School in 1879, then studied medicine at the Medical College of Ohio, Cincinnati, graduating in 1890. He became interne at the Cincinnati Hospital (1890-1891); professor of pathology at the Presbyterian and Laura Memorial Medical College (1892-1895); member of the staff of St. Mary's Hospital (1907); and professor of hygiene, Medical Department, University of Cincinnati (Ohio Miami Medical College), from 1908 until his death. In 1909 he was appointed a mem-

ber of the Cincinnati Board of Health, and elected health officer in 1910. He was director of the Visiting Nurse Association, Council of Social Agencies, and a member of the Commission on National Milk Standards. He was a member of the American Public Health Association and of the Society for the Study of Inebriety (British).

In 1894 Dr. Landis married Daisy M. Graham, of Cincinnati. He died at his home in Cincinnati on August 23, 1918.

LANE, Levi Cooper (1830-1902), founder of Cooper Medical College, California, was born of English Quaker stock, in Ohio, May 9, 1830. His early education was partly private, partly in Farmer's College and in Union College, Schenectady, New York, from the latter receiving an A. M., and in 1877 an LL. D. He took an M. D. in 1851 from Jefferson Medical College and in the same year was appointed interne in the New York State Hospital on Ward's Island where he remained four years.

In 1855 he entered the navy, but four years later resigned and settled to practice in San Francisco with his uncle, Dr. Elias Samuel Cooper (q. v.), for whom Cooper Medical College was later named. Lane at once became identified, as professor of physiology, with the medical department of the University of the Pacific—the first medical school on the Pacific coast, of which Dr. Cooper was the leading spirit. In the following year Cooper died and this school was discontinued and Dr. Lane called as professor of anatomy to the newly organized Toland Medical College; but in 1870, in association with its old members and some new blood he revived the original school which he entered as professor of surgery. In 1882 he built a fine college building, which he incorporated as Cooper Medical College. To this he added, in 1890, Lane Hall, and in 1894 Lane Hospital, the total gift approximating half a million dollars—money earned by himself in his profession, as he expressed it.

Dr. Lane was a most indefatigable student. His impromptu thesis before the Navy Board was in Latin. German and French were to him familiar tongues and he knew also Greek, Spanish and Italian. For many years it was his custom to devote the early morning hours to reading, investigation and writing. Thus he wrote his scholarly work, the "Surgery of the Head and Neck." As a surgeon he following Sir Astley Cooper, never operated on an important case without previously performing the operation on the cadaver. In his knowledge of anatomy and surgery there was not his superior on the coast—probably not his equal. Not only was he skilful and resourceful but he possessed decided originality. He devised a number of new operations, notably vaginal hysterectomy, which he was the first to perform in America and which he devised as an original procedure, not being aware that the operation had been performed a number of times in France in the early years of the century. He also originated an operation for craniectomy, for microcephalia and devised important changes in hare-lip operations.

Notwithstanding Dr. Lane's active and energetic life, his physique was far from robust. In early youth he had been asthmatic, and a resultant emphysema had rendered him liable to frequent attacks of bronchitis. He spent some months of the winter of 1882 in Guatemala, in recuperation, and in the middle seventies gave two years of his life to study in Europe where he received the M. R. C. S. (Eng.) degree and the M. D. of Berlin.

Dr. Lane did not seek public position, but was once a member of the City and State Board of Health and president of the State Medical Society.

Among his articles are found: "Ligations for the Cure of Aneurysm," 1884; "Rudolph Virchow," 1893; "Surgery of the Head and Neck," 1898.

In the early seventies he married Mrs. Pauline Cook but had no children. A fine portrait by Toby Rosenthal and a marble bust are in the possession of the college.

HENRY GIBBONS, JR.

Lang, John (1859-1896), ophthalmologist of Victoria, B. C. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia, 1912 vol. II, p. 82.

Langley, John Williams (1841-1918), at various times professor of mathematics, chemistry and physics and electrical engineering. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 679.

LANGMAID, Samuel Wood (1837-1915), laryngologist of Boston, was born in that city June 26, 1837, and died in Brookline, a suburb of Boston, Feb. 3, 1915. He was the son of Samuel H. and Dorcas Sawyer Langmaid, his father being of Welsh extraction and his mother of English. He was educated in the Boston Public Schools and the Roxbury

Latin School, preparing at the latter for Harvard College, from which he received his A. B. in 1859. He then taught school for a short time at the Henderson Institute in Danville, Ky., but deciding to study medicine, entered Harvard Medical School, from which he was graduated and completed his course at the Massachusetts General Hospital as surgical house-officer in 1864. He then entered the U. S. Army as acting assistant surgeon, remaining until 1865, the close of the Civil War. On his return to Boston he began the practice of medicine, which he continued until a few years before his death. He was physician and surgeon at the Boston Dispensary from 1866 to 1875 and surgeon at the Carney Hospital in South Boston from 1868 to 1880. He was also on the surgical staff of the Children's Hospital from 1870 to 1885, when he was made chief of the department for diseases of the throat. In 1881 he was appointed assistant physician for diseases of the throat in the clinic of Dr. F. I. Knight (q. v.), at the Massachusetts General Hospital, a position which he held till 1892. During all these years there had been an influence at work which caused him gradually to give up general medical and surgical practice and devote himself to diseases of the throat. He was the possessor of a fine tenor voice which preserved its freshness and power until he was about 70 years of age. He was always much interested in the voice and in the methods of voice production, and he was thus led to the study of the larynx by means of the laryngoscope. At the time of his medical studies there was no real knowledge of the living larynx, in fact, it was only seven years since Manuel Garcia, in 1855, had first demonstrated the use of the laryngoscopic mirror. In spite of his having had no instruction in laryngology, Langmaid's love of music and his knowledge of the use of the voice gave him a large acquaintance among actors and singers, whose throats he examined and whose methods of singing he discussed and criticized. In consequence of the experience thus acquired he was elected a member of the American Laryngological Association in 1880, two years after it was founded, and in 1891 he was chosen president. Even before his medical studies he had taken an active and enthusiastic interest in the voice, and while in college was leader of the Glee Club. Immediately after graduation, in 1860, he was elected a member of the Harvard Musical Association and was made its president in 1902, a position which he held for many years, and during half a century he gave much of his time and talent as a tenor singer in the interest of this organization. He was also a member of the quartet of Trinity Church for twenty-five years as well as of a number of male singing societies.

As a member of the American Laryngological Association the papers which he presented naturally had to do with vocal disabilties and their causes and also the proper manner of using the voice with criticisms of the harm done by many of the then prevalent methods of teaching; and before the American Climatological Association, to which he was elected in 1887, he read a paper on changes in the voice in early phthisis. In the Archives of Laryngology, N. Y., 1880-1884, and in the Transactions of the American Laryngological Association, and of the American Climatological Association are to be found the papers written by him.

He led an active, useful, professional life, having a large private practice in addition to all his hospital work and his numerous musical duties and was a member of most of the important medical societies of Boston. But he was not a believer in "all work and no play," for no one was a keener sportsman or more enthusiastic fisherman than he, and no one was more willing than he to do his share of storytelling and singing at the club or medical meeting, and, consequently, he was in great demand at social gatherings. His method of singing must have had distinct merit or his voice would have given out long before it did.

In 1870 Dr. Langmaid married Miss Ella M. Tuttle of Boston, who with two daughters survived him.

JOHN W. FARLOW.

LA ROCHE, Réné (1795-1872), of Philadelphia who wrote a treatise on yellow fever, was the son of a French physician of the same name (1755-1819), who was a graduate of Montpellier (1799), and had practiced in San Domingo until the insurrection in that island when he came to Philadelphia and cared for the French families of that city. Réné was born in Philadelphia in 1795 and had his education there. When seventeen years old he enlisted in the War of 1812 and became a captain of volunteers in Colonel Chapman Biddle's regiment. At the close of the war he engaged in business, beginning the study of medicine in 1817 and graduating M. D. from the University of Pennsylvania in 1820. Soon after graduation he became connected with "Dr. Chapman's Summer School," and

was one of the most active members of the "Kappa Lambda Association of the United States" under whose auspices the "North American Medical and Surgical Journal" was issued for several years, La Roche being one of the editors. When this society ceased to exist, the Monday Evening Club—said to be the first medical club in the United States—was founded. It consisted of the following physicians: Wood, Hodge, Meigs, Bache, Condie, Coates, Bell and La Roche, and later Dr. Bond and Dr. S. H. Dickson (q. v. to all). From the beginning Dr. La Roche was an assiduous writer on medical topics for current journals, and at his death left copious manuscripts upon music, of which he was a devoted lover. His collection of musical works was very extensive and ultimately found its way into the collection of J. W. Drexel. As an active member of the College of Physicians, an original member and president of the Pathological Society, a member of the board of health, president of the state and county medical societies, and a trustee of the University, Dr. La Roche served the cause of medicine. He practiced for over fifty years and died December 9, 1872, at the age of seventy-seven.

His chief work was a treatise on yellow fever (1855). Of this Dr. S. D. Gross said in his History of American Medical Literature in 1876: "As a work of profound erudition, at once complete and exhaustive, written in a scholarly style, and evincing the most patient and extraordinary research, the monograph on yellow fever, by Dr. La Roche, is without a rival in any language." In writing this work he collected a great library on yellow fever embracing the literature of all countries. Dr. Gross has this to say, in his autobiography, of La Roche's personal characteristics: "Dr. La Roche had an expressive and intellectual countenance, a handsome eye, and a good forehead, although his head was not very large. His highly organized and well-balanced brain enabled him to perform a vast amount of labors." In his physique he "was so fragile that it seemed as if a heavy wind might readily blow him over" . . . "I knew La Roche personally for more than a third of a century, a part of this time intimately, and during all the period he retained this attenuated form." "He was a charming conversationalist, always instructive, and free from affectation and pedantry. He was a great reader of light literature, was well informed respecting passing events, and could talk well upon almost any subject."

LARSH, Napoleon Bonaparte (1835-1887), of Nebraska City, Nebraska, was one of the medical pioneers of the state. Larsh was of French parentage and was born January 6, 1835, at Eaton, Ohio. He attended Antioch College, Ohio, and received his M. D. from Miami Medical College in 1857. After spending a short time in Palestine, Ohio, he came to Nebraska City in 1859 where on December 2, 1859, he married Ella S. Armstrong. He became at once a factor in the affairs of his city and state as well as in the medical profession. In 1868 he was one of those who organized the Nebraska State Medical Society and was one of the important members in its early days. He signed the original constitution as a delegate from Otoe County and was elected president in 1870. He contributed at this meeting a paper reporting a case of pyemia. At the meeting in 1871 in Lincoln he presided and also read a paper reporting a gunshot wound of the abdomen. In 1870, 1871 and 1872 he was superintendent of the State Hospital for the Insane at Lincoln.

That he continued active in both public and professional affairs is evidenced by the fact that death (on December 22, 1887) was due to an acute congestive disturbance following severe exposure while on a professional call and that at the time he was mayor of Nebraska City.

H. Winnett Orr.

LATHAM, Henry Grey (1831-1903), army surgeon, of Lynchburg, Virginia, was the son of Dr. Henry Latham of Lynchburg, Virginia, being born in that city March 4, 1831. His father was a physician, and both he and his son had the honor of being chosen president of the state medical society. Educated in private schools at Lynchburg and the University of Virginia; he studied medicine in the University, graduating in 1851, and did hospital work in Richmond, Baltimore and Philadelphia. He then settled in his native town. He was a member of the Medical Society of Virginia, and elected president in 1891; an honorary fellow in 1892. Before studying medicine he was engaged for a time in engineering, being one of the corps of engineers who laid out the route of the Virginia and Tennessee Railroad. At the beginning of the Civil War he organized the Latham Battery, and in many battles of the first two years of the war he and his men were conspicuous for their bravery. He ruled his

men through their devotion to him. About the latter part of 1862 he was commissioned surgeon in the army, and as such served until the close of the war.

He married, in 1853, Anna Turner. They had three children, none of whom survived their father. He suffered for several years from organic disease of the heart, of which he died on May 5, 1903.

His wit was proverbial and he was noted as a toastmaster and as a writer of humorous sketches and poetry, and his professional papers are scholarly and full of thought, though not numerous. The title of two are: "Report on the Advances in Surgery"; "Transactions of Medical Society of Virginia," 1885; "A Neglected Medical Function"; "Presidential Address," ibid., 1892.

ROBERT M. SLAUGHTER.

LATIMER, Henry (1752-1819), army surgeon, of Delaware, was born at Newport, in that state, April 24, 1752, and graduated A. B. from the University of Pennsylvania in 1770 and A. M. in 1773, completing his medical education at Edinburgh University, but did not take a degree. He settled at Wilmington, Delaware, but on war breaking out was appointed hospital surgeon and physician. In 1777 he was appointed surgeon of the flying hospital with Dr. James Tilton (q. v.). He was honorably mentioned by Gen. Washington during the war, and in 1813 appointed surgeon-general of the army and discharged in 1815. He was a member of the State Medical Society from its organization, and at one time its president. As a surgeon in the Continental Army he won distinction and afterwards both as physician and surgeon was considered a man of ability and of high character.

He gave up practice in 1794, when he was a member of the State legislature, 1793-95. He was a United States Senator, 1795-1801.

He married early in life, and had five children, and died at Philadelphia, December 19, 1819.

HANNAH M. THOMPSON.

LATIMER, Thomas Sargent (1839-1906), professor of medicine in the Baltimore College of Physicians and Surgeons, was born at Savannah, Georgia, June 17, 1839. Having received a literary training at the Sherwood Academy, York, Pennsylvania, he entered the medical school of the University of Maryland, and was graduated M. D. in 1861 and soon after went south and entered the Confederate Army as private, but was soon appointed assistant surgeon, later full surgeon, and medical purveyor of the army of Northern Virginia. The war having closed, he remained at Richmond one year, and in 1866 was appointed resident physician to the Baltimore Infirmary, a position he held two years and then began private practice.

Among other appointments he was professor of anatomy in the Baltimore College of Dental Surgery; in 1873 held the chair of surgery, in the College of Physicians and Surgeons; and was appointed, in 1876, to the chair of physiology and diseases of children, and in 1883 professor of the principles and practice of medicine. He was president of the Baltimore Medical Association, 1872-73, of the Clinical Society of Maryland, 1880-81, of the Medical and Chirurgical Faculty of Maryland, 1884-85, and for many years he held the same office in the Faculty of the College of Physicians and Surgeons. With E. Lloyd Howard he edited the "Baltimore Medical Journal" in 1870-71. In 1873 he was the editor of the "Physician and Surgeon," and was a frequent contributor to the journal literature and wrote sections for Harris' "Principles and Practice of Dentistry" and Loomis' "Textbook of Medicine." Among his most valuable articles are those on alcoholism, actinomycosis and diseases of children. He died May 16, 1906, from Bright's Disease. He knew that his case was hopeless several years before the end, but he stuck to his work until the last year of his life. Then with that fine sensibility which characterized him, he offered his resignation, but his faculty refused to accept it, and he remained in office until his death.

EUGENE F. CORDELL.

LAWRENCE, Jason Valentine O'Brien (1791-1823), founder of a summer school of anatomy at Philadelphia. Lawrence spent six years in study at the University of Pennsylvania, where he received his M. D. degree in 1815, returning at once to New Orleans, and beginning the practice of medicine with Dr. Flood, his step-father. During his study at the University of Pennsylvania, he had acquired a taste for the more scientific aspects of medicine, which caused him, three years after his return, to sacrifice an unusually brilliant prospect of entering upon a large practice at home so that he might return to Philadelphia for further scientific study. At that period the medical school of the University of Pennsylvania closed its doors in April and was not again opened until the following November. To offer advantages to

those desiring to study during this vacation period, Lawrence opened a private school in which he gave a course on anatomy and surgery. This course began in March, had a recess in August, and ended in November. He gave six lectures a week and these were distinguished for the ease and perspicuity of their style and attracted many students. His school differed from the private courses in anatomy given by numerous practitioners at this time in that it was more systematically organized, and was open to the public, while the lessons given by others were more in the nature of instruction to private pupils. The school founded by Lawrence existed for many years, and later became known as the Philadelphia School of Anatomy. In 1875 this school was closed, but soon afterwards another school bearing the same name was opened by a former teacher in the school, and was continued until recent years. In the fall of 1818 Lawrence became assistant to Dr. Gibson, professor of surgery at the University of Pennsylvania, and in 1822 he was also made assistant to Dr. Horner, then adjunct professor of anatomy, and about the same time he was appointed surgeon to the Philadelphia Hospital.

In 1821 the "Academy of Medicine was formed for the development of scientific medicine." Lawrence was an active member of this academy. He was diligent in scientific investigation, one of his chief pieces of work being the "Study of the Action of Veins as Absorbents." Dr. Chapman, professor of practice and physiology at the University of Pennsylvania, became interested in the views brought forward by Magendi, that the veins as well as the lymphatics served as absorbents. He himself disbelieved in the conclusions of Magendi, and at his suggestion a committee of the Academy of Medicine was appointed to make a study of the subject. He gave pecuniary assistance to this committee, which consisted of Dr. Lawrence, Dr. Harlan and Dr. Coates. Over ninety experiments on living animals were performed. Lawrence not satisfied with this, in the following summer, together with Dr. Coates, performed an additional series of over one hundred experiments. He had begun a third series to determine the method of absorption in the brain, when his work was cut short by death. The results were published in the "Philadelphia Journal of Medical and Physical Sciences," vol. iii, p. 273; vol. v, pp. 108 and 327, and they not only verified but extended Magendi's views.

In New Orleans, Lawrence had exposed himself to yellow fever by making autopsies on putrid bodies. He investigated the subject still further in the epidemic of 1820, and left the most complete record of autopsies which had been made up to that time. He left over 3,000 pages of manuscript, much of it for use in a projected work on pathological anatomy, a subject at that time neglected in America.

Although if Lawrence had lived, he would probably have established an extensive practice in Philadelphia, his devotion to scientific teaching and study during the earlier years of his life left him little time to work at building up a trade among the wealthy. While he was attending the poor, during an epidemic of typhus fever in that city in 1823, he was stricken with a mortal illness, at that time being but thirty-two years old.

CHARLES R. BARDEEN.

LAWSON, Leonidas Moreau (1812-1864), of Cincinnati, founder and editor of the Western Lancet, was born in Nicholas County, Kentucky, September 10, 1812, a son of the Rev. Jeremiah Lawson, who had emigrated from Virginia to Kentucky in 1797 and had married Hannah Chancellor. Leonidas received his early education in the school which afterwards became Augusta College and in 1830 began to study medicine, two years later receiving a license to practice in the first medical district of Ohio. He removed soon afterwards to Mason County, Kentucky, where he practiced until 1837, graduating at Transylvania University, Lexington, Kentucky, in the spring of 1838. In 1841 he removed to Cincinnati, Ohio, the following year founding the "Western Lancet," and continuing as editor until 1855. In 1844 he began a reprint of Hope's "Pathological Anatomy." During the same year he received a call to a chair in Transylvania University, and in 1845 spent several months in the hospitals of London and Paris. On his return he moved to Lexington, Kentucky. In 1847 Dr. Lawson was made professor of materia medica and general pathology in the Medical College of Ohio, a position he held until 1853, when he was appointed professor of the principles and practice of medicine. In 1856 he returned to the Medical College of Ohio, but in 1860 filled the chair of clinical medicine in the University of Louisiana.

In 1861 he published his treatise on "Phthisis Pulmonalis," a work to which he had given six years of earnest labor, destined to

be a standard text-book long after its publication.

Lawson married twice. His first wife was Miss Louisa Cailey, of Felicity, Ohio, who died in 1846 leaving three daughters. One of them—Louise—became a noted sculptor, receiving high honors in this country and abroad. She died in 1899. His second wife was Eliza Robinson, daughter of John Robinson of Wilmington, Delaware; by her he had two sons and five daughters. Dr. Lawson died January 21, 1864.

A. G. Drury.

LAWSON, Thomas (1781?-1861), army surgeon, was born in Virginia and after completion of his medical studies was appointed surgeon's mate in the navy, March 1, 1809. He became surgeon of the sixth Infantry May 21, 1813. Upon the reduction of the army in 1815, he was retained in the service as surgeon of the seventh Infantry. Upon reorganization of the medical department in 1821 he was army surgeon, senior in grade, and so continued until his promotion as surgeon-general in 1836. His character was marked not only by administrative ability but by an intrepid bravery which led to his appointment as lieutenant-colonel of a regiment of Louisiana volunteers and to his assignment to the organization and command of a battalion of New York and Pennsylvania volunteers in the Seminole war. He served in every war in which his country was engaged up to his death, excepting the Black Hawk War. When appointed surgeon-general he was acting as medical director of the troops from the north designed for service in the Florida War, so that he did not arrive in Washington until six months after his appointment. He secured for army medical officers actual military rank, but without command, and enunciated the principle that such officers should be allowed to engage in private practice at their stations when it could be done without interfering with military duty. In 1850 he inaugurated the custom of sending delegates from the army to the American Medical Association, and in 1856 secured an increase of the commissioned medical force, the enlistment of hospital stewards as such, and the authorization of extra duty-pay for soldiers detailed for hospital service. He accompanied Gen. Winfield Scott on his Mexican campaign and received the brevet of brigadier-general for gallantry.

He was the author of "Report on Sickness and Mortality U. S. A. 1819-39," 1840; "Meteorological Register 1826-30, and Appendix for 1822-5," Phila, 1840.

A man of commanding character, he exerted a most effective and beneficent influence in favor of his department. While on a trip for rest and recreation he died of apoplexy at Norfolk, Virginia, May 15, 1861.

James Evelyn Pilcher.

LAZEAR, Jesse William (1866-1900), of the United States Army Yellow Fever Commission and one who laid down his life in the investigation, was born in Baltimore on May 2, 1866. His early education was received at Trinity Hall, a private school in Pennsylvania. From there he went to the Johns Hopkins University, graduating in 1889; he studied medicine at Columbia University, New York, and following graduation in 1892 was interne at Belleuve Hospital. He then studied for a year in Europe, part of his time being passed at the Pasteur Institute in Paris. On his return he was appointed bacteriologist to the medical staff of the Johns Hopkins Hospital and also assistant in clinical microscopy in the University, where he displayed brilliant promise in research. It was he who first succeeded in isolating the diplococcus of Neisser in pure culture in the circulating blood in a case of ulcerative endocarditis, and he was the first person in this country to confirm and elaborate the studies of Romonovsky and others concerning the intimate structure of the hematozoa of malaria.

In 1900, when the United States Army Yellow Fever Commission was appointed, he was made a member and reached Cuba several months before his colleagues. This time he spent in investigating the pathological and bacteriological side of the disease, so that when the commission met he was able to say with confidence that cultures and blood examinations promised nothing of special importance. He, as well as the other members of the commission, believed in the theory of the transmission of the disease by means of the mosquito. It was, therefore, with a full knowledge of his danger that he allowed a mosquito which was known to have bitten a yellow-fever patient to alight upon his hand and take its fill. Five days later he was taken ill with the disease, but before he would consent to be removed to the yellow-fever hospital he made over to his colleague, Dr. Carroll, his notes on mosquito inoculation and told him of his personal experience. For three days he held his own, but then the dreaded black vomit made its appearance, a

symptom which he well knew indicated that the case was all but hopeless. Dr. Carroll, who visited him at this time, said that he could never forget the expression of alarm in his eyes when this symptom was impending. Four days later, on September 26, 1900, he died.

Lazear's early death was a most grievous loss to his profession and to the world at large. He laid down his life before the Yellow Fever Commission had well entered upon their work, so early indeed in its career that his name appears on but one of their published reports. Nevertheless, although his untimely death deprived him of a full share in the brilliant results which they achieved, he did heroic service and Walter Reed (q. v.) when speaking of him before the Medical and Chirurgical Faculty of Maryland, closed his remarks with these words: "It is my earnest wish that, whatever credit may hereafter be given to the work of the American Commission in Cuba, the name of my late colleague, Dr. Lazear, may always be associated therewith."

Dr. Lazear is buried in the Loudon Park Cemetery at Baltimore and a memorial tablet has been erected to his memory at the Johns Hopkins Hospital.

He married and left two children, the younger of whom he never saw.

CAROLINE W. LATIMER.

LEAMING, James Rosebrugh (1820-1892). On February 20, 1820, there was born at Groveland, Livingston County, New York, one James Rosebrugh Leaming, destined to help suffering humanity by his special study of chest affections. In 1845 he studied under Dr. Lauderdale of Geneseo; in 1847 matriculated at New York University, and in 1849 graduated, immediately after settling down to practice in that city, where his lectures in the New York clinic, of which he was president, were strikingly clear, original and useful. "Beyond all doubt his greatest teaching was with regard to pleural pathology and the interpleural origin of râles. His teaching of the latter met with a storm of opposition, but he lived to see his propositions met with widespread acceptancy in the profession." By common consent Dr. Leaming was credited with an ear which, in its acuteness, was almost without a rival. He will be always regarded as a leading diagnostician of diseases of the heart and lungs. He was so sure of his own power of detecting the occult features of cases that one of his dying regrets was the inability to sound his own chest. Curiously, his acuteness of observation seemed to extend to his quick knowledge of men, so astonishing was the accurate estimate he formed. He was physician to the Northern and to the Demilt dispensaries and to St. Luke's Hospital.

Among his many memberships was that of the New York Academy of Medicine; the Pathological Society; the Medical Society of the State of New York, and the American Medical Association; and among his noteworthy writings are: "Cardiac Murmurs," New York, 1868; "Respiratory Murmurs," New York, 1872; "Plastic Exudation within the Pleura, Dry Pleurisy," Philadelphia, 1873; "Contributions to the Study of Diseases of Heart and Lungs," New York, 1884; "Significance of Disturbed Action and Functional Murmurs of the Heart," 1875.

He died on December 5, 1902, aged seventy-two, after suffering heroically.

LEAVENWORTH, Melines Conklin (1796-1862), botanist and army surgeon, was born in Waterbury, Connecticut, January 15, 1796. He was the eldest son of Mark Leavenworth, a graduate of Yale, and one of the pioneers in the manufacturing business in Waterbury, a man of energy and ability, thorough and practical in the training and education of his family. As a child Dr. Leavenworth showed a keen intelligence and spent many hours in reading history and the natural sciences when other children of his age were at play. When fourteen years of age he went to the Cheshire Academy and, after a year there, to the Ellsworth Academy, where he studied for three years. At the age of eighteen he began the study of medicine with Dr. Edward Field, of Waterbury, but later studied with Dr. Baldwin, Dr. Jonathan Knight (q. v.), and Dr. Eli Ives (q. v.) of New Haven. Under the tuition of Dr. Ives he began to specialize in courses of lectures in the recently organized medical school of Yale and graduated in the class of 1817—at the age of twenty-one. After graduation he devoted himself exclusively to the study of botany and was placed in charge of a botanical garden, which was cultivated for the benefit of the medical college.

In 1819 he made an engagement with Dr. Whitlaw, as an assistant lecturer on botany, and made a tour through most of the Southern States. He familiarized himself with the flora of every state and territory through which he traveled, and as he already knew that of New England and some of the middle states, his

knowledge was extensive. After completing his engagement with Dr. Whitlaw, he spent a few months in the study of French and then began the practice of medicine in Cahawba, Alabama. After a few months in this town he was attacked with one of the epidemic fevers of the locality and decided to leave. He went to Augusta, Georgia, and engaged in the drug business for four years and then deciding to enter the army, became assistant surgeon and served in the army for eleven years. During this time he availed himself of every opportunity to make botanical researches. Whenever he obtained leave of absence, instead of returning to his home and friends, he penetrated to the wilds of Texas and the plains, making diligent search for new specimens of plants in unexplored regions. He was, for a time, almost the only investigator, or rather pioneer in those investigations in the particular localities at which he was stationed and his labor resulted in valuable additions to botanical science. His contributions were repeatedly acknowledged by Dr. John Torrey and Dr. Asa Gray in their work on the Flora of the United States, and in Silliman's "Journal of Science."

After him was named the beautiful composite "Coreopsis Leavenworthii," widely disseminated in Florida. The pretty and widespread Florida "heliotropium Leavenworthii" is also a namesake of his.

Dr. Leavenworth's reputation as an army surgeon was good. He was competent and faithful and very popular among his men. He had natural qualifications for camp life on the frontier, his genial manner, the ease with which he adapted himself to circumstances and his general intelligence made him a useful officer. He resigned his position in the army in 1842 and returned to Waterbury to take up the practice of medicine, but was never contented after the change, missing the free intercourse and social enjoyments of camp life, and, on the breaking out of the rebellion he applied for the position of surgeon in one of the Connecticut regiments. In spite of his advanced age and the arduous duties of the service, he accepted the position of assistant surgeon in the 12th Regiment Connecticut Volunteers and began his duties while the regiment was stationed at Hartford in the autumn of 1861. The following winter he accompanied the command South, arriving at New Orleans at the time of its capture. In the Fall of 1862 he was taken with pneumonia and died on November 18, 1862.

Dr. Leavenworth's most distinguishing faculty was memory. He was a living encyclopedia of knowledge, of events, dates and facts —remembering almost everything he ever read, heard or saw. He seldom found it necessary to re-read a book or to re-investigate a subject when once mastered. This remarkable faculty made him valuable as a consultant and a most interesting companion.

He never married but late in life took upon himself the support and care of a family of orphans, the children of his deceased sister.

LeCONTE, John (1818-1891), teacher of natural philosophy and a founder of the University of California, was born in Woodmanston, Georgia, December 4, 1818. Of French Huguenot descent, his father was Lewis LeConte, a distinguished naturalist, and his brother was Joseph LeConte (q. v.). The father (1782-1838), for forty years one of the most prominent naturalists in the South, established a botanical garden and chemical laboratory. His manuscripts were destroyed in the burning of Columbia, S. C. at the close of the civil war but his observations are embodied in the writings of his brother, John Eatton Leconte, Stephen Eliott, William Baldwin and others. John's early education was irregular and desultory, received at a neighborhood school. He graduated at the University of Georgia, Athens, in 1838 with high honors. Moving to New York, he received an M. D. from the College of Physicians and Surgeons there in 1841, and settled in Savannah, Ga., in 1842, where he practiced his profession, kept up his scientific studies and contributed valuable papers to medical literature. In 1846 he was called to the chair of physics and chemistry in his alma mater, where he remained nine years. Resigning in 1855 he became professor of chemistry in the College of Physicians and Surgeons, New York, and was unanimously elected to fill the chair of physics in the South Carolina College at Columbia in 1856. During the Civil War he was superintendent of Confederate nitre works, with rank of major. All his property was swept away by the war and he had to find a new field of labor, therefore he journeyed westward. In 1868 he was elected professor of physics and assisted in the work of organization of the State University of California. In 1869 he acted as president, and in 1876 he was elected full president, still retaining his chair. He resigned his presidency in 1881, but held the professorship up to the time of his death.

About one half of his life was spent in the service of this institution. In 1869 the University opened with 38 students, 8 professors, and an income of $30,000; Dr. LeConte left it with 1200 students, 150 teachers and an income of $360,000. He was the father of the University. On the campus of The University of California at Berkeley is a large memorial oak with a monument to the brothers John and Joseph LeConte, (q. v.).

The University of Georgia conferred the degree of LL. D. on him in 1879. He was general secretary of the American Association for the Advancement of Science, member of the California Academy of Sciences, the American Philosophical Society and Natural Academy of Science.

In 1857 Dr. LeConte discovered the sensitiveness of flame to musical vibrations, but had not the wealth to develop his discovery, but his priority was acknowledged by Tyndall in his book on sound. During his long scientific career of half a century he published more than 100 papers that have had a distinctive effect on the progress of science.

He married, in 1841, Eleanor Josephine Garham, a lady of rare intelligence, character, and beauty, and they had three children.

Dr. LeConte died in Berkeley, California, April 29, 1891.

LeCONTE, John Lawrence (1825-1883), entomologist and geologist was the son of the naturalist, John Eatton Le Conte (1784-1860), of Huguenot ancestry, and his wife, Mary A. H. Lawrence, and grandson of Lewis Le Conte. He was born in New York City, May 13, 1825, and, his mother dying when he was a few weeks old, was educated under the care of his father, first at Mt. St. Mary's College, Maryland, where he graduated in 1842, and then at the College of Physicians and Surgeons, Columbia, taking his M. D. in 1846. Young Le Conte acquired an interest in entomology from his father, who had been in correspondence with European workers in this field and had collected a cabinet of specimens. While a medical student, at the early age of nineteen, he published his first paper containing descriptions of twenty-odd species of Carabidae from the eastern United States. Thus Dr. Le Conte began his career in science in 1844, when his first paper on the coleoptera was published in the proceedings of the Philadelphia Academy. During 1849 he made several visits to the Lake Superior region, once in company with Louis Agassiz (q. v.), collecting specimens, and in the following year he visited California and Panama, exploring also the Colorado desert in search of material in many departments of natural history, material that was carefully studied on his return. He published his "Attempt to Classify the Longicorn Coleoptera of America, North of Mexico" in 1852. At this time he moved to Philadelphia, where the greater part of his scientific labors were conducted and his numerous writings published. In 1859 he edited the "Complete Writings of Thomas Say on the Entomology of North America." During the war he served as surgeon of volunteers and medical inspector, with rank of lieutenant-colonel, finishing in the latter position in 1865. He became chief clerk of the United States Mint in Philadelphia in 1878, and held that place until his death.

Dr. Le Conte acted as geologist to a survey of the Union Pacific Railway in 1867 and spent the years 1869 to 1872 traveling abroad and visiting all the chief museums. He had a remarkable memory and was able to recall and describe to the many savants the species in his own collection so that doubtful points of nomenclature were elucidated. In 1875 he was president of the American Association for the Advancement of Science, giving a noteworthy address on retiring, on the relations of the geographical distribution of coleoptera to paleontology. Public office did not attract him, and he contented himself with being an honorary member of the chief foreign entomological societies. At the time of his death, November 15, 1883, he was president of the American Entomological Society, of which he had been a founder. Scudder speaks of Le Conte as the greatest entomologist this country had produced. He described nearly half of the coleoptera for the first time and actually described or at least named 4739 nominal species.

In 1861 Dr. Le Conte married Helen, daughter of Judge Grier of Philadelphia, and they had two sons.

LeCONTE, Joseph (1823-1901), geologist and teacher, was born February 26, 1823, and descended from Guillaume LeConte (LeConte de Nonant, of Normandy) who settled about 1698 at New Rochelle in the state of New York. His father, Lewis, had left the North to take up his permanent abode upon a family estate in Woodmanston, Georgia, and it was here Joseph was born. From the University of Georgia he received the degrees

A. B. 1841; A. M., 1845; from the College of Physicians and Surgeons, New York, M. D., 1845; from Lawrence Scientific School (Harvard), B. S., 1851; from Princeton, LL. D., 1896. He was a member of the National Academy of Sciences, and various other societies. In Cambridge he studied under Louis Agassiz (q. v.), and in New York under John Torrey (q. v.) and Louis A. Sayre (q. v.). He was elected to the chairs of geology and natural history, University of Georgia, 1852; to the chairs of geology and chemistry, South Carolina College, 1856; to that of chemistry in the medical department of the same college, 1857; and those of geology and zoology, University of California, in 1869—positions he continued to hold until his death. During the Civil War he was chemist of the Confederate laboratory for the manufacture of medicines, 1862-3, and chemist of the Nitre and Mining Bureau, with the rank of major, 1863, until the end of the war.

Dr. LeConte practiced as a physician only a few years after graduating M. D., and before taking up his studies under Agassiz. Nevertheless, he continued to be interested in medical subjects, publishing a number of papers on such topics; and a book, "Sight," which is an exposition of the principles of monocular and binocular vision, 1880, and was well thought of by ophthalmologists. Besides these, he was the author of various books and articles, most of which lie in the domain of natural science. His book, "Religion and Science," that appeared in 1874, the result of a series of Sunday lectures on the truths revealed in nature and scripture, excited a great deal of interest at the time. In his own specialty of geology his best work lay along the line of mountain making and structure. Up to the time of his death he was head of the departments of geology and biology in the University of California, but elected to those of geology and zoology, for in 1869 the term "Biology" had not yet entered scientific nomenclature.

In 1874 he married Caroline Elizabeth Nisbet, daughter of A. M. Nisbet, of Milledgeville, Georgia, and had five children, four of whom survived him, Emma Florence, Sarah Elizabeth, Caroline Eatton and Joseph Nisbet. Dr. LeConte died while on a camping trip in the Yosemite Valley, July 6, 1901. There is a memorial lodge to his memory in the Yosemite Valley where the University of California Extension Division holds yearly lectures in June.

It is a peculiar fact that the LeConte family were scientific men from father to son for two hundred years. Dr. Pierre LeConte (born in 1704) was in his day a physician of some note, and since his time there has not been one generation of his family in the male line which has not been represented by scientists and by one or more physicians. This striking example of heredity was noted by Samuel Scudder in his biographical sketch of the LeConte family, read before the National Academy of Science in 1884. His many scientific publications were mostly confined to geology and physiology. Among those connected with medical science are:

"Artificial Production of Sex," "Nashville Journal of Medicine and Surgery," 1866-67; A series of articles on "Binocular Vision," "American Journal of Science," 1868-87; "Glycogenic Function of the Liver," "American Journal of Science," 1878-89; "Genesis of Sex," "Popular Science Monthly," 1879; "Effect of Mixture of Races on Human Progress," "Berkeley Quarterly," 1880; "Significance of Sex in Evolution," "Science," 1880; "Pacific Medical Journal," 1880; "Evolution; Its Nature, Its Evidences, and Its Relation to Religious Thought," 1888.

CHARLES E. LECONTE.

LEE, Arthur (1740-1792), practitioner of Williamsburg, Virginia, Minister to France, was born in the County of Westmoreland, Virginia, on December 20, 1740. He was the sixth son of Thomas Lee of Stratford, the first native Virginian to be appointed governor of the colony. The distinction attained by each of his six sons caused Washington to write in 1717: "I know of no county that can produce a family all distinguished as clever men, as our Lees." Arthur Lee was educated and took his M. D. at Edinburgh University. He gave special attention to botany and to materia medica; and his treatise in Latin on the botanical character and medicinal uses of Peruvian bark obtained a prize and was published by the university. On returning to Virginia he settled in Williamsburg, and practiced with success for several years. Not liking his profession, however, he gave it up, went to London and began to study law in the Temple, with a view to a political career. While there, he rendered most important service to his country in sending to America the earliest information of the plans of the British Ministry. When instructions were sent to Gov. Bernard, Lee communicated their nature to the patriots of

Boston. In 1775 he was in London as agent of Virginia, and presented to the King in August of that year the second petition from Congress. When Jefferson declined the position, Lee was appointed minister to France, and joined his colleagues, Dr. Franklin and Mr. Deane, at Paris in December, 1776. History deals fully with the dissentions which arose between Lee and his colleagues resulting in his return to America. So unquestioned was his integrity, he found no difficulty in reinstating himself in the opinion of the public, and in 1784 was appointed one of the commissioners for holding a treaty with the Indians of the Six Nations, a trust which he executed with much honor to himself. In 1790 he was admitted a counsellor of the Supreme Court of the United States by a special order.

He died after a short illness December 12, 1792, at Urbanna, Middlesex County, Virginia.

His published articles were mostly of a political nature, and consisted of "The Monitor's Letters," written in 1769 in vindication of the colonial rights, "Extracts from a letter to Congress, in answer to a Libel by Silas Deane," 1780; and "Observations on Certain Commercial Transactions in France," laid before Congress in 1780.

ROBERT M. SLAUGHTER.

LEE, Benjamin (1833-1913), of New York, and Philadelphia, pioneer orthopedist and sanitarian, was born at Norwich, Conn., Sept. 26, 1833, his father being the Rt. Rev. Alfred Lee, D. D., Bishop of Delaware, while among his maternal ancestors was Judge Trumbull of Connecticut, the patriot poet of the Revolution. After receiving his primary education at the Episcopal Academy, Philadelphia, he entered the collegiate department of the University of Pennsylvania, graduating A. B. in 1852, and A. M. in 1855, and Ph. D. in 1876, after attending courses of the Auxiliary Faculty of Medicine of that University in 1874-5 and 1878. He attended lectures at Jefferson Medical College in 1853-4 and at the New York Medical College in 1854-55-56, obtaining his M. D. from the latter institution in 1856, and receiving a prize for his thesis on "The Mechanics of Medicine." After a service of two years in the hospitals of New York he further prosecuted his studies in Paris and Vienna, and was secretary of the American Medical Society in Paris in 1858. Returning to this country he established himself in general practice in New York City, and while in that city was a member of the Medical Society of both county and state. In 1863 he became associated with Charles F. Taylor (q. v.) in the treatment of deformities and spinal affections by mechanical agencies, and in 1865 removed to Philadelphia, continuing the practice of orthopedics and the treatment of nervous diseases, and especially devoting himself to the development of mechanical therapeutics in connection with these classes of affections. During June, July, and August, 1862, and July, 1863, he served as surgeon in the U. S. Army, being attached to the 22nd regiment, New York National Guard. In 1885 Dr. Lee was appointed a member of the newly created State Board of Health, of which he was elected secretary, a position which he continued to fill until that board was superseded by the Department of Health in 1905, when he became assistant to the commissioner. From 1893 to 1905 he was secretary of the State Quarantine Board. He supervised the sanitary and medical service in and about Johnstown, Ohio, after the great floods of 1889. In that year he was appointed United States commissioner for the condemnation of land for quarantine purposes at the mouth of Delaware Bay, and in 1891 Governor Beaver appointed him a member of the Quarantine Commission to select a site for a new station on the Delaware River or Bay. In 1898-99 he was health officer of the City and Port of Philadelphia. He was a member of the Philadelphia County Medical Society, of which he was corresponding secretary in 1875 and vice-president in 1876; of the Medical Society of the State of Pennsylvania, of which he was elected treasurer in 1873, and of the American Medical Association. His most important production as a medical author was his work, "The Correct Principles of Treatment for Angular Curvature of the Spine," 1872. During 1862 he was editor of the "American Medical Monthly." He was president of the American Academy of Medicine, the American Public Health Association, and the American Orthopedic Association.

He was married, April 5, 1859, to Emma Hale, daughter of Norman White of New York. He died at Point Pleasant, New Jersey, July 11, 1913.

Lee, Charles Alfred (1801-1872), early peripatetic teacher of medicine, editor, writer, son of Samuel and Elizabeth Brown Lee, was born at Salisbury, Connecticut, March 3, 1801. He graduated A. M. at Williams College, Massachusetts, in 1822 and began to study medicine with his brother-in-law, Lu-

ther Ticknor, M. D., of Salisbury, Connecticut, graduating from the Berkshire Medical Institution at Pittsfield, Massachusetts, in 1825, where he held the office of demonstrator of anatomy during the winter session, and instructor in botany during the summer course.

When the Northern Dispensary of New York City was being established, Dr. Lee and Dr. James Stewart were among its most active and most efficient promoters. He accepted the chair of materia medica and general pathology in the Geneva Medical College, New York. After the year 1850 Dr. Lee devoted himself chiefly to teaching various branches of medicine in different medical colleges, among which may be named the University of the City of New York; Geneva Medical College; University of Buffalo, medical department; Vermont Medical College, at Woodstock; Maine Medical School, at Brunswick; Berkshire Medical Institution; Starling Medical College, Columbus, Ohio. The branches taught by him in these different colleges were: therapeutics and materia medica; general pathology, obstetrics, and diseases of females; hygiene and medical jurisprudence.

In 1850, in connection with his colleagues, Dr. Hamilton, Dr. Flint, Dr. Hadley, and Dr. Webster, he founded the Buffalo Medical School, acting under the charter of the University of Buffalo. He wrote extensively on a great variety of medical and scientific subjects. His "Physiology for the Use of Elementary Schools" was published by the American Common School Society about 1835 and passed through ten or more editions, much popularizing this important branch of knowledge. His "Manual of Geology for Schools and Colleges" was published in 1835. In 1843 he was instrumental in establishing the "New York Journal of Medicine and the Collateral Sciences". In 1845 Dr. Lee brought out an edition of "Principles of Forensic Medicine," by William A. Guy, M. D., with extensive and valuable notes and additions, and in 1848 began the most important and laborious professional work of his life—the editing an American edition of Dr. James Copland's "Dictionary of Practical Medicine," issued irregularly in London. The Dictionary was fifteen years in passing through the press of the Harpers, owing to its slow publication by the author in London. The entire work forms three immense octavo volumes. He also edited and enlarged an English work entitled "Bacchus, an Essay on the Nature, Cause, Effects and Cure of Intemperance," by Ralph B. Grindrod; also A. T. Thomson's "Conspectus" of the London, Edinburgh, and Dublin Colleges, and of the United States Pharmacopoeia; also "Pharmacologia, or, the Theory and Art of Prescribing," by J. A. Paris, M. D. During the last years of his life he wrote a work on the "Indigenous Materia Medica of the United States," which is in manuscript and would form a volume of about six hundred pages.

In the spring of 1862, the second year of the war, Dr. Lee visited Europe to collect plans, models, and specifications of the best and most recent naval, civil, and military hospitals of Great Britain and the Continent, for the use of the United States Government. These, with others, were placed in the archives of the War Department at Washington. He wrote for the "American Medical Times", of New York, about fifty elaborate and carefully prepared letters designed to furnish useful information to our military and naval surgeons. During the war he accepted a situation as hospital inspector and visitor, in the United States Sanitary Commission's employ. He labored efficiently in this field until the close of the war, and in the spring of 1865, soon after the surrender of Gen. Lee's army, the doctor was engaged for several months throughout the South in collecting materials for "Memoirs of a Sanitary History of the War." ("Sanitary Records and Medical History of the War," issued by the United States Sanitary Commission.)

Lee was a member of the New York Academy of Medicine and the New York State Medical Society.

On the twenty-eighth of June, 1828, he married Hester Ann Mildeberge, daughter of John A. and Ann DeWitt Mildeberge, of New York City, and had nine children, only three of whom, all sons, survived.

He was taken ill on the thirtieth day of January, 1872, with endocarditis, and died after two weeks of suffering. His wife and three sons survived him.

JOSEPH M. TONER.

LEE, Charles Carroll (1839-1893), New York gynecologist, was born in Philadelphia, Pennsylvania, March 24, 1839, and died suddenly from pleurisy in his home in New York City, May 11, 1893. He was descended from the distinguished family of Lees which settled in Virginia in 1641. In 1770 one member of the family moved to Maryland. The Hon. Thomas Sim Lee, Governor of Maryland in 1779, was Dr. Lee's grandfather. His

father, the Hon. John Lee, married Harriet Carroll, granddaughter of Charles Carroll, of Carrollton, the last of the signers of the Declaration of Independence to die. It may thus be seen that a long line of distinguished ancestors had undoubtedly left their impress upon the mind and physique of Lee. He graduated from Mt. St. Mary's College, Emmettsburg, Maryland, in 1856, and received his M. D. from the University of Pennsylvania in 1859. His LL. D. was conferred by Mt. St. Mary's College in 1890. He was successively appointed to the position of house physician to Wills, Blockley and Pennsylvania Hospitals and assistant surgeon in the regular army at the beginning of the Civil War. At its close, after being appointed to full surgeon, he resigned and settled in New York City. He was a warm personal friend of Dr. George T. Elliot (q.v.), and through him was at once introduced to the best circle of medical men in the city and appointed surgeon to St. Vincent's Hospital and to the Charity Hospital soon after he came to New York. After being assistant surgeon at the Woman's Hospital in the State of New York, under E. R. Peaslee, (q. v.) he became surgeon early in 1879, after the latter's death, a position held over ten years, when, on account of laborious private practice, he resigned. At the time of his death he was consulting physician to the Charity Hospital, St. Elizabeth's Hospital and the Woman's Hospital. In 1887 Lee was elected professor of diseases of women in the New York Post-Graduate School, a position held at the time of his death. He was president of the New York Obstetrical Society for two years, vice-president of the New York Academy of Medicine for three years, and when he died president of the Medical Society of the County of New York.

As a clinical teacher he always interested his class with a wonderful graphic and interesting description of the disease, or lesion, present in the patient before him. He was ever willing to use new appliances, instruments, and medicines, or to try new surgical operations when such seemed to be improvements, but never simply because they were new. As a presiding officer he was quick, judicious, and gracious. In this position he showed, "par excellence," the gentleman of the old school, adorned with all the culture and refinement of the best modern society. As a writer he gave many practical contributions on important subjects. He wrote the article on "Diseases of the Vagina" in the "'American System of Gynecology". His subjects were various and showed a breadth of thought and study. In 1879, in the "Medical Record," we find his helpful paper on "Cystitis"; in 1881, in the same journal, his article on "The Proper Limitation of Emmet's Operation." Later, in the "New York Medical Record," appeared "Puerperal Fever"; while in 1886 he wrote the very scholarly paper on "Ovarian and Uterine Tumors" in the "International Encyclopedia of Surgery." (New York). In 1888 he wrote a paper on "Hysterorrhaphy in the Treatment of Retroflexions of the Womb," and in the fall of 1891 he read before the New York Obstetrical Society a paper on "The Ultimate Results of the Removal of the Uterine Appendages," which was published in the "New York Journal of Gynecology and Obstetrics" and in the "University Medical Magazine." In the "Transactions of the American Gynecological Society," and in those of the Medical Society of the County of New York, of the Obstetrical Society, and of the Academy of Medicine of New York, may be found many pages of his remarks in the discussions of various papers.

Dr Lee married Helen, daughter of Dr. Isaac Parrish (q. v.), of Philadelphia, in 1863, who, with five children, survived him. One son became a physician.

HORACE TRACY HANKS.

LE FEVRE, Egbert (1858-1914), New York clinician and educator, died of scarlet fever and angina March 30, 1914, at the age of fifty-five. He was of Huguenot ancestry on both parental and maternal sides. His father, James L. Le Fevre, a clergyman in New Jersey, was born in New Paltz, New York, and his ancestor was Simon L., who emigrated from France in 1663 to Ulster County, New York. Egbert's mother was Cornelia Bevier Hasbrouck. He was born in Raritan, New Jersey, October 29, 1858, and attended Rutgers College, graduating in 1880 and taking his M. D. from the New York University Medical College in 1883. When nearing the completion of his interneship at Bellevue Hospital in 1885 he had active lung tuberculosis with pulmonary hemorrhage, but made a complete recovery. Dr. Le Fevre, who had grown to the physical proportions of six feet four inches in height and a weight of two hundred pounds, next spent two years in study abroad, returning in 1888 to become clinical lecturer in the practice of medicine in the medical department of New York Uni-

versity. From this position he advanced to adjunct professor of medicine, and in 1898, on the consolidation of Bellevue Hospital Medical College and New York University Medical College took the chair of professor of clinical medicine and associate professor of therapeutics and materia medica. In 1903 he became dean of the faculty and this position and that of professor of therapeutics and materia medica and clinical medicine he held at his death. Rutgers conferred on him the degree of A. M. in 1884, the honorary degree of M. D. in 1903, and New York University the degree of LL. D. in 1911. In 1902 he published a text-book on "Physical Diagnosis," a highly appreciated work, and he contributed editorials to the "New York Medical Journal" and articles to medical periodicals.

Dr. Le Fevre was visiting physician to New York City Hospital from 1895 to 1898, and after the latter date to Bellevue Hospital; also consulting physician to Beth-Israel Hospital. He belonged to a large number of medical societies and had been president of the Association of American Medical Colleges and corresponding secretary of the Academy of Medicine.

He was a man of dominating personality and had great ability as an administrator; his capacity for hard work was a marvel to his associates and a stimulus to his pupils. Chancellor Brown of New York University said of him: "As I have heard him from year to year addressing the entering class at the medical college, I have been profoundly thankful that our medical students were to be under his leadership. It was a massive and vigorous leadership, and pitched on a high plane. In both his professional and academic relationships he was singularly high-minded and unselfish."

Dr. Le Fevre married Mrs. Helen D. Hasbrouck Trotter in 1889. They had no children.

LEFEVRE, John M. (1857-1907), was a well-known and very popular practitioner in the early days of Vancouver, British Columbia, and a member of the Board of Directors of the General Hospital, in which he exhibited a lively interest, also taking a prominent part in the establishment of the new hospital, which was completed shortly after his death in 1907. He held the M. D. and C. M. from McGill University (1879) and the M. R. C. S., England, 1896. He was a surgeon to the Canadian Pacific Railway during construction, and to the Company in Vancouver. Dr. Lefevre was a good diagnostician and took a keen interest in his professional work. He spent a year among the hospitals of Europe, and before returning presented himself for examination and passed the membership of the Royal College of Surgeons of England.

After a short illness he died, in 1907, aged fifty years.

OSWALD M. JONES.

LEIDY, Joseph (1823-1891), an eminent physician of Philadelphia, was born in Philadelphia, September 9, 1823. His father, Philip Leidy, was born in Montgomery County, Pennsylvania, and served as an officer in the Mexican War. He later engaged in making and selling hats in Philadelphia, and did a good business, and had many customers from the adjoining counties as well as in the city. On October 6, 1818, he married Catherine, a daughter of Peter and Rachel Mellick. She was born in Bloom township, Columbia County, Pa., Jan. 27, 1790, and died in Philadelphia, May 28, 1825. Joseph Leidy was the third of four children that sprang from this union. On May 25, 1826, Philip Leidy married Christina Mellick, a sister of his first wife, and it was her wholesome influence that guided Joseph during his boyhood days and later directed his thoughts to the study of medicine. In his earliest childhood he displayed a marked fondness for the study of natural history, the foundation for the many fields of endeavor in which he excelled. He was a recognized authority in vertebrate and invertebrate anatomy, paleontology, anthropology, geology, mineralogy, botany and zoology.

Joseph's grandfather, John Jacob Leidy, was an officer in the Revolutionary War from Philadelphia County and was present at Yorktown and Valley Forge. He married Catherine Le Febre, the sister of Francis Joseph Le Febre, Duke of Dantzig, and one of Napoleon's marshals.

His great-grandfather, Carl Ludwig Leidy, was the original American immigrant who settled in Philadelphia County, Pennsylvania, in 1719, and was the founder of Leidytown, still a post office in Montgomery County, formerly Philadelphia County. At the age of ten years Joseph Leidy was sent to the Classical Academy, a private school conducted by Rev. William Mann, a Methodist clergyman, where he studied English and read Latin and Greek. Joseph even then manifested an unusual interest in minerals and plants and

diligently read books on mineralogy and botany. In his pursuit Mr. Mann lent him his support, although he was frequently called upon to admonish Leidy for repeated unexcused absences from school which the boy spent in the hunt for minerals and plants in the rural districts near Philadelphia. It is a noteworthy fact that these excursions into the realm of nature were prompted solely by his eagerness to find the specimens which he had read about. His favorite hunting ground was along the banks of the Schuylkill and Wissahickon. On one of these occasions he strolled into Mr. Henry Pratt's famous grounds at Lemon Hill where he became acquainted with Mr. Robert Kilvington, a practical and proficient botanist, who then had charge of the hothouse and garden. Mr Kilvington formed a friendship with young Leidy and cheerfully instructed the boy who was so anxious to learn, and in later years took great pride in stating that he had been Leidy's botanical preceptor. Early young Leidy displayed a gift for drawing and the high artistic skill which he acquired was exclusively due to self-cultivation. A small book of his portraits of shells dated February 1833, has been preserved, that shows his skill with a pencil in his tenth year. His school days ended with his sixteenth year. It was deemed expedient that he should now be taught some art by which to earn a livelihood and his father was anxious that Joseph should utilize his skill in drawing by becoming a sign painter, but young Leidy preferred employment with an apothecary where he applied himself so diligently that in a few months he was left in temporary charge of the retail business.

His loving stepmother cherished superior aspirations for all of her children, however, and hoped that they would choose professional careers and so she insisted that Joseph study medicine, for she fully believed that he would become a successful physician. Her constant endeavors finally won the rather reluctant consent of the father and in 1840 young Leidy became a pupil of Dr. James McClintock, then a private teacher of anatomy in College Avenue, where he devoted parts of 1840 and 1841 to practical anatomy. On October 26, 1841, Leidy matriculated at the University of Pennsylvania and was under the instruction of Dr. Paul B. Goddard, then demonstrator of anatomy in the University and Prof. Horner's (q.v.) prosector. Dr. Goddard was a skilful surgeon and devoted his leisure evenings in his office to microscopic studies and there young Leidy received his first lesson in the use of the microscope. Leidy attended three courses of lectures, submitted a thesis on "The comparative anatomy of the eye of vertebrated animals," and complied with other requirements of that time whereupon the degree of Doctor of Medicine was conferred upon him by the University of Pennsylvania, April 4, 1844.

In the year after graduation, he was an assistant during six weeks in the laboratory of Robert Hare (q.v.), professor of chemistry, and then entered that of James B. Rogers (q. v.) lecturer on chemistry in the Medical Institute of Philadelphia, where he remained through the summer course. In the fall of 1844, he opened an office, No. 211 North Sixth Street, but found the restrictions of general practice so irksome that after two years' trial he turned to a university career as teacher. In 1845 Leidy was appointed prosector under Dr. Horner and in 1846 was chosen demonstrator of anatomy in the Franklin Medical College where he served one session, then resigned to resume his position with Dr. Horner, in 1847, where he delivered to Horner's students a private course of lectures on human anatomy. While his kinsman, Dr. Napoleon B. Leidy, was coroner of the County of Philadelphia (1845-48), Dr. Joseph Leidy acted as coroner's physician and received fees for the autopsies he made. In April, 1848, Prof. Horner and Dr. Leidy visited England, Germany and France where they "visited hospitals and anatomical museums, and sought out eminent anatomists and surgeons," returning to Philadelphia in September. During this fall Leidy delivered a course of lectures on histology and in the spring of 1849 he began a course on physiology in the Medical Institute of Philadelphia. His health failed, however, and he had to abandon this course.

In 1850 Dr. George B. Wood (q. v.), professor of the practice of medicine, desired to collect models, casts and preparations, suitable for demonstration in future courses of instruction and he prevailed upon Leidy to accompany him to Europe and render much valuable aid in the search and selection of desirable specimens, a work for which he was especially qualified. They visited the most celebrated schools and museums of Europe and spent many thousands of dollars in the purchase of teaching material. It was during this trip that Leidy made the acquaintance of such distinguished anatomists and physiologists as Owen, Magendie, Hyrtle, Milne,

Edwards, Johannes Muller, and many others. Leidy went abroad on two subsequent occasions and was accompanied by his wife on the last trip. He lectured on physiology in the Medical Institute of Philadelphia in 1851 and in 1852 and in May, 1853, after the death of Dr. Horner the previous March, Dr. Leidy, at the age of thirty, was elected professor of anatomy. In this capacity he served faithfully during the remainder of his life, a period of thirty-eight years, and in addition, a few years before his death, filled the chair of professor of zoology and comparative anatomy. It was universally conceded that he was the highest authority on the subject of human anatomy in this country. In 1871 he was elected professor of natural history in Swarthmore College, a position which he filled for many years, until failing health forced him to relinquish it.

In August, 1851, Leidy was elected a Fellow of the College of Physicians of Philadelphia and he was secretary of the committee on lectures under the Mütter Trust, from January, 1864. His war service consisted in filling the office of acting assistant surgeon in the Army from 1862 to its close. He made about sixty autopsies which are reported in "The Medical and Surgical History of the War of the Rebellion." He was appointed a member of the Sanitary Commission Association, April 3, 1862; and on September 11 the state of Pennsylvania appointed him chief surgeon within the old limits of the city of Philadelphia. Dr. Leidy was elected a member of the National Academy of Science, in 1863, at the time of its organization. In 1885 he was elected president of the Wagner Free Institute of Science in Philadelphia; and in 1889, at the time of its organization, president of the Association of American Anatomists. In 1886 Harvard University conferred upon him the degree of Doctor of Laws, and the Boston Society of Natural History awarded to him, in 1879, the Walker grand prize of $500, which in this instance was raised to $1,000, as a special recognition of his investigations and discoveries in zoology and paleontology, and in the same year he received a prize from the Royal Microscopical Society. The Geological Society of London gave him, in 1884, the Sir Charles Lyell medal for his paleontological researches; and in 1888 he received the Cuvier medal from the Paris Academy of Science for his work in biology. In the period from 1845 to 1887 he was elected honorary member by more than forty of the learned societies of Europe and America.

Time has greatly emphasized the importance of some of Leidy's original discoveries. In 1846 he discovered the "Trichinella spiralis" in pork, and in this connection it has been stated that "From a viewpoint of public health, his discovery of "Trichinella spiralis" in swine seemed to be his most practical contribution to helminthology." In 1849 he demonstrated the existence of bacterial flora in the intestine and in 1851 he originated the method of transplantation of tumors in pathological research. A noteworthy feature in his work in anatomy was an attempt to anglicize anatomical nomenclature. Among the unrecorded discoveries one deserves mention here. Leidy stated that the discovery of the tactile corpuscle on the nerves of the finger is his own. He also frequently alluded to his having observed the amoeboid movements in the white corpuscles, but he interpreted them to be pathological and hesitated in recording his discovery. It is stated that Leidy considered his failure to record this fact one of the greatest mistakes of his life. In 1886, under the cover of a short article entitled "Researches on Parasites and Scorpions," Leidy expressed the opinion that hookworm might perhaps be the cause of pernicious anemia in the United States. This was twelve years before the investigations by Stiles and Ashford apprised the world of the medical importance of this parasitic infection.

Leidy's work as anatomist, botanist, mineralogist, paleontologist, zoologist and anthropologist is crowned by a total of nearly 600 publications. His works are essentially records of facts often new and of the greatest scientific importance. In medicine he was primarily an anatomist and helminthologist and his writings on these subjects alone number over 150. Some of his most important contributions are: "Researches into the comparative structure of the liver," 1848; "Intermaxillary bone in the embryo of the human subject," 1849; "An elementary treatise on human anatomy" (First edition, 1861, 2nd edition, 1889); "Intestinal worms," 1888. It is interesting to note that in 1848 he made the discovery of the presence of eyes in a species of "Balanus," leading Darwin to look for them in other members of this group.

Leidy was one of the group of four distinguished true naturalists who have done most for the introduction of natural science into America—namely, Louis Agassiz, Spencer F. Baird, James D. Dana and Joseph Leidy. He was singularly interested in the

very lowest forms of animal life and he wrote many short papers and in addition published a magnificent monograph on "Rhizopods as they occur in all fresh waters of the country from the Atlantic border to an altitude of 10,000 feet in the Rocky Mountains," 1879. This work is beautifully illustrated with forty eight large plates in color from Leidy's own exquisite drawings. In the domain of paleontology, and particularly vertebrate paleontology, his contributions were so brilliant that "they entitled him to be considered as the equal of any paleontologist produced by this country or Europe." His first paper on this subject appeared in 1847, "The fossil horse of America." Among the more prominent contributions to this subject are: "Ancient fauna of Nebraska," 1853: "Memoir of the extinct sloth tribe of North America," 1852; "Cretaceous reptiles of the United States," 1865; "Description of vertebrate remains from the phosphate beds of South Carolina," 1877. For many years Leidy was the only American naturalist who devoted considerable time to the study of animal parasites and he collected many specimens and made valuable drawings illustrating new genera and species. This material has been arranged and edited by Dr. Joseph Leidy, Jr., a nephew of Leidy, under the title "Researches in helminthology and parasitology, with bibliography of his contributions to science," published by the Smithsonian Institute in 1904. It embraces 281 pages and contains the life work of Dr. Leidy in parasitological and helminthological research arranged chronologically from 1846 to 1891. Perhaps the most important single contribution to helminthology is "A synopsis of entozoa and some of their ectocongeners," 1856, which was the first publication of its kind to appear in America. In this synopsis are contained 100 new species identified and named by Leidy, and reference is made to seventy-two known genera and species which he had encountered in a great variety of hosts.

In palaeontology Leidy found a virgin field in our west where his extensive work has stood the severe test of time and the vast explorations and intensive studies of others; his work remains perfect and his figures and illustrations, the standards for all his successors. It is declared that he never made an incorrect observation or published an incorrect figure! His work reached a climax in 1869 when he published his great monograph "Extinct Mammalian Fauna of Nebraska and Dakota," which still ranks in breadth and accuracy as the finest single contribution that has been made to vertebrate palaeontology in this country, if not in the world." (Osborn). He "lived as the last great naturalist of the world of the old type who was able by both capacity and training to cover the whole field of nature." His work was extensive as well as intensive. Leidy was essentially a man of peace, while Edward D. Cope, a contemporary, was a most militant palaeontologist. When Leidy withdrew from his labors in the field of fossils, it was openly declared in the Philadelphia Academy of Natural Sciences that the step was taken to avoid constant friction and controversies with a competitor. During Leidy's lifetime, he was naturally constantly compared with Cope and Marsh, both great men but his inferiors. Although they were his immediate successors in the field, Osborn says, "I doubt if you will find in the writings of Professor Cope or Professor Marsh a single allusion to the work of Leidy." "Tantaene irae coelestibus animis?"

In 1864 Leidy married Anna, a daughter of Robert Harden, of Louisville, Kentucky. They had no children, but some years later adopted Alwinia, the infant daughter of the late Professor Franks of the University of Pennsylvania. Leidy was fond of children and derived great pleasure from his daughter and her little playmates. His family life was quiet and unassuming and a deep affection between the three members of the circle was a touching tribute to their unity of thought.

Early in April, 1891, he began to feel the strain of hard work and frequently had to sit down and rest during a part of his lectures. On Thursday, the twenty-eighth, he took to his bed and on April 30th he gradually lapsed into unconsciousness and died.

Dr. Joseph Leidy was a man of most charming personality. He enjoyed the society of his friends and was universally beloved by his students who appreciated his instruction and marveled at his wonderful skill with the crayon. Savants and students mourned his loss and gave glowing tribute to his memory. A statue to his memory stands by the City Hall in the shadow of William Penn. On the western slope of the Rocky Mountains in Wyoming stands Mount Leidy, so christened by Dr. F. V. Hayden, the explorer and geologist. In the Luray Caverns of Page County, Virginia, is a great column and a stalactite dedicated to him in September, 1881, known as the Leidy Column and the Leidy Stalactite.

Majestic in noble simplicity, unassuming in greatness, approachable by all seeking knowledge, the last to allude to his own achievements, a soul filled with human kindness tempered by unswerving devotion to the truth—such a man was Joseph Leidy.

CHARLES A. PFENDER.

LEIGH, John, author of "An Experimental Inquiry into the Properties of Opium and Its Effects on Living Subjects . . . ," 144 pp., Edinburgh, 1786, is supposed to be the John Leigh who was a student at William and Mary College in 1769, son of Francis Leigh and Elizabeth Roscoe. His brother William, also, was a physician. They were members of the Leigh family of King William County, Virginia, to which belonged Benjamin Watkins Leigh (1781-1849), United States senator, and Hezekiah G. Leigh (1795-1858), who, with Gabriel P. Desosway, founded Randolph-Macon College. John Leigh's medical education was obtained in Europe, where he received an M. D., but his name would be lost to posterity except for his disputation which gained the Harveian prize in 1785. The motto was: "Quae priores nondum comperta eloquentia percoluere, rerum fide tradentur." (Tacitus). The dedication was to George Washington, the place, Edinburgh, and the date, May 15, 1785. He writes: "Upon this subject very few original observations can be expected; the only demand that can be made upon an author is to collect and arrange with accuracy those opinions which are best established." Then follows a list of opinions, and a series of pharmaceutical experiments testing the value of the opium preparations on the market of the London and Edinburgh pharmacopoeias, showing the amounts of inert matter often present and the superfluous ingredients of many preparations, while utterly rejecting others as foolish, such as Philonium, Mithridatum and Theraiaca. Experiments on animals follow, beginning with the injection of opium into the eyes of puppies (he injected opium into his own eye also); he experimented on rabbits; injected it into the urethra of man, into the vagina of a bitch; experimented on men and women with three and four grains of opium by the mouth and noted the effects, observing nausea and drowsiness; he noted the time it took various preparations to act; he cites the use of opium in typhoid (Cullen) and in smallpox (Sydenham); and in dysentery after cleaning out the bowel. Leigh had a good friend in Dr. James Ramsay, of Virginia, who took thirty drops of thebaine tincture as an experiment on himself, and then in more than three pages gives what is the equivalent to a homeopathic proving of the drug. Leigh's thesis may be described as a careful, critical experimental study of opium as used in his day, taking the right lines for investigation, namely, first a careful preliminary pharmaceutical examination of preparations in use, and then an elaborate experimental inquiry into its effects on man and on animals. The result was slight, owing to the uncertainty in the composition of the available preparations and the absence of accurate chemical knowledge. There was no substantial discovery, nor did he open any immediate door of promise, but Leigh's work was, however, the dawning of the critical experimental spirit destined to yield such a harvest in the next century.

HOWARD A. KELLY.

LELAND, George Adams (1850-1924), Boston laryngologist and otologist, was born in that city, September 7, 1850, the son of Joseph Daniels and Mary P. Adams Leland. After graduating from Amherst College in 1874 he entered Harvard Medical School, receiving his degree of M. D. in 1878 at the completion of an 18 months service as house officer in the Boston City Hospital. While at Amherst his interest in gymnastic exercises and physical development was very marked, and after graduation he offered a cash prize to the class judged the most proficient in these departments. This Leland Prize was awarded annually for nearly 40 years. When looking for some one to introduce into the schools of Japan a system of gymnastics similar to that of Amherst, President Seelye, of Amherst, who had been entrusted with the selection, naturally turned to Dr. Leland, who had recently completed his hospital service. The offer was accepted, and after delaying just long enough to be married to Miss Alice P. Higgins of Boston, the newly wedded couple started off in July, 1878, for a three years stay in Japan. His work there was most successful and he is given the credit of being the first to introduce physical exercises into the schools of Japan. He made a large series of measurements of young people, had charge of the construction of a gymnasium and wrote several books, some of them illustrated, on the value and methods of gymnastics and physical culture. For his services he was awarded the Fourth Order of Merit of Sacred Treasure (Japan). At the

end of his three years' engagement, in 1881, he left Tokio and went to Vienna and Germany to study laryngology and otology to prepare himself for special practice, returning to Boston in 1883 after a five years' absence. He soon received the appointment of aurist to the Boston Dispensary and not long after that of assistant to the physician for diseases of the throat in the out-patient department of the Boston City Hospital, the physicians in charge then and later being Dr. F. H. Hooper (q. v.), Dr. T. A. DeBlois (q. v.) and Dr. J. W. Farlow. The ear and throat departments were not united until many years after, and Dr. Leland held the two positions, that of aural surgeon and assistant in diseases of the throat, with very large and important clinics and much operating at his disposal, an experience of the greatest value to him. The position of aural surgeon he retained until his death. The clinics were used by him in giving instruction in the Boston Polyclinic, in which he was first an instructor and later the dean. Another important teaching position held by him was that of professor of laryngology at the Dartmouth Medical School, at Hanover, N. H., from 1893 to 1913, the title being changed in 1904 to oto-laryngology. He was given an appointment in the Mary Hitchcock Hospital, where he performed many operations before the students in connection with his lectures. He demonstrated methods for correcting deviations of the septum and the removal of septal spurs and paid much attention to showing how to care for diseased tonsils by discission and by slitting open the crypts for drainage, using for this purpose knives with curved blades at right angles to the handles, the so-called Leland knives, which he devised. The above mentioned operations were done before the days of tonsillectomy and Killian's septal operations and were more or less in the nature of novelties.

Dr. Leland was a member of the American Laryngological, Rhinological and Otological Society and of the New England Otological and Laryngological Society, being president of the latter for two years. In addition he took part in four International Otological Congresses. He was elected a member of the American Otological Association in 1894 and also of the American Laryngological Association; of the latter he was president in 1912 and delivered an excellent address. In the Transactions of these two societies appeared many of his most important contributions; for instance: "Lateral Sinus Thrombosis," and a paper on "A Case of Abscess and Exploration of the Brain with good Recovery of Hearing." He wrote "Tonsillar and Circumtonsillar Abscess" and also other papers relating to the ear and throat. He began his studies in diseases of the nose and throat before the days of cocaine and the understanding of adenoid disease. He was primarily an aurist, but the rapid developments in rhinology soon after he began practice had so evident a bearing on his original specialty that he embraced the new knowledge with great zest, not forgetting, however, that otology had been his first interest. In spite of several minor attacks of angina pectoris, he continued his busy professional work until a few days before going to the hospital for a serious abdominal operation which he was unable to withstand, and he passed away on March 17, 1924, in his seventy-fourth year.

He was survived by his wife, a daughter born in Tokio and a son, who bears his father's name, a promising Boston surgeon.

JOHN W. FARLOW.

LE MOYNE, Francis Julius (1798-1879), originator of cremation in America, was born in Washington, Pennsylvania, September 4, 1798, and was the only child of Dr. John Julius and Nancy McCully LeMoyne; his father, when the French Revolution began, left France on account of his liberal sentiments, with the members of the French Colony, and settled at Gallipolis, Ohio, in 1790; a few years later going to Washington, Pennsylvania. Francis Julius LeMoyne was educated at Washington College (now Washington and Jefferson College,) Washington, Pennsylvania, and graduated at the age of seventeen. He attended lectures for two winters at the University of Pennsylvania, making the trip to Philadelphia both times on horseback, and, graduating in 1823, began active practice in 1824, after serving a year as interne at the Pennsylvania Hospital.

About 1835 he became deeply interested in the anti-slavery movement and in education. He was one of the founders of the female Seminary at Washington in 1836, which is still in existence. Later he endowed a chair in Washington and Jefferson College and after the war established a normal school for the colored people at Memphis, Tennessee. Following this he established the Citizen's Library and Free Reading Rooms at Washington, Pennsylvania. Dr. LeMoyne's last ef-

fort in reform was in regard to cremation. He became convinced years before his death that cremation was the proper and sanitary method of disposing of the dead and with that in view he offered to build a crematory in the Washington cemetery, Pennsylvania. However, his offer was declined, so he erected one in 1876 on his own grounds, the first and only one in the United States until 1884. He died October 14, 1879 of diabetes and was cremated.

In May, 1823, he married Madelaine Romaine Bureau of Gallipolis, Ohio, whose parents were also members of the French Colony, and had eight children, three sons and five daughters. Dr. LeMoyne was a strong, broad, earnest man; a great reader and a student to the end of his life. He was fearless of criticism and wholly indifferent to popular sentiment; uncompromising on all questions of right or wrong, he often said, "of two evils choose neither."

Of his sons, Frank, born at Washington, Pennsylvania, April 1839, followed him in the medical profession.

ADOLPH KOENIG.

Lennox, Richmond (1861-1895), ophthalmologist of Brooklyn, N. Y. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia, 1912, ii, p. 95.

LEONARD, Charles Lester (1861-1913), of Philadelphia, a pioneer in Roentgenology, and the first in America to demonstrate calculi in the kidney and to show the kidney outline, so vital in an x-ray diagnosis, also widely known as a teacher in x-ray methods of diagnosis, laid down his life like so many, a martyr to his own specialty. He was born in Easthampton, Mass., December 29, 1861, the son of M. Hayden Leonard and Harriet Moore, and traced his ancestry to John Leonard who settled in Springfield, Massachusetts, in 1632. He was fitted for college at the Rittenhouse Academy, Philadelphia, and received the A. B. degree at the University of Pennsylvania in 1885, and at Harvard in 1886, graduating in medicine at the University of Pennsylvania in 1889 and taking his A. M. in 1892. After graduating he spent several years in Europe in the laboratories, then he devoted much time to photomicrography in the Pepper Laboratory, Philadelphia, and succeeded by means of an original electric shutter, in photographing various periods in the life cycle of microscopic organisms. In 1896 he took up the study of Roentgenology to which he gradually devoted all his energies.

A director of the Roentgen Laboratories in various hospitals, including the University of Pennsylvania, Methodist Episcopal and Polyclinic, he was professor of Roentgenology at the Philadelphia Polyclinic and president of the American Roentgen Ray Society in 1904 and in 1905, and a Fellow of the British and the German Roentgen Societies. He founded the Philadelphia Roentgen Society in 1906 and remained its secretary until his death. In 1905 he went as the delegate of the American Medical Association to the Roentgen decennial meeting in Berlin and in 1908 he read a paper at the British Medical Association as an invited guest. As a delegate from the American Medical Association to the Fourth International Congress of Radiology in Amsterdam he read a paper on "Varying Forms of Peristaltic Waves." He was associate editor of the "Archives of the Roentgen Ray" of London, the "Zeitschift für Roentgenkunde" of Leipsic, and the "Journal de Radiologie" of Brussels. In August, 1913, had his health permitted, he was to have been present at the International Congress of Medicine, Section of Radiology, in London when he and Holzknecht of Vienna were to report on "The present Status of Roentgen Diagnosis in Gastro-intestinal Conditions." The paper, prepared for this meeting representing a year's work, was his last.

Leonard's work was notable in three directions: (1) as a pioneer and a leader in a new and brilliant specialty; (2) one of the foremost in introducing the improved technique of instantaneous Roentgenography; (3) as a pioneer in the detection of renal and ureteral calculi, where he exercised a strong influence over conservative surgical practice by showing that a large percentage of small ureteral calculi pass spontaneously if let alone. A list of his writings comprises some fifty-one papers.

He married Ruth Hodgson and they had one daughter, Catherine Henrietta Lawson Leonard, who married Captain James Bennett Hance, I. M. S., June 24, 1916, at Oxford, England.

Dr. Leonard found his recreation in the Canadian woods. His hands, badly burned in the early days, grew slowly worse, and then began the fruitless battle against the invasion of the body; first a finger was amputated, the left hand, and finally death intervened. Always cheerful, never asking for

sympathy even in his extremity, he died at Atlantic City, New Jersey, September 22, 1913, at the age of 51 years, a universally beloved, brilliant scientist who laid down his life for his fellows.

THOMAS S. STEWART.

Lett, Stephen (1847-1905), Toronto alienist.

See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 698.

LETTERMAN, Jonathan (1824-1872), reorganizer of the medical department of the army in the civil war, was born in Canonsburg, Pennsylvania, December 11, 1824. His father was a surgeon and his mother a daughter of Craig Ritchie, of Canonsburg, near Pittsburgh. Letterman was educated by a private tutor until he entered Jefferson Medical College and took his M. D. there in 1849, at once entering the army as assistant surgeon. He served in Florida, Minnesota, Kansas, Virginia, California, and in 1861 began duty with the army of the Potomac, becoming surgeon in July, 1862, when he was made medical director of this division of the Union forces, under the command of Major-General McClellan. Thirteen years experience on the frontier posts and in campaigns against the Seminoles, Navajos, Apaches and Utes had assisted in preparing Dr. Letterman for his new duties. At once he evinced a remarkable grade of administrative ability, rehabilitating the service of the sick, creating a military medical organization, installing an effective hospital service, also instituting a system of transportation of the wounded in charge of an ambulance corps, making the medical department adequate to the needs of even such great battles as Chancellorsville and Gettysburg. The organization thus created formed the basis of the military medical administration during the remainder of the war.

In October, 1863, Dr. Letterman married Mary Lee of Virginia, whom he had met at her house, coming tired and hungry from the battle of Antietam. She waited on him and it was appropriate that when they were married, the medical officers of the army of the Potomac should present them with a handsome silver service. Having completed the medical organization of the army, he was relieved as inspector of hospitals in the department of the Susquehanna. There he remained for a year and then took up his residence in San Francisco, California. In 1866 he wrote "Medical Recollections of the Army of the Potomac," and in the following year he was elected coroner in San Francisco and served two terms. The sudden death of his wife, November 1, 1867, combined with a chronic intestinal trouble, from which he had long suffered, undermined his health and he died, March 15, 1872, being only a few months over forty-seven years of age.

By a general order of the War Department, November 13, 1911, a government hospital, of five surgical and four medical wards, each of forty beds, built on the pavilion plan, and situated within a quarter of a mile of San Francisco, where it gets the ocean breezes through the Golden Gate, has been named the Letterman General Hospital, in honor of the man who did so much for the medical department of the army.

LEVIS, Richard J. (1827-1890), Philadelphia surgeon, the son of Dr. Mahlon M. Levis, was born June 28, 1827, in Philadelphia, graduated from the Central High School, and in 1848 from Jefferson Medical College, studying also with Professor Thomas D. Mütter. He settled in Philadelphia and attained a high reputation as a general and ophthalmic surgeon. In 1859 he was elected surgeon to the Philadelphia Hospital and in 1871 to the Pennsylvania Hospital, where he served until 1887. He was also an attending surgeon at Wills Eye Hospital. During the Civil War he was surgeon-in-chief to the two United States military hospitals in Philadelphia. A skilful ophthalmic surgeon, he introduced the well-known wire loop used in certain cases of extraction of cataract. Dr. S. D. Gross speaks of the spatha invented by Dr. Levis as "a contrivance of great power, well adapted to the reduction of dislocations of the thumb and fingers." For many years he was clinical lecturer on ophthalmic and aural surgery at Jefferson Medical College and also took up active work at Jefferson Hospital. Dr. Levis was the first president of the board of trustees of the Philadelphia Polyclinic and College for Graduates of Medicine, and one of the original members of the faculty, being professor of clinical and operative surgery. He was one of the original members of the American Surgical Association and an active member of the Philadelphia County Medical Society.

He died at Cedarcroft, Pennsylvania, November 12, 1890.

LEWIS, Dio (1823-1886), Boston homeopathist, medical reformer, and pioneer physical culturist, was born in Auburn, New York, March 3, 1823. He studied medicine at the Harvard medical school, adopted homeopathy and went to Buffalo, where he practiced for several years and edited a medical magazine in which he decried the use of drugs, and advocated physical exercise as a part of public education. From 1852 to 1863 he engaged in lecturing on hygiene and physiology, settling in Boston in 1863, and founding the Boston Normal Physical Training School, from which five hundred pupils were graduated in seven years. He was one of the leaders in establishing physical culture in institutions of learning in the United States. In 1864 he established a school for young women on hygienic principles in Lexington, Massachusetts, which was burned in 1868, when he resumed lecturing on hygiene and temperance. and originated the women's temperance crusade in Ohio. He edited "Today," "Dio Lewis Nuggets," and "The Dio Lewis Treasury," and published many pamphlets and papers in magazines, writing "New Gymnastics" (1862); "Weak Lungs and how to make them Strong" (1863); "Talks About People's Stomachs" (1870); "Chats with young Women" (1871).

Dr. Lewis had a compelling personality and profoundly influenced a large number of people in America by his teaching at a time when the nation was devoting itself more and more to sedentary pursuits and the need of physical exercise had not become recognized.

He died in Yonkers, New York, May 21, 1886.

LEWIS, Eldad (-1825), of Lenox, Massachusetts, had a reputation for eloquence, wherefore he became the first orator of the Berkshire Medical Society in 1787. His oration on "The Usefulness of Medical Societies," delivered before the fourteen members of the Medical Association of the County of Berkshire, gathered at Mr. Bingham's in Stockbridge on the twelfth of June, 1787, was carefully recorded by vote in the old record book of that society. After lamenting the lack of medical schools, hospitals and opportunities to study medicine in this country, Dr. Lewis says: "A society of physicians united upon liberal principles offers a fine opportunity for improvement from the communications of the several members; important incidents occurring in private practice will by this means be rescued from oblivion, talents will be stimulated to exercise, which otherwise might forever have lain dormant and useless, or there will be the greatest and most noble excitements to a laudable emulation and industry. Opportunities also will often present of habituating ourselves to observe accurately, to think justly, to reason truly and analogically and judge with precision." Dr. Lewis hoped that the "association" might control the quacks, who were at that time a great menace to the community. He said: "It will undoubtedly be in our power, when properly organized, to hinder the illiterate medicaster and ignorant quacks from introducing themselves into the practice, to the danger of the lives of the sick and the injury of the deserving physicians." This excellent oration closed with a plea to the members to elevate the pharmaceutical standards of the druggists and to stand together for the public good, to concur in all measures calculated to abolish all odious distinctions and ill-natured competitions among the faculty and to cultivate confidence and harmony in the profession.

He settled in Lenox as early as 1778, took an important part in town affairs, assisted in establishing the first town library, and published one of the earliest newspapers in the county, a political campaign sheet. He was a good scholar and a forceful writer and speaker besides being a successful practitioner. After living in Lenox for over a quarter of a century, he moved to New York State in 1810 and died there in 1825. Yale conferred her A. M. on him in 1788 and Williams in 1806.

WALTER L. BURRAGE.

LEWIS, Francis West (1825-1902). Medical annals and medical libraries would be searched in vain for the professional and literary achievements of Francis W. Lewis, son of Mordecai D. and Sarah West Lewis, but the Children's Hospital on Twenty-second Street in Philadelphia is a fine monument to a man who gave his best years to lightening the burden of suffering childhood. He himself, when only seven, went to Bronson Alcott's School in Germantown, afterwards to Bishop Hopkins' Institute at Burlington, Vermont, graduating from the University of Pennsylvania at eighteen and taking his M. D. at Jefferson Medical College in 1846 and becoming a fellow of the College of Physicians in 1855. Two years were then spent partly in studying ophthalmology under Sir William Wilde in Dublin and afterwards in work at the Salpêtrière, Paris, a varied ex-

perience to end in an appointment of resident physician at the Pennsylvania Hospital. The cares, two years later, of a large private practice among the Philadelphia poor drew on his strength and he made frequent voyages abroad, but during these and while he was tending sick soldiers in the Satterlee Hospital, Philadelphia, or in the temporary military hospital in Harrisburg he had one cherished hope—that of giving sick children a hospital all to themselves.

Finally, in 1855, aided by Dr. Penrose and Dr. Bache, a small house furnished with twelve beds was opened in Blight Street, Philadelphia, and Dr. Lewis' love for his new work as physician there grew even greater, though he had given up practicing somewhere between the years 1866 and 1868. He prized nothing more than his welcome from the children when he went into the wards.

A broad minded philanthropist, a lover of natural science and art, a great reader and a good friend, Dr. Lewis with his two sisters helped onwards the well-being of their native town, but one cold night in February, 1902, a day of severe blizzard, he received his death blow from pneumonia because he would attend the Charity Organization meeting, his death taking place the same month.

LEWIS, George (1823-1863), of New York, the first to write on appendicitis, the son of Milo and Susan Beecher Lewis, was born September 1, 1823 in Naugatuck, Connecticut. He attended lectures at Dartmouth Medical College and was graduated from the College of Physicians and Surgeons, New York, in 1851, then settled to practice in Brooklyn and New York City where he soon had much to do. Being threatened with phthisis he wintered in Minnesota in 1861-62 and improved so much that he returned to New York the next fall; an attack of pleuropneumonia proved fatal April 24, 1863. His wife was Emma Dean.

Lewis had the true scientific spirit, as shown in an admirable article on appendicitis in 1856 (N. Y. Journ. Med., i); "Statistical Contribution to our Knowledge of Abscess and other Diseases consequent upon the Lodgment of Foreign Bodies in the Vermiform Appendix, with a Table of Forty Cases." This is our first great piece of literature upon this burning subject and shows a remarkable acumen. From the aspect of perforation due to attrition and ulceration, it leaves little to be desired. No historical study of this subject is complete without recognition of Lewis' claims. During his last year he wrote valuable articles for the "American Medical Times" on the climate of Minnesota.

LEWIS, Samuel (1813-1890), was a book collector of Philadelphia "who possessed a steady and intelligent generosity out of all proportion to the size of an income never more than moderate"—in the expressed opinion of him by S. Weir Mitchell (q. v.).

Lewis was born in Barbados, November 16, 1813, came to Philadelphia with his uncle and guardian, the Rev. Prescott Hinds, when not quite twenty-one and in the fall of the same year matriculated at the University of Pennsylvania. After one year he went to Edinburgh and matriculated there, first experiencing a severe attack of small-pox owing to non-vaccination while in the Indies, and being given a patient, who had died of the disease, to dissect. After recovery he became dresser to the celebrated Syme, professor of clinical surgery in Edinburgh. For a while he stayed in London, then on to Dublin, returning to Edinburgh in 1840 and taking his M. D. there. The same year he went back again to Philadelphia and entered active practice besides helping Dr. Hollingsworth edit "The Medical Examiner." He was closely attached to all medical interests but was most of all anxious to improve the college library and in 1864 presented to it his private library of 2,500 carefully selected volumes, thus making the college collection the best in the state. He valued books for their historical association and their utility rather than their rarity, though he loved also a beautiful book. His greatest happiness lay in adding to his gift, until the numbers exceeded 10,000, including an unequalled collection of the School of Salerno. It formed part of his holidays in Europe to buy collections, and if any friend craved a book, to supply the library with it. Equally generous with his money, he was a friend to many in poor health and was known always as a faithful and sincere Christian. He held a fellowship of the College of Physicians, Philadelphia, and was president in 1884; he was also a member of the Royal College of Surgeons, London, 1839, and of the Royal Medical Society of Edinburgh, 1840.

In 1890 advancing age began to tell on him and it was also known he had a lesion of the aortic valve. On November 8, after a slight heart attack, he was able to enjoy his books again, but on November 15 he died, aged seventy-six years.

LEWIS, Winslow (1799-1875), Boston surgeon, was born in that town July 8, 1799, and died at Granville, Massachusetts, August 3, 1875. His biographer, John H. Sheppard, traces the genealogy of the Lewis family from George Lewis who came out of Plymouth, from Kent, England, in 1633 to Captain Winslow Lewis of Wellfleet, Mass., a sea captain and a builder of lighthouses for the government and inventor of the binnacle illuminator. Captain Lewis married Elizabeth Greenough, daughter of a mathematical instrument maker. Their son, Winslow, was born in the same house in which his mother was born; he fitted for college with Dr. Daniel Staniford, who kept a private school, and Winslow was graduated from Harvard College in 1819. After studying with Dr. John C. Warren (q. v.) he graduated at the Harvard Medical School in 1822 and went abroad to perfect his medical training under Dupuytren in Paris and Abernethy in London. Beginning practice in his native town, he married Emeline Richards, daughter of Capt. Benjamin Richards of New London, Conn., and received an appointment as physician to the municipal institutions and to the house of correction; after the death of Dr. Warren he became consulting surgeon to the Massachusetts General Hospital. He translated "Gall on the Structure and Functions of the Brain," six volumes, and edited "Paxton's Anatomy." During his professional career his private pupils numbered four hundred, a no mean contribution to the cause of medical education in his time. Dr. Lewis was grand master of the Masons in Massachusetts in 1855, 1856 and 1860; a representative in the legislature in 1835, 1852 and 1853; a member of the school committee most of the time from 1839 to 1858; an overseer of Harvard College, 1856-1862, and later for a second term of six years; president of the New England Historic Genealogical Society; city physician in 1861.

Dr. Lewis was said to have "a peculiar tact for operating, as he had a firm nerve and quick, decisive judgment." He should have inherited mechanical ability through both parents. His portrait shows a genial, forceful face, smooth shaven except for a moustache and the popular "side whiskers" of the time, surmounting an open standing collar white stock and ruffled shirt bosom.

LIEBERMANN, Charles H. (1813-1886), ophthalmologist of Washington, D. C., was born in Riga, September 15, 1813, his father a military surgeon who died while the boy was a child. His mother belonged to the Radetzkys who furnished many famous personages in German and Polish history. The doctor's uncle became his guardian and gave the child a good education. He entered Dorpat University, from which he was graduated M. A. in 1836, then on to Wilna, where he studied medicine, but after some time returned to Dorpat, and so to Berlin University, where he took his M. D. and became a private pupil of Prof. Dieffenbach, serving for some time as his assistant. Dr. Liebermann enjoyed the advantages of the lectures and clinics of the famous ophthalmologist von Graefe in his treatment of affections of the eye and also studied physical deformities. He came to the United States early in 1840 and landed in Boston, but settled to practice in Washington shortly after his arrival, on the north side of Pennsylvania Avenue, between Ninth and Tenth streets. Professor Dieffenbach, the originator of the operation for the cure of strabismus, said: "Dr. Liebermann, who has been one of my distinguished pupils and for some time after closing his academical course my associate in the practice of medicine and surgery, was, after myself, the third physician in Europe and the first one in the United States who, as early as October last (1840), performed the operation for strabismus with complete success." Dr. Liebermann had to contend with a natural objection to foreigners but so well was he equipped professionally, and so discreet and honorable in his intercourse with medical men, that he soon gained not only their high regard but that of the citizens in general. He identified himself as soon as practicable, with the profession of the city by joining the Medical Society of the District in 1843 and was its president from 1865 to 1868. He was one of the founders of the University of Georgetown, and filled the chair of professor of surgery from 1849 to 1853, and again from 1857 to 1861, when he resigned and was elected emeritus professor. He was also a member of the first Pathological Society of Washington, organized in 1841. He had much mechanical ingenuity, which enabled him to succeed in the treatment of cataract, joints and deformities. He was for over twenty years the leading oculist in Washington. He was also a member of the staff and consulting surgeon to the Providence Hospital for a number of years.

He married in 1841 a Miss Betzold, of Alexandria, and had two children, a son and daughter. In 1872 he retired from practice.

His mental powers to the last seemed as active and strong as in middle life when he died on March 27, 1886.

DANIEL SMITH LAMB.

LINCOLN, Benjamin (1802-1835), lecturer on anatomy in the University of Vermont, grandson of General Benjamin Lincoln, of Revolutionary fame, and son of Theodore and Hannah Mayhew Lincoln, was born in Dennysville, Maine, October 11, 1802, "with the forest behind him and the ocean before," as he was fond of saying. He obtained his academic degree at Bowdoin in the Class of 1823. Whatever leisure was left from college studies was occupied with investigations on sound, and in the practice of music, to which he remained devoted throughout his life, and in the study of mathematics. During his college course his father was asked to attend a physical examination by Nathan Smith (q.v.), then a professor at the Bowdoin Medical School, of the alleged hipjoint dislocation of Charles Lowell, plaintiff in the historic case of Lowell vs. Faxon and Hawkes (q. v.). Young Lincoln drove with his father to the curious scene and the brief hour thus spent probably turned his mind to medicine. Before beginning this study, however, he gave up nearly a year as nurse and companion to a fellow student, ill with tuberculosis, taking a sea voyage to New Orleans and back, in search of health. Entering upon a three years' course and showing zeal for anatomy, he became demonstrator to Nathan Smith and to John Doane Wells (q.v), then setting forth on his meteoric career as a lecturer on anatomy in several medical schools. In the vacations, Lincoln continued his studies in Boston with Dr. G. C. Shattuck (q.v.), and finally was graduated M. D. from Bowdoin in 1827, with a thesis on "Sea Sickness," in which he suggests that disturbance of the ear may have an influence in producing the malaise. Dr. Lincoln settled in Boston for practice, and continued his friendship with Dr. Shattuck, so that when there came a call from the medical school of the University of Vermont for a capable young lecturer on anatomy and surgery, Lincoln was at once recommended, accepted, and gave his first course in 1828. He returned to his office in Boston after the opening course of lectures, and finding encouragement in the fact that he had proved that he possessed the art of attracting the steady attention of students, and a favorable opening offering itself in Burlington, Vermont, for practice, he left Boston for good, and settled for practice and for a lifetime of lectures in Burlington. With a high heart and aims, Dr. Lincoln, then at the age of twenty-eight began practice in Burlington, and also his second course of lectures, little dreaming of the hardships before him in his lectureship, or in carrying into effect his ideals for improving medical education in Vermont. He discovered that the men at the two other schools namely at Castleton and at Woodstock were imbued with the one idea of making money by talking medicine to uneducated students, and by padding their catalogues for bombastic parade with the names of fictitious personages, not students at all. Such men saw nothing irregular in besieging students bound for Burlington with the cry that Burlington was moribund, but that Castleton and the Woodstock School for Clinical Medicine were alive and leading all in medical instruction. Moreover, in their haste for money, they cut prices of tickets and the cost of board for students in their respective villages, and in lieu of cash, accepted notes on demand, payable after the students had gone into practice, and earned enough to pay. Nor was it ever denied, though publicly charged, that many students paid the graduation fee of $25 as a bribe for a diploma to practice after a single year of study, nor that one institution was founded by a single physician, who named himself professor, and obtained for his students from a "Patron College" in another state diplomas of medicine, "plenty of which were growing wild on the Kennebec River above tide water in the wilds of Maine." Finally, such men tried later on to seduce from Burlington the only faithful colleague of Dr. Lincoln, with the idea of closing its doors forever, when Lincoln went on to Baltimore, as will next be seen, to lecture on his favorite topics.

Bitter as was such treatment, it became worse when Dr. Lincoln, after the death of John Doane Wells in 1830, was invited to Baltimore. There he gave delightful courses on anatomy, comparative anatomy, and on the brain and the nervous system to the satisfaction of the faculty and numerous students alike. When invited, at the end of the courses, to repeat them another year, and to consider himself as a candidate for a professorship in the University of Maryland Medical School, he declined because his painful neuritis, which had continued off and on since 1820, prevented him from taking so long a journey again. This declination was publicly seized upon by his opponents, and perverted

into a story of his complete failure as a lecturer, so that he was at last compelled, in self defense, and as proof of his position as a lecturer, to print for everyone to read the invitation of the faculty and classes at Baltimore to repeat his lectures and to consider himself as a candidate for the vacant professorship of anatomy and surgery. So, too, when in another year he went to Bowdoin and lectured in the place of the lamented Wells, his opponents in Vermont sneered at him for deserting, like any rat, the sinking ship of Burlington.

Arriving in his native village, Dr. Lincoln bravely endured the remainder of his life. He did a little practice, driving around in his chaise, being helped in and out by loving hands. He gave a few public health talks and illustrated them with pictures of his own. He finally developed a curious mental condition, in which conversation or the reading of newspapers became distasteful in the highest degree, while he could still spend hours enjoying the most abstruse mathematical problems. He gradually failed, having all the symptoms of tuberculosis, and died February 26, 1835, in his thirty-third year. In that short life, he had accomplished much, but had fallen short of his medical ideals.

JAMES A. SPALDING.

LINCOLN, David Francis (1841-1916), hygienist and author, was born in Boston, January 4, 1841. The son of William Lincoln, he was of Pilgrim descent; his education was received at the Boston Latin School and at Harvard College where he took an A. B. in 1861. Going on to the medical school he was granted an A. M. and an M. D. in 1864. Eighteen months before graduation Dr. Lincoln served as acting assistant surgeon in the United States Navy. After taking his degree he spent a like period in study at the universities of Berlin and Vienna and then settled in practice in Boston, making a specialty of nervous diseases. Following the year 1881 he lectured and did literary work at Hobart College, Geneva, N. Y., returning to Boston in 1894, and living there until his death, October 17, 1916, at the age of seventy-five. At one time he was secretary of the department of health of the American Social Science Association. He was a Fellow of the Massachusetts Medical Society from 1865 until 1883, when he resigned.

Dr. Lincoln was never married. He was the author of: "Electro-Therapeutics," 1874; "School and Industrial Hygiene," 1880, 1896; "Hygienic Physiology," 1893; "Sanity of Mind," 1900. Besides these books he wrote articles for the reports of the state boards of health of Massachusetts, New York and Connecticut; the journal of the Social Science Asociation; and contributions to Buch's "Hygiene" and Keating's "Cyclopedia of Diseases of Children."

LINCOLN, Rufus Pratt (1841-1900), of New York, soldier and laryngologist, was born in Belchertown, Massachusetts, April 27, 1841, and died in New York City, November 27, 1900. The son of Rufus S. and Lydia Baggs Lincoln, he was descended from Thomas Lincoln who came from England in 1635 and settled in Hingham, Massachusetts. Dr. Lincoln was educated at Williston Seminary in Easthampton, Massachusetts, at Phillips Exeter Academy and at Amherst College, where he was graduated in 1862. He enlisted at once as second lieutenant in the thirty-seventh volunteers, rising to the rank of captain within two months. He saw service throughout the war, was made major and lieutenant-colonel in 1864, was slightly wounded at the battle of the Wilderness and severely at "The Angle." After being mustered out of the service at the close of the war, Lincoln studied medicine for a year at the College of Physicians and Surgeons, New York, going from there to the Harvard Medical School, where he received the degree of M. D. in 1868. Beginning general practice in New York City, he was at first associated with Willard Parker (q. v.), but soon took up the special study of laryngology to which he afterwards devoted himself. He was possessed of great manual dexterity and worked with despatch and decision, which may have been factors in determining his choice of a specialty. He was one of the first in this country to make use of the electric cautery for operating on the throat, especially for fibrous and sarcomatous tumors of the naso-pharynx. He described his cases and his methods of operating in a number of articles in different medical journals, reporting the later progress of his cases in other articles, so that he became the recognized authority in this class of disease and operation. Although never connected with any clinic or medical institution for teaching, he soon became known as a successful practitioner for diseases of the nose and throat, with the result that his office was filled with a large and fashionable clientèle. His work was recognized by the medical profession also, and when the New York

Laryngological Society (the first special society of its kind in the world) was converted into the Section of Laryngology of the New York Academy of Medicine, he was chosen its first chairman. He was a founder and an active member of the American Laryngological Association and its president in 1888. His prominence led him to be called in consultation in the case of Emperor Frederick, who was suffering from cancer of the throat.

The Index Volumes of the Transactions of the American Laryngological Association contain the titles of most of his medical writings, among which may be mentioned: "Laryngeal Phthisis," 1875; "Selected Cases of Disease in the Nasal and Post-Nasal Regions, treated with the Galvano-Cautery," 1876; "The Surgical Use of Electricity in the Upper Air Passages," 1886. Besides his membership in the societies referred to above, he was a member of the American Climatological Association, the New York Pathological Society and of the usual state and county medical societies as well as of several social clubs.

In 1869 he married Caroline Carpenter, daughter of Wellington H. Tyler of New York City, by whom he had three children. A very promising son, Rufus Tyler Lincoln, died at the age of sixteen, and in his memory his mother gave to Amherst College the sum of $100,000 to found a professorship in science.

JOHN W. FARLOW.

LINDE, Christian (1817-1887), pioneer physician of Wisconsin, was descended from the noble Danish family of De Linde-Freidenreich, and was born on their estate near Copenhagen, February 19, 1817. He was educated at the Royal University from which he was graduated M. D. in 1837. On account of political troubles while attending the hospitals of the Danish capital, he came to America in 1842 and settled near Oshkosh, Wisconsin. Here he intended to found a landed estate and devote a portion of his time to hunting, of which he was passionately fond. This pursuit led him much among the Indians, with whom he soon gained fame and influence as hunter and healer. From his blond countenance and numerous deeds of strength and bravery, they called him Muckwa (meaning White Bear). This phase of his life and character is marked by incidents romantic, tragic and humorous sufficient to fill a volume; in later years he was fond of relating them to his intimates. To illustrate the difficulties of his practice in the early days, it is related that: During a small-pox scare among the Indians along the lower Fox, he set out on a tour of vaccination accompanied by John L. Williams, famous as the son of the lost Dauphin of France. Despite the doctor's reputation for honesty among the savages, they were still skeptical, and at each place visited they reqired as a precautionary measure that the operation be performed on his companion, The condition of Williams' arms, as well as feelings, after several days' touring, may be left to the imagination. The insistent demands of the settlers for his professional services drew him reluctantly from the woods and streams, and after practicing a few years in Green Bay and Fond du Lac, he settled permanently in Oshkosh. He was the first regular surgeon in Northern Wisconsin and during his long career he was called upon to perform many difficult operations. Dr. Linde belonged to the medical societies of his county, state and nation, serving as president of the Winnebago County Society, and as vice-president of the Wisconsin Society. To these and to various publications he furnished a number of papers on surgery. His most brilliant contribution to medical science, however, was the use of animal tendon in surgery. To him belongs the distinction of having discovered its value and first applied it in the treatment of wounds.

Dr. Linde was married three times: to Sarah Dickinson, daughter of Clark Dickinson, in 1843; to Sarah Davis, niece of Gov. Doty, in 1852, and to Mrs. Hulda Henning Volner in 1858. Dr. Fred Linde, the only issue of the first marriage, was associated with his father until his untimely death in 1880. Two daughters survived Dr. Linde.

Besides his attainments in medicine, Dr. Linde was a fine classical scholar and linguist, being able to converse in seven languages. He died at Oshkosh, of senile capillary bronchitis. Stoical in his philosophy of life, during his last hours he discoursed calmly of death, and at the end whispered "How beautiful it is to die!"

MOLLIE LINDE BOWEN.

LINDLEY, Walter (1852-1922), editor of the "Southern California Practitioner," was born January 13, 1852, at Monrovia, Indiana, the son of Milton and Mary E. Banta Lindley. He was educated at the Minneapolis high school and in 1875 he received an M. D. from the Long Island College Hospital, Brooklyn, New York. He at once began practice in Los Angeles, California, where he was

health officer, 1879, member of the board of education, 1880-81, superintendent of the Los Angeles County Hospital, 1885, dean of the University of Southern California College of Medicine, 1902-04, president of the state board of medical examiners, and medical director of the California Hospital. In 1889 the legislature of California, in response to his appeals, made liberal appropriations for the establishment of trade schools, and he was appointed to establish the first. Dr. Lindley founded and in 1880 was the president of the Los Angeles' Orphans' Home Society; he was also a founder of the Los Angeles Society for the Prevention of Cruelty to Animals and of the College of Medicine of the University of Southern California, of which he was secretary of the faculty in 1885, professor of obstetrics in 1885-91, and dean in 1902-04. An original incorporator of the Los Angeles County Medical Association, he was president in 1882; he was also president of the California Medical Association in 1889-1890. In 1885, he started the "Southern California Practitioner," of which he was editor and publisher until his death. He contributed to medical, sociological, and literary journals. Among his writings are: "California of the South," 1888, "The Delinquent Child in Great Britain and France," 1908, "The Traducers of Shakespeare," 1908, and "Irish Dramatists and the Irish Drama," 1914. St. Vincent's College conferred an LL. D. on him in 1903.

He died from cerebral hemorrhage, January 24, 1922.

Lindsly, Harvey (1804-1899), professor in the National Medical College, District of Columbia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 705.

LINING, John (1708-1760), early physician of Charleston, South Carolina. Born in Scotland in 1708, John Lining emigrated to America in 1730, settling at Charleston, South Carolina, where his skill as a physician gained him a large practice, and his scientific experiments a distinguished reputation as a scientist as well as a physician. He experimented early in electricity and was a correspondent of Benjamin Franklin. His meteorological observations extending over the years 1738, 1739, 1740 and 1742, communicated to the Royal Society of London, were probably the first ever published. In order to determine the loss or gain in body-weight under varying thermic and meteorological conditions he made a series of experiments extending through one year, carefully comparing the weight of all solids and fluids ingested, with the weight of the perspiration, urine and feces. The account of these experiments was published in the transactions of the Royal Society of London. In 1751 he published an accurate history of the yellow fever, "which was the first that had been given to the public from the American continent." In 1747 he was named by the General Assembly as one of three physicians who should visit vessels entering the port and certify to the health of the crews.

In 1739 he married Sarah Hill, of Hillsboro, North Carolina, but had no children.

He died September 21, 1760.

ROBERT WILSON, JR.

LINN, Lewis Fields (1795-1843), physician and senator from Kentucky in pioneer days, was born near the site of the present city of Louisville, Kentucky, November 5, 1795. His father was Asahel Linn of Louisville, his mother Ann Hunter, who had been the widow of Israel Dodge before marrying Linn. During Lewis' youth the Indians were a constant menace to the settlers of his neighborhood. Both his grandparents with seven members of their family had fallen victims to the scalping knives of the savages. The western side of the Ohio river was still popularly known as "the Indian side" and communities within many miles had to be constantly on the alert to protect themselves from the red marauders. His parents died early, leaving him and his sister to the care of his half brother, Henry Dodge (1782-1857), of the U. S. Army, who won fame as an Indian fighter and was voted a sword by Congress with "the thanks of the nation." Lewis studied medicine in Louisville and began to practice in Sainte Genevieve, Missouri, about 1815. His reputation soon spread, giving him a large practice in the southern part of the state.

In July, 1818, he married Elizabeth, only daughter of John Rolfe of Virginia. During the cholera epidemic in 1832 Linn worked incessantly, both in treating patients who were accessible, and in publishing pamphlets instructing the public in measures of prophylaxis and in the treatment of the dreaded scourge. He contracted the disease himself but survived it. In 1827 he was elected to the state senate and in 1832 was appointed a commissioner to settle a question of validity

involving certain old land titles in Missouri. In 1833 he was appointed U. S. Senator to fill the vacancy left by the death of Alexander Burkner. In this capacity he served as a contemporary of Clay, Calhoun and Daniel Webster. He was indefatigable in promoting all just legislation furthering the interests of his constituents. In particular he interested himself with bills designed to provide protection from the Indian hordes in the west and warmly supported a measure to increase the military forces of the United States in order to cope with the Indian situation. In this he was opposed by Calhoun, but so ably argued in its favor, that his bill eventually passed by a majority of thirteen votes. In speaking of his work as a senator his biographers remark that "in his constant attendance, fidelity to his duties and refraining from unnecessarily occupying the time of the senate in desultory talk or long and elaborate speeches, he set an example which the public have great reason to wish should be more closely followed by many who now fill the places of those who have passed away." At this time the English were making efforts to colonize the Oregon territory. For five years Linn labored to put through a bill providing for the occupation of that vast region by the United States military forces. The fear of a disagreement with England made Congress loath to take such action, yet in 1843 Linn had the great satisfaction of seeing the measure, in which he had taken so lively an interest, passed by the House.

He died October 3, 1843, in St. Genevieve, Missouri.

ROBERT M. LEWIS.

LINSLEY, John Hatch (1859-1901), organizer of the State Laboratory of Hygiene in Vermont, the son of Daniel C. and Patty Linsley, daughter of the Hon. John D. Patch, was born at Windsor, Vermont, May 29, 1859, and went early with his family to Burlington. His preliminary education was obtained there in the public schools and his medical training in Vermont University, where he was graduated in 1880. He was associated for a short time after his graduation with Dr. S. W. Thayer and later practiced himself in Burlington. During these early years he was instructor in laboratory chemistry in the university, and later in histology and pathology. In 1888 he went to New York, where he was appointed professor of pathology in the Post-graduate Medical School, a position he held for four years until his health compelled him to abandon it. During this time he became enthusiastically interested in bacteriology and spent some time in Berlin in 1890 under Prof. Koch. Soon after his return from Berlin, Koch's discovery of tuberculin was announced and Linsley was sent back to Berlin by the Post-graduate Medical School to secure what information he could in regard to the new serum and he brought back the first bottle of tuberculin used here. Soon after, he translated Fraenkel's standard work on bacteriology, but his health, never rugged, broke down at this time and he was compelled to abandon work. He held relations with the medical department of the University of Vermont during his stay in New York and was later made professor of histology, pathology and bacteriology, a position he held until 1899. In 1891 he returned to Burlington to live, but on account of his health was able to do only a limited amount of teaching and private laboratory work.

In 1897 Linsley proposed to the Vermont State Board of Health to give the people of the state, especially the physicians, an object lesson in the use of the laboratory in preventing disease. An arrangement was made with this Board by which Linsley agreed to examine specimens, provided by practitioners of the state of suspected cases of diphtheria and typhoid fever without remuneration for his services. The Board, however, agreed to reimburse him as far as possible for the necessary equipment. The success of the experiment undertaken at his suggestion by the State Board was instantaneous. With characteristic energy, Linsley undertook to interest the Legislature of the state in the usefulness of a State Hygienic Laboratory and, equipped with his microscope and other technical apparatus, proceeded, after the gathering of the next General Assembly in 1898, to Montpelier. The result was the present State Laboratory of Hygiene, one of the best of its kind in this country, and from the day of its foundation, through Dr. Linsley's efforts, to the present time, one of the most completely equipped in the country. It is his best and most enduring monument, and in it, as director, he did his last and most valuable work, besides writing many papers for state and other societies.

He was married in July, 1880, to Nettie, daughter of Harmon A. Ray of Burlington, and had one son and a daughter, Daniel Ray and Patty Hatch Linsley.

He died of meningitis at his home in Burlington, February 17, 1901.

CHARLES S. CAVERLY.

LINTON, Moses L. (1808-1872), pioneer physician and writer of Kentucky, the son of Benjamin Linton, a farmer who had migrated to that state from Fauquier County, Virginia, was born in Nelson County, Kentucky, April 12, 1808. His education was spasmodic and occasional; once for six weeks he attended a grammar school in the neighborhood, and took a prize in English. A physician who lived with the family was interested in the boy lending him his medical books and influencing his choice of a profession. While Moses worked about the farm, books were his constant companions. After studying medicine under I. H. Polin of Springfield, Kentucky, he entered Transylvania University, was graduated March 1, 1835, and then settled in Springfield.

In 1837, he married Agnes, daughter of Judge Paul J. Brooker, who put aside a fine trousseau for a simple outfit that the money might take Dr. Linton to Europe for study. Accordingly in the spring of 1839, he went abroad for a year, spending much of the time in Paris with Charles A. Pope (q. v.). In 1842, he accepted the chair of obstetrics in St. Louis University and in 1844, the chair of theory and practice of medicine which he occupied until his death. To the alumni he became the "Old Philosopher." Dr. Linton wrote on a pad on his lap as he traveled about in his doctor's buggy; his writings, including many poems, embraced medical, religious, and political subjects. The most noteworthy of his medical contributions is the monograph on the "Outlines of General Pathology," 1851. Some of his medical articles appeared in the "St. Louis Medical and Surgical Journal" which was first issued in April, 1843,—Dr. Linton being the originator and for many years sole editor of this first medical journal west of the Mississippi and still in existence in 1876.

He died June 1, 1872.

Linton was a tall, delicate looking man with piercing eyes. His manner was generally abrupt but always cordial. At the ceremonies attending the hanging of his portrait in O'Fallon Hall of the University, Charles A. Pope declared "He is a rough diamond. He is in truth the philosopher and the poet. Self-educated and self-reliant, poor but indefatigable, he has by his own unaided efforts successfully surmounted every obstacle and has acquired proficiency in all the knowledge and acquirements that adorn the scholar."

AUDREY W. DAVIS.

LITTELL, Squier (1803-1886), physician and ophthalmologist of Philadelphia. The Littells were among the earliest emigrants to America, the line beginning with George Littell who with his brother Benjamin came from London to Newbury, Essex County, Massachusetts, about 1630. Squier was the third child of Stephen and Susan Gardiner Littell and was born in Burlington, New Jersey, December 3, 1803. Both parents died early and the boy was adopted by his uncle, Dr. Squier Littell of Butler County, Ohio, and had an education at such schools as the country then possessed, afterwards studying medicine with his uncle and dividing time between the farm and his studies.

In 1821 he began to work under Dr. Joseph Parrish (q. v.) of Philadelphia, and three years later graduated at the University of Pennsylvania with a thesis on "Inflammation." Before settling in Philadelphia, he visited Buenos Ayres hoping to get a post there, but failed in this, yet was made a licentiate by examination of the Academy of Medicine there. Some time after his return to Philadelphia he married Mary, daughter of Caleb Emlen, but she died early, leaving him with an infant son and daughter. When the Wills Hospital was organized in 1834 he was elected one of the surgeons; a fellow in 1836 and afterwards a councillor. Although a general practitioner in every sense, he was best known as an ophthalmologist and as a patient and cautious physician bold in execution when operation was necessary. When no longer young he devoted himself to mastering the difficulties of the ophthalmoscope (then new) and using it daily. His "Manual of Diseases of the Eye" was one of the earliest American books on the subject and was favorably received here and abroad. He edited "The Monthly Journal of Foreign Medicine." Although he always practiced vaccination, he believed neither in the efficacy of that nor in the malarial origin of disease, not from narrow mindedness, for he had read widely and studied. He was a staunch churchman and one of the committee to revise the Prayer Book in 1838, also editing some journals of the Episcopal Church.

His contributions to medical literature were numerous and of value; they include: "Diseases of the Eye," 1837; "Tumors at the Base of the Brain producing Amaurosis," 1838; "Notes on Secondary Variolous Ophthalmia," 1855; "Memoir on Granular Ophthalmia (by request) in the Transactions, Congrès d'Ophthalmologie de Bruxelles,"

1857; "Epithelial Cancer of the Colon," 1873.

As he neared his eightieth birthday he began to suffer from an affection of the choroid. To one so fond of books this was a great trial. Early in the spring of 1886 his strength began to fail and he was found dead in bed on July 4, at Bay Head, New Jersey, where he had gone for his health.

LITTLE, James Lawrence (1836-1885), New York surgeon who first punctured the bladder for retention. Of Scotch-Irish and English forbears, he was born in Brooklyn, February 19, 1836, and went to private schools until nearly twenty, when books attracted him and he entered a book-store. Reading more than selling, particularly the medical works, he soon wanted to become a doctor. One day Willard Parker (q. v.) was asked to take in another student. He was going to refuse, but somehow the tall, earnest young man applying made an impression. Little was admitted and studied with Parker for two years and graduated at the College of Physicians and Surgeons in 1860, and resigning a position at Bellevue Hospital, became junior assistant at the New York Hospital. Little had enthusiasm and thoroughness. He reported cases for the "American Medical Times;" and devised a method for making and applying plaster-of-Paris splints to supersede the old starch bandage. He was eminently painstaking as a lecturer, for one of his class says: "Little did not merely tell the men to apply a flaxseed poultice but brought the flaxseed and the cloth and made the poultice before the class." His clinics were besieged by crowds of patients from far and near, and everyone knew when they were being held, by the mud-stained buggies of the other practitioners standing near the door. He was the first American surgeon to puncture the bladder with the aspirator for the relief of retention of urine. He simultaneously ligated the subclavian and carotid arteries of the right side for aneurysm of the first part of the subclavian. The operation for stone he had done seventy-seven times with only two fatalities.

Among the writings which his scanty leisure gave time for are: "The Use of Plaster of Paris in Surgery," 1867; "Median Lithotomy"; "Excision of the Lower Jaw for Osteo-Sarcoma"; "Anchylosis of the Temperomaxillary Articulation, Treated by Excision of the Right Condyle."

His appointments and memberships numbered: Lecturer on operative surgery to New York Hospital; professor of surgery, University of Vermont; visiting surgeon, St. Luke's Hospital and afterwards to St. Vincent's; member of the New York State Medical Society; fellow New York Academy of Medicine.

He married in June, 1858, Elsie A., daughter of John Charlotte, of Newbern, North Carolina. Dr. Little was actively engaged in work on March 31, 1885, and on April 4 he had succumbed to diabetes.

LITTLE, Timothy (1776-1849), pioneer physician of Maine who gathered an anatomical museum. George Little, the founder of the Newbury (Massachusetts) branch of this family, came from London, England, and was the grandfather, twice removed, of Dr. Timothy Little, now to be delineated. Timothy Little was born in Newbury, October 27, 1776, was educated at Phillips Exeter Academy, studied medicine with Dr. Jewell of Berwick, Maine, and was later a member of the Massachusetts Medical Society. He settled first in New Gloucester, Maine, about 1806, and before long enjoyed a large practice. He possessed a great reputation as a medical teacher, and often had as many as fifteen students under his instruction at one time. He built up an extensive anatomical museum, composed of dissections made by himself or by his pupils under his direction. The teaching value of these collections is indicated by a vote at an early meeting of the Directors of the Medical School of Maine, in 1821, requesting the loan of the museum to the new institution. Finding country practice too difficult to endure, Dr. Little removed to Portland in 1826 and practiced there until his death.

He married Eliza Lowell of Portland by whom he had five sons, none of whom, however, practiced medicine. He early imbibed the views of Swedenborg and often officiated in the local church in the absence of the regular preacher.

Dr. Timothy Little died at Portland, November 28, 1849, his widow surviving him until 1853.

JAMES A. SPALDING.

LITTON, Abram (1814-1901), professor of chemistry in St. Louis medical college, was born in Dublin, May 20, 1814, and was brought to the United States by his parents when he was three years old. In 1831 he graduated from the Nashville, (Tennessee), University and at once began life as a teacher.

He was made professor of mathematics and natural philosophy in the University of Nashville in 1839, before he went abroad to study. He visited Paris, Berlin, Bonn and Heidelberg, looking for laboratories open for study, but found at Giessen, with the great Liebig, the opportunity he sought to perfect himself in methods of precision. He spent three and one-half years abroad, and on May 15, 1843, was appointed professor of chemistry and pharmacy in the Medical Department of the St. Louis University. This college was later known as the St. Louis Medical College, or Pope's, and now is recognized as the Medical Department of Washington University. His slender salary was $300, later increased to $600, and finally placed at $1000. He added to this income by his labors in connection with the Geological Surveys of Iowa and Missouri, and by his employment as chemist in the Belcher Sugar Refinery. The first effort of the Washington University towards advanced education was in starting a scientific school. They sought a professor of chemistry, and endeavored to find him in the East. Judge Treat, a director of the university, conferred with Prof. Horsford, of Harvard, concerning the best available man. He replied, "Why not Litton, of St. Louis?" This aroused their interest in a man eminently qualified for the place, who had labored in their midst for more than ten years as a teacher and as a scientist. Later the Rev. W. G. Eliot asked Dr. Litton to take the professorship, telling him that they wanted to establish a scientific school of high grade in the city, but that they lacked money. Dr. Litton responded to this appeal and offered his services. This was in 1857. For fully forty-nine years he held his place in the St. Louis Medical College. He resigned in 1892, much to the regret of the faculty, and against their earnest protest. He died September 22, 1901.

Every student must remember the expression of hopeless despair manifested not only in his mobile face, but in his whole body, as some particularly dull boy disappointed his oft-repeated efforts to force comprehension of the facts he so clearly presented. His laboratory was a storehouse of living truths to him. I remember well the rush he would make down its stairway, every angle of his bony frame bristling with exclamation points, if sounds of disaster in some beloved experiment reached him. Though immersed in the fumes of his laboratory and enveloped in the mysteries of the phenomena of the material world, his love of humanity ever kept in touch with those who came to him for help and advice.

HENRY H. MUDD.

LIVINGSTON, Robert Ramsey (1827-1888), of Plattsmouth, was undoubtedly the most prominent of Nebraska's early physicians. A Canadian by birth, of Scotch-Irish descent, he was born August 10, 1827, in Montreal. His early education was received in the Royal Grammar School in the same city. Having received the degree of M. D. at McGill University he later attended lectures at the College of Physicians and Surgeons in New York City and for a time after graduation acted as superintendent of the Lake Forest Mining Company near Houghton, Michigan. In 1857 he abandoned this work and came to Plattsmouth. In 1861, while acting as temporary editor of the "Platte Valley Herald," he received the news that the flag had been fired upon at Fort Sumter. He immediately stopped the press as an edition of the paper was being issued and printed a circular calling for volunteers to serve the Union. As a result of this, Company A of the First Nebraska was organized at Plattsmouth with Livingston as captain (July 12, 1861). In this month he was promoted to the rank of major and in June, 1862, lieutenant-colonel of the First Nebraska Regiment. Gen. John M. Thayer, who later became governor of Nebraska, always spoke in the warmest terms of the activity and ability of Dr. Livingston, who continued to advance in rank, in the summer of 1863 being promoted to the position of commander of the St. Louis Post and a few months later commander of the district. In the spring of 1865 he was brevet brigadier-general and in July of the same year was mustered out.

He was one of the charter members of both the Nebraska State Medical Society and the Omaha Medical College, having served on the faculty of the latter as professor of the principles and practice of surgery. In the State Medical Society he was for many years the moving spirit. The circular which called the first convention of physicians together for its organization was written and issued by him. He served in 1872 as its president, also he wrote much of the material in the early volumes of the Transactions and one on the "Progress of Surgery" which appeared in the Transactions of 1884.

H. WINNETT ORR.

LLOYD, James (1728-1810). According to J. M. Toner (Address on "Medical Biography," Philadelphia, 1876, 23) Dr. Lloyd of Boston was the first surgeon in America to use ligatures instead of searing wounds with the actual cautery, and to use the double flap in amputation after the method of Cheselden. He also performed lithotomy and was the first in Massachusetts to devote himself wholly to obstetrics. For nearly sixty years he was the great physician and surgeon of New England and a warm advocate of inoculation for smallpox. He was the youngest of ten children born to Henry Lloyd, a Boston merchant, son of James Lloyd, who came from Somersetshire, England, about 1670. James was born at Oyster Bay, Long Island, April, 1728, and educated in Stratford and New Haven, Connecticut. When seventeen he began his medical studies with Dr. William Clarke, of Boston, and after five years sailed to London, where he spent two years as dresser at Guy's Hospital. While in London he attended lectures by William Hunter and William Smellie, then returned to Boston primed with all the latest knowledge of midwifery and surgery, and shortly because of his attainments, acquired a large practice. He was for some time a surgeon at Castle William and in 1764 was an advocate of general inoculation. Having acquired from Smellie's scientific method of teaching obstetrics a new conception of that science as a distinct branch, he practiced and taught midwifery, a pioneer obstetrician in Boston. Ephraim Eliot, a contemporary, says of him: (Proc. Mass. Historical Socy. vol. vii.) "James Lloyd charged fees of half a dollar, but his practice was in high life. He was high in his profession and a leader in surgery. He introduced the male practice of the obstetric art as a general appendage to the office of physic. He was esteemed by the ladies; he entertained much, had fine horses, genteel equipage and a suite of servants." Harvard conferred the honorary degree of M. D. on him in 1790. He was an incorporator of the Massachusetts Medical Society in 1781 and was a councillor.

Dr. Lloyd died March 14, 1810, leaving a son James, who graduated from Harvard College in 1787 and was a United States Senator.

WALTER L. BURRAGE.

LLOYD, Zachary (1701-1756), a founder of the Pennsylvania Hospital. Born in Boston, Massachusetts, on the fifteenth of November, 1701, he studied medicine with Dr. Kearsley, Sr., in Philadelphia, and in 1723 went abroad to continue his medical studies. He began practice in Philadelphia in 1726 and was one of the Founders of the College of Philadelphia; he also helped found the Pennsylvania Hospital, serving as one of the members of its first medical staff, and at his death bequeathing to it 350 pounds and a number of books. He was at one time health officer of the Port of Philadelphia. He never married, and died on September 26, 1756, while paying a professional call.

Dr. John Jones, (q. v.) who had been his pupil, wrote of him as "A person whose whole life had been one continued scene of benevolence and humanity."

FRANCIS R. PACKARD.

LOCKE, John (1792-1856), of Cincinnati, Ohio, inventor of the electric chronograph, was born in Fryeburg, Maine, February 19, 1792, the son of Samuel Barron and Hannah Pussell Locke. In 1796 his father moved to Bethel, Maine. Young Locke's mechanical taste and ingenuity, as well as his love for books, was manifested at an early age, botany being his favorite study, but this he pursued under great difficulties. The books available were the "Pentandria"—the fifth class of plants in the Linnaean system—and a small work by Miss Wakefield. In 1816 he met Dr. Solon Smith of Hanover and with him spent two years in further study of botany, while studying medicine also. Before graduating he obtained the position of assistant surgeon in the navy, but after a short and disastrous voyage resigned and returned to medicine. Although he had never seen a piece of chemical apparatus, his genius led him to construct his own instruments. Chiseling out a mould in a soft brick he made twenty plates of zinc the size of a silver dollar. With as many silver dollars, and cloths wet in brine, he constructed a "Volta's pile" which was a partial success.

He received his M. D. from Yale in 1819, and that year delivered his first public lectures in Portland, Maine, also in Boston, Salem and at Dartmouth College. After graduation he began practice, but abandoned it, not from want of patients, but from their neglect to pay. Discouraged, he accepted a position as assistant in a Female Academy in Windsor, Vermont. In June, 1821, he went West and established a school for girls in Lexington, Kentucky, in 1822 going to Cincinnati, Ohio, where he found a friend, one Ethan Stone, who introduced him to a number of the most influential citizens, with whose

assistance he established a school for girls which soon became popular, even famous. Dr. Locke's method of instruction was largely conversational. In 1835 he was elected professor of chemistry in the Medical College of Ohio but found the place wanting in the necessary means of illustration, so, to meet every possible demand, he visited Europe, and purchased many thousand dollars worth of apparatus. Dr. Locke held this position until the session of 1849-50, when he was displaced, but at the solicitation of friends he resumed and held the chair until 1853. In 1854 he accepted the position of principal in the academy at Lebanon, Ohio. The following year he returned to Cincinnati. He had a most accurate knowledge of geology, and in 1838 was engaged in a state geological survey of Ohio, his report on the "Geological Structure of the Southwestern Portion of the State," being regarded as a paper of greatest value. Later he was called into the service of the United States for the survey of the mineral lands of the Northwest in connection with David D. Owen.

Dr. Locke invented a number of scientific instruments; among them the thermoscopic galvanometer described in the "American Journal of Sciences," vol. xxxiii. The object was, "to construct a thermoscope so large that its indications might be seen on the lecture table, and at the same time so delicate as to show extremely small changes of temperature." In vol. xxiii of the "American Journal of Sciences" is a description of a microscopic compass invented by him. He wrote a series of papers on the medical botany of the west in the "Ohio Medical Repository," 1826-1827, edited by Guy W. Wright, one of the rarest of American Medical Journals. His greatest achievement was the invention of the "Electric Chronograph," or "Magnetic Clock." Lieut. Maury, in an official letter to the Hon. John Y. Mason, secretary of the navy, dated National Observatory, Washington, January 5, 1849, says: "I have the honor of making known to you a most important discovery in astronomy, by Dr. Locke, of Ohio." After his observations in magnetism had been published, the English government presented to him a complete set of magnetic instruments.

After his return to Cincinnati in 1855, he broke down completely. For rest he went to Virginia to examine some coal lands, but returned with his infirmities greatly aggravated.

He was the author of "The Outlines of Botany" (1829); A sub-report on "The Survey of the Mineral Lands of Iowa, Illinois and Wisconsin," published by Congress (1840;) sub-report on "The Geology of Ohio," published by the state (1838); and text-books on botany and English grammar.

He married, in Cincinnati, October 25, 1825, Miss Mary Morris, of Newark, New Jersey.

He died in Cincinnati, July 10, 1856.

A. G. Drury.

LOEB, Jacques (1859-1924), pioneer in the application of physics and chemistry to biology and a protagonist in the mechanistic interpretation of biology, was born in Germany, April 7, 1859. After graduating from the Ascanisches Gymnasium in Berlin, he studied medicine in Berlin and Munich and then in Strasbourg where he received his M. D. in 1884. From 1886 to 1888, he was assistant in physiology in the University of Würzburg and from 1888 to 1890, in the University of Strasbourg. During the next two years, he worked in the Biological Station at Naples, Italy. He came to America in 1891 to be an assistant in biology at Bryn Mayr College, and became assistant professor in physiology and experimental biology in 1892, associate professor in 1895, and professor in 1900. He then occupied the chair of physiology in the University of Chicago until 1902 when he was called to the same post in the University of California. After 1910 he directed the Division of General Physiology of the Rockefeller Institute. Soon after coming to America, the conception of "Physiologically balanced" solutions, representing the ideal environment of living cells, was greatly fostered by Loeb. He claimed that the hypothesis of purposeful behavior was replaced by explanations based on purely mechanical and chemical reactions. These theoretical conceptions of life led to his philosophy that if experiments were carried far enough, the mystery of the life processes could be explained by the known laws of chemistry and physics. His successful production of "fatherless frogs" made a wide popular appeal. All his earlier works, including studies on the heliotropism of animals and its identity with the heliotropism of plants, are collected in two volumes, "Studies in General Physiology" (1905). In 1906, he published "Dynamics of Living Matter"; in 1912, "The Mechanistic Conception of Life"; in 1913, "Artificial Parthenogenesis and Fertilization"; in 1916, "The Organism as a Whole"; and in 1918, "Forced Movements, Tropisms, and Animal Conduct." Recently he gave a new orienta-

tion to much of the vague "colloid" behavior of proteins. The explanation of the properties of physiologic membranes also engaged his research. He edited the "Journal of General Physiology" from its foundation. In 1909, Dr. Loeb received an honorary D.Sc. from Cambridge, England, M. D. from Geneva, and Ph. D. from Leipzig. He was a member of many professional associations here and abroad.

He married Anne L. Leonard of Easthampton, Massachusetts, in 1891.

Loeb was a keen observer and a man of great personal charm with an unfailing fund of humor. He lived in his laboratories—in New York in winter and in Wood's Hole, Massachusetts, in summer. On February 11, 1924, he died of heart disease at Hamilton, Bermuda, where he had gone to undertake experiments at the marine laboratory.

LOGAN, Cornelius Ambrose (1832-1899), physician, editor and diplomat of Kansas, was born in Deerfield, Massachusetts, August 24, 1832. He came of a family distinguished as journalists, dramatists and actors. His father, Cornelius Ambrose Logan (1806-1853), was author of "Yankee Land" (1834), "The Wag of Maine," "The Wool Dealer" and other plays; his mother was Alice Eliza Blunden. Her sisters, Eliza (1829-1872) and Olive (1839-1909), were actresses and writers, and another sister, Celia (1837-1904), was a journalist and dramatist. Dr. Logan's boyhood was passed in Cincinnati, Ohio, to which his parents moved in 1840, and where he received his early education. In 1849 he began to study medicine under John T. Shotwell (q. v.) and in 1850 under R. D. Mussey (q. v.); he was graduated at the Miami Medical College in 1853 and was appointed resident physician at St. John's Hospital, Cincinnati, and assistant in chemistry at Miami. He later moved to Indiana where he remained one year, then in 1856 settled in Leavenworth, Kansas, and practiced his profession, at the same time being interested in the political life of the state. When the Civil War broke out he was appointed by the governor of Kansas chairman of the State Board of Medical Examiners and held this position till the end of the war; he took part in the Battle of Westport. In 1865 he was appointed a member of the Geological Corps of the State and made a "Report on the Sanitary Relations of the State of Kansas" (1866). In 1868 he was a founder of the "Leavenworth Medical Herald," of which he was editor also. He wrote "On the Climatology of the Missouri Valley;" "Physics of Infectious Diseases;" and edited the works of General John A. Logan.

Dr. Logan was largely instrumental in developing the coal field of northern Kansas; he succeeded in securing a franchise, going to Washington for the purpose, so that a bill was passed giving the company which had been organized "the right to purchase twenty acres in fee-simple of the Fort Leavenworth Government Reservation . . . together with the exclusive right to mine for all coal under that Reservation, embracing about 7,000 acres of land." The result was the great output of cheap fuel to the people of Leavenworth and the consequent impetus given to manufacturing industries in that section. In 1873 President Grant nominated Dr. Logan as minister to Chile, and his mission was so satisfactory and he was held in such esteem that he was chosen to arbitrate between Chile and other governments. In 1879 he became minister to Central America, and in 1883 was re-appointed minister to Chile, holding this position until 1885. His health became impaired and he returned to the United States, but did not take up a permanent residence, usually spending his summers with his daughter in Canada and winters in Washington or in California.

Dr. Logan married Zoe Shaw in 1854; they had two children. He died at Los Angeles, California, January 30, 1899, of Bright's disease.

HOWARD A. KELLY.

Logan, George (1753-1821), secretary to William Penn and a United States Senator from Pennsylvania. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 712.

LOGAN, Samuel (1831-1893), surgeon and teacher in Charleston, Richmond and New Orleans, was born near Charleston, South Carolina, on April 16, 1831, his father a Scotsman his mother a Glover of South Carolina. The boy was educated in his native city and graduated from the South Carolina Medical College in 1853, practicing but a few months in Charleston, where he was appointed assistant demonstrator of anatomy in his alma mater. A year later he became professor of anatomy and lectured on surgery in the summer school until the outbreak of the Civil War, when he volunteered his services to the Confederacy. In 1865 and 1866 he resumed

his duties in the chair of anatomy and surgery at the South Carolina Medical College and the following summer became professor of anatomy in the Medical College of Richmond, Virginia, accepting the chair of surgery in the New Orleans School of Medicine the next year. In 1867 he was dean of that school and professor of anatomy and clinical surgery in the University of Louisiana in 1872. He was peculiarly fitted for teaching and his clinical lectures and operations were of the highest rank. He was one of the editors of "Geddings Surgery," published in 1858. Dr. Logan was president of the New Orleans Academy of Medicine in 1872 and of the New Orleans Medical and Surgical Association in 1876 and a member of the South Carolina Medical Society.

He married Mary Virginia King, a daughter of a former judge of the Louisiana Supreme Court.

JANE GRAY ROGERS.

LOGAN, Thomas Muldrup (1808-1876), surgeon, historian and sanitarian, of Charleston, New Orleans and Sacramento, was born in Charleston, South Carolina, July 31, 1808. He came of a medical family, his father and grandfather having been physicians. His great-great-grandfather, Colonel George Logan, who came from Restalrig, Scotland, early in the eighteenth century and settled in Charleston, had a son, William, who married Martha, daughter of the Provincial Governor Daniel of South Carolina. Their son, George Logan, after receiving a medical degree from the University of Edinburgh in 1773, studied two years in Europe and in 1775 married Honoria Muldrup, daughter of the Danish Consul in Scotland, and returned to Charleston to practice. To benefit his health he traveled to the New England States in 1793, but died in Salem, Massachusetts, leaving, besides his wife, four children, one of whom, George Logan (1778-1861) was the father of the subject of our sketch. This George Logan was born in Charleston, January 4, 1778, and graduated in medicine at the University of Pennsylvania in 1802 with a thesis entitled "Hepatic State of Fevers." He settled in Charleston, but in 1810 became a surgeon in the United States Navy, serving until his resignation in 1829. He returned to Charleston and practiced there until his death. He was physician to the Orphans' Home until 1854, and for about twenty years was in charge of the Naval Hospital in that city. He wrote "Practical Observations on Diseases of Children" (218 pp., Charleston, 1825). In 1802 he married Margaret White, daughter of Daniel Polk of Wilmington, Delaware; she became the mother of Thomas Muldrup Logan. In 1834 he married Ann, daughter of Captain George Turner, of Charleston. He died in New Orleans, February 13, 1861.

Thomas Muldrup Logan was educated at Charleston College and studied medicine with his father, graduating at the Medical College of South Carolina in 1828 with a thesis on "Salix Nigra" as a succedaneum to the official Cinchona. He began practice in Charleston and in 1832 went to study for a year in London and Paris. In 1833 he was appointed lecturer on materia medica and therapeutics in the Southern School of Medicine, a summer course connected with the Medical College of South Carolina. With Thomas L. Ogier he began "A Compendium of Operative Surgery" (the first number, published in 1834; the second in 1836); it described operative procedures for the ligation of arteries, with illustrations designed and drawn by Logan. In 1843 he moved to New Orleans where he was chosen a visiting physician to the Charity Hospital; he gave up this position in 1847 when appointed visiting surgeon to Luzenberg Hospital, which was closed in 1849. Logan moved to San Francisco, California, in January, 1850, settling in the autumn in Sacramento, where he acquired an excellent practice and the esteem of the community, and remained the rest of his life.

Logan wrote letters to E. D. Fenner, M. D., published in the "Medical Reporter" in 1850, describing the climate of California; he described the hygienic conditions of California in an article contributed to the "New Orleans Medical and Surgical Journal" (1852-3, ix, 8); he wrote articles on climatology and meteorology published in the Reports of the Smithsonian Institution for 1854-56. Four articles on the "History of Medicine in California" went to the "California State Medical Journal". In 1858 he presented to the California State Medical Society a report on the "Topography, Meteorology, Endemics and Epidemics of California"; in 1859 he sent to the American Medical Association a report on the "Topography and Epidemics of California." In 1868 he read before the Sacramento Society for Medical Improvement a paper on the "Medical History of California for the year 1868," and the same year before the San Francisco Medical Society a paper on "Mushrooms and Their Poisoning, with Cases" (published in the "Pacific Medical Journal," n. s.,

ii). His address as president of the State Medical Society is published in the Transactions for 1870-1871, containing also his paper on the "Mortality of California." The Transactions for 1871-1872 contained his "Report on the annual museum for the Exhibition of the American Medical Association in Philadelphia and the contributions from California." At the meeting in Philadelphia (1872) he was elected president of the Association and when presiding at the St. Louis meeting the following year discussed medical education and state medicine. When the law was passed in 1870 authorizing a State Board of Health, Logan became permanent secretary and took up such matters as the ventilation of schoolrooms and areas of special diseases. He believed strongly in a National Board of Health, and prepared a bill for Congress to establish a National Sanitary Bureau at Washington (published in the second biennial report of the State Board of Health; the third biennial report gives another paper further showing his interest in the subject of public health). In 1867 he made a second journey to Europe, spending several months visiting medical institutions in France, England and Germany. Besides the offices named, Dr. Logan was president of Agassiz Institute of Sacramento and meteorologist of the State Agriculturist Society of California; he was an honorary member of the Imperial Botanical and Zoological Society of Vienna.

Dr. Logan married Susan W. A., only daughter of Judge John S. Richardson, of South Carolina; their only surviving son, Thomas M. Logan, graduated in medicine at the Medical College of South Carolina and practiced at Columbia, Alabama. In 1864 Dr. Logan's wife died and in 1865 he married Mary A., daughter of Samuel Greely, of Hudson, New Hampshire; they had no children.

On February 13, 1876, Logan died at his home in Sacramento, of pneumonia.

HOWARD A. KELLY.

LONG, Crawford Williamson (1815-1878).

The credit for first using ether as an anesthetic, though not of demonstrating it to the medical world, must be ascribed to Crawford W., son of James Long, a lawyer of Danielsville, Georgia, where Crawford was born on the first day of November, 1815. His paternal grandfather, Capt. Samuel Long, of Pennsylvania, distinguished himself during the Revolutionary War, and was one of Gen. Lafayette's officers at Yorktown. Crawford matriculated at Franklin College—now the University of Georgia—at an early age. Subsequently studying for one year at the University of Pennsylvania, he received there his M. D. in 1839, then spent a year in New York, and there attained reputation as a skilful surgeon, and though a young man, soon acquired an extensive practice, for his abilities were apparent. In 1841, because of family importunities, he returned to Georgia and practiced in the village of Jefferson. His office became the place of sojourn of the young men of the village who desired a pleasant evening. About that time the inhalation of laughing gas, as an exhilarant, was much discussed. Lecturers on chemistry would sometimes entertain by giving a "nitrous oxide party," during which the participants would become drunk from breathing it. It was in the winter of 1841 that some young friends importuned Dr. Long to permit them to have a party in his rooms. The physician had no means of preparing nitrous oxide gas, but suggested that sulphuric ether would produce similar exhilaration. The ether was produced; the young men inhaled and became hilarious, some of them receiving bruises. Long noted that these bruises were not accompanied with pain, so divined that ether must have the power of producing insensibility, and from this simple observation came the great discovery of anesthesia. He determined to prove the value of his discovery, and during the month of March, 1842, ether was administered to Mr. James Venable until he was completely anesthetized, when a small cystic tumor was taken from the back of his neck. To the amazement of the patient he experienced no pain. From five to eight other cases, testing the anesthetic power of ether, were satisfactorily dealt with by Dr. Long during the years 1842 and 1843—quite a goodly number when it is remembered that more than half a century ago surgical operations were not frequent in the country practice of a young physician.

Dr. Crawford Long's surgical operations, under ether, were exhibited to medical men and also to persons of the community, as established by affidavits of persons operated upon, and of witnesses to the operations. Says Ange De Laperrière, M. D., of Jackson County: "I do certify to the fact of Dr. C. W. Long using sulphuric ether by inhalation to prevent pain in surgical operations was frequently spoken of and became notorious in the county of Jackson, Georgia, in the year 1843." In May, 1843, Dr. R. D. Moore and Dr. Joseph B. Carlton, for many years leading physicians in the city of Athens, Georgia, discussed the

trial of Dr. C. W. Long's discovery in a case of surgery before them. They were unfortunately prevented from making the experiment by having none of the fluid at hand. Mrs. Emma Carlton, widow of Dr. Joseph B. Carlton, who died recently in Athens after living there for many years, signed the following: "I do certify that Dr. Crawford W. Long, of Jefferson, Jackson County, advised my husband, Dr. Joseph B. Carlton, a resident of Athens, Georgia, to try sulphuric ether as an anesthetic in his practice. In November or December, 1844, in Jefferson, Georgia, while on a visit to that place, in the office of Dr. Long, my husband extracted a tooth from a boy who was under the influence, by inhalation, of sulphuric ether, without pain—the boy not knowing when it was done. I further certify that the fact of Long using sulphuric ether, by inhalation, to prevent pain, was frequently spoken of in the county of Jackson at this time, and was quite notorious."

It is to be regretted that Long did not at once make known to the world his great discovery of anesthesia. Considered from a present point of view, his delay seems extraordinary. But it must not be forgotten that since that period the world has moved with exceeding rapidity. At that time for a young medical practitioner in an obscure village, far from contact with centers of thought, removed from railroads, enjoying but modest postal facilities, with no great hospital organizations or medical associations to confirm his professional research, for a modest, diffident, young physician to claim so startling a discovery as anesthesia has proven to be, without first securing most exhaustive proof of its worth, would have brought upon him the adverse criticism of his elders, and possibly the laughter of his colleagues.

Dr. William H. Welch said that Long "is necessarily deprived of the larger honor which would have been his due had he not delayed publication of his experiments with ether until several years after the universal acceptance of surgical anesthesia . . . we need not withhold from Dr. Long the credit of independent and prior experiment and discovery but we cannot assign to him any influence upon the historical development of our knowledge of surgical anesthesia or any share in its introduction to the world at large." A careful examination of the question clearly shows that two and a half years elapsed after the discovery by Crawford W. Long, before Dr. Wells (q.v.), of Hartford, knew of the anesthetic power of nitrous oxide; that four and a half years passed after Dr. Long's initial experiment before Dr. Morton (q. v.) claimed to have the same knowledge. Morton is declared to have received the suggestion from C. T. Jackson (q. v.); the latter claimed to have made the discovery about the time Dr. Long made it, but left it to Morton to prove it practically. Dr. Hugh H. Young of John Hopkins' Hospital, in his interesting pamphlet entitled "Long, the Discoverer of Anesthesia," says "The immediate and universal use of anesthesia in surgery is due to the great Boston surgeons, Warren, Hayward and Bigelow." In 1849 Morton petitioned Congress for a reward as the discoverer, but he was opposed by the friends of Wells and Jackson. The friends of Morton and Wells presented volumes of testimony to the Senate of the United States in behalf of their candidates, but Jackson afterwards acknowledged the justice of Dr. Long's cause. For five years Crawford W. Long refused to take any part in the controversy, but he naturally desired to be recognized as the discoverer of anesthesia, and to that effect wrote an article for the "Southern Medical and Surgical Journal," vol. 5, December 1849, pp. 705-713, "An Account of the First Use of Sulphuric Ether by Inhalation as an Anaesthetic in Surgical Operations." Confronted by so formidable an opponent as Dr. Long, the friends of Morton and Wells finally seemed to lose hope, the bill before Congress was allowed to die, and it was never resurrected. In 1877 Dr. J. Marion Sims investigated the claims of Dr. Long to the discovery of anesthesia, and was convinced of their merit.

He demanded their recognition by the medical profession, Dr. Long especially desiring the endorsement of the American Medical Association. It was but a short time afterwards that Dr. Long died, on the sixteenth of June, 1878, in the city of Athens, Georgia, for many years the place of his residence. In 1910 an obelisk, given by Dr. L. G. Hardman, was set up in the city of Athens in memory of Long.

He married, in 1842, Caroline, niece of Gov. Swain of North Carolina.

ISHAM H. GOSS.

LONG, David (1787-1851), pioneer army surgeon of Cleveland, son of Dr. David Long who came from Shelburne, Massachusetts, was born in Hebron, Washington County, New York, September 29, 1787. He was descended from David Long, who came from Scotland to Taunton, Massachusetts, in 1747. After studying medicine with his uncle, Dr.

John Long, of Shelburn, he afterwards graduated M. D. in New York City and came to Cleveland in June, 1810, presumably influenced by a letter written by Stanley Griswold and dated May 28, 1809. This letter is to be found in a scrap book in the Historical Society of Cleveland. Dr. Long was a surgeon in the western army in the War of 1812. At the time of Hull's surrender it was feared that the frontier settlements would be overrun by Indians. News of the surrender reached Dr. Long when at Black River, at what is now called Lorain. In order to protect the settlers by bringing them early knowledge of this event, he rode on horseback to Cleveland, a distance of twenty-eight miles, in two hours and fourteen minutes. On another occasion, in a case of great emergency, he rode fourteen and a half miles in fifty minutes, changing horses twice. These incidents show the hardships surrounding pioneer life, and the energy and endurance which Dr. Long brought to overcome them.

In 1811 Dr. Long married Julianna Walworth, daughter of Judge Walworth. A son, Solon, died at the age of eighteen, and a daughter, Mary Long Severance, lived in Cleveland until the age of eighty-six, being one of the most influential women in the charities of Cleveland. Dr. and Mrs. Long, in addition to their own children, adopted several others. He was highly esteemed by the foremost citizens, and his position in the community and church was an influential one. He died in Cleveland on September 1, 1851, of apoplexy.

A short sketch and portrait of Dr. Long were published in the "Magazine of Western History," January, 1886.

DUDLEY P. ALLEN.

LONGWORTH, Landon Rives (1846-1879), of Cincinnati, Ohio, developer. of the art of microphotography, was born in that city December 25, 1846, the second son of Joseph and Anna Maria Rives Longworth. His mother, Miss Anna Maria Rives, was the daughter of Dr. Landon Rives, who was for many years professor of obstetrics in the Medical College of Ohio. In 1863 Landon entered Harvard College and received his A. B. in 1867. In 1868 he went to Europe to study art and worked under Hans Gude, at Carlsruhe, and became a painter of no ordinary merit. His aim was both to cultivate his art and to bring the enjoyment of it within the reach of the people. He found, however, no encouragement. Discouraged, he sought other fields, in which, with his wealth, he could be of the greatest benefit to humanity. The spring of 1870 found him beginning to study medicine under Dr. Edward Rives, and he matriculated in the Medical College of Ohio, but in the fall went to New York, where he entered the College of Physicians and Surgeons. In 1873 he was graduated, taking the faculty prize for a thesis on "The Ligature of the External Carotid," which was later published in the "Archives of Scientific and Practical Medicine," May, 1873. After graduation he again visited Germany, going first to Vienna, where he sat under Hebra; studied the opthalmoscope with Jaeger and Arlt, the laryngoscope with Schrötter and Stoerck, and enjoyed the benefits of the many practical courses in operative surgery. After one term in Vienna he went to Strassburg to study histology. There he entered the laboratory of Waldeyer, and took the courses of V. Recklinghausen, and while there published his "Discoveries of the Nerve Terminations in the Conjunctiva" in the "Archiv. für Miscroscopische Anatomie" of Max Schultze. Returning home in the fall of 1874, he was immediately chosen assistant demonstrator in the Medical College of Ohio and Lecturer on dermatology, also pathologist to the Good Samaritan Hospital. He was adjunct professor of anatomy and clinical surgery in the Medical College of Ohio in 1875 and professor in the same chairs from 1876 to 1879, also pathologist to the Cincinnati Hospital from 1876 until his death. Surgery and dermatology were his specialties, and he rapidly built up a practice but soon gave it up and devoted himself exclusively to scientific investigation. With characteristic energy he turned his house into a medical workshop, retaining only two rooms for non-medical work—his sleeping apartment and a music room; the latter a place where all the better musicians of the city were in the habit of meeting.

It was in this house that Dr. Longworth began his work on photography, injection of specimens and the electric light. The process of photographing microscopic preparations he developed by means of a new apparatus, to such an extent that all his results were satisfactory—results that would have been given to the world in a short time, if he had lived, in the form of a work on microscopic anatomy. The methods which he used were described fully in a lecture given by him before the Academy of Medicine of Cincinnati, May 18, 1878, entitled "Hints on Improvements in Micro-photography." During his last

year his whole time was taken up by injecting specimens and the study of electric light. He devised a new instrument for injecting, his injection mass being his own invention. In the last session of the college he used the electric candle for his demonstrations in anatomy, and had just completed the construction of a lantern, by means of which he could throw the images of solid bodies upon the screen, thus enabling him to perform dissections of organs, such as the brain, before a class of 350, showing each and all of them every step. In his studies on electricity he went so far as to construct a new electric candle, for which he was granted a patent, May 21, 1878.

Dr. Longworth was never married.

On the fifth of January, 1879, he was taken ill with pneumonia, and died on the fourteenth.

A. G. Drury.

LONGYEAR, Howard Williams (1852-1921), Superintendent of the Harper Hospital and gynecologist of Detroit, the son of John Wesley Longyear, Judge of the United States District Court of Detroit, and Harriet Monroe Longyear, was born in Lansing, Michigan, July 24, 1852. A preliminary education in the public schools of Lansing, supplemented by a two years' course in chemistry at the University of Michigan, preceded his study of medicine which began as a student in the office of Doctor David O. Farrand (q. v.) of Detroit and ended with graduation from the College of Physicians and Surgeons of New York in 1875. Returning to Detroit, Doctor Longyear became the first superintendent and resident physician to the Harper Hospital, and from 1875 until the time of his death, he was continuously a member of its Medical Board. Under his guidance, Harper developed into a great general hospital; the introduction of antiseptic surgery was the notable event in his administration. The first operation, in Michigan, under Lister's carbolic acid spray was performed by T. A. McGraw (q. v.) assisted by Longyear, in 1878, in the amphitheatre of the Harper Hospital before the class of the Detroit Medical College. In 1879, he resigned and went to Europe and studied for a year in Berlin and Vienna. On his return he was made a member of the visiting staff of Harper Hospital and began his career as a general practitioner. After ten years of large experience in general medicine and surgery, Longyear limited his practice to gynecology and abdominal surgery, remaining the trusted confidant and adviser to many of his old families.

To fix himself for his chosen field, he again went to Europe in 1890 and studied with Lawson Tait of Birmingham, chronicling his experience in an article, " Five Weeks with Lawson Tait."

To medical literature he made frequent contributions; the most original was a monograph on "Nephrocoloptosis," (1910), stressing the etiologic importance of the "nephrocolic ligament" in nephroptosis and presenting his operation to fix the prolapsed kidney and colon. He was a member of the American Surgical Society and active in the American Association of Obstetricians and Gynecologists of which he was president in 1904. Keenly alive to the problems of sanitary science and preventive medicine, he served as a member of the Detroit Board of Health for four years. In 1895 Doctor Longyear became clinical professor of gynecology in the Detroit College of Medicine, a chair he held until he retired from active service on the staff of the Harper Hospital. At different times he was visiting and consulting surgeon and chief of staff to the Woman's Hospital and consulting surgeon to the Providence Hospital. In 1914, he was made chief of the department of gynecology and obstetrics in the Hospital. A year later, after forty years of active service, he retired, retaining only the post of consulting surgeon. Recalled to active duty in 1916, however, he served two additional years as a member of the executive committee, retiring finally in 1918.

In 1880, Doctor Longyear married Miss Abbie Scott of Chicago, who survived him with two daughters.

Confined to his bed and chair for the last six months of his life, he died July 2, 1921, from chronic myocarditis.

He was ever an ardent nature lover and excelled in angling. His knowledge of woodcraft and his unfailing good nature made him an ideal field companion.

LOOMIS, Alfred Lebbeus (1831-1895), clinical teacher of New York. With little money and less health, Alfred Loomis began to practice in New York when only twenty-three. Tuberculosis had run rife in the family and on January 23, 1895, he himself died of it. His parents were Daniel and Eliza Beach Loomis and Alfred was born at Bennington, Vermont, on October 16, 1831, and had barely funds enough to carry him through Union College where he took his A.

B. in 1851. He had his M. D. from the College of Physicians and Surgeons of New York in 1852. It was not long before he gave special attention to diseases of the chest, the art of auscultation and percussion, then developing rapidly, having great attractions for him. In 1864 want of money, the war, and a fire had brought the University of the City of New York to a very low ebb. Loomis brought all his energy as teacher and organizer to diagnose and heal its condition, with the result that the Loomis Laboratory was built and endowed, someone donating the sum of $100,000 through Dr. Loomis in 1886 for the building of the laboratory. He joined with Dr. Trudeau (q. v.) in making provisions for impecunious consumptives and took keen interest in the Hospital in the Adirondacks.

He had great skill as a clinical teacher and anyone reading a "Clinical Lecture on Empyema," published in the "Boston Medical and Surgical Journal," for June 26, 1879, is impressed with the happy blending of questioning of the student and demonstration by physical signs. His great talent lay in discriminating between the patient and the disease, looking beyond the morbid process to the man fighting with it for his life. During the three days he himself lay dying, all classes came to beg to do semething for him, for few men had exerted so powerful an influence in so many directions.

Among his appointments were: professor of pathology and practice of medicine, University of the City of New York; physician, Bellevue Hospital; lecturer on physical diagnosis, College of Physicians and Surgeons, New York.

In 1858 he married Sarah J. daughter of Henry Patterson, of Hoosic Falls. A son was Dr. Henry Patterson Loomis, (q. v.).

His chief written works were "Lessons in Physical Diagnosis," 1868; a volume on "The Diseases of the Respiratory Organs, Heart and Kidneys," 1876; "A Text-Book of Practical Medicine," 1884, besides papers contributed to leading medical journals.

LOOMIS, Henry Patterson (1859-1907), Henry Patterson Loomis, distinguished in the field of treatment of tuberculosis, died at his home in New York City on December 22, 1907, of pneumonia, after a short illness, in the forty-ninth year of his age and at the height of his intellectual powers and his professional work. The son of Dr. Alfred L. Loomis (q. v.), first president of the American Climatological Association, he inherited a name distinguished in the annals of medical science, and an ample fortune which might have robbed a mind less devoted to the pursuit of truth in our calling, of two of the strongest incentives to work. Graduating from Princeton University in 1880, he took his degree in medicine from the New York University Medical College in 1883; in 1887 he was appointed visiting physician to Bellevue Hospital, and for a number of years was professor of pathology in his alma mater. His demonstrations, supplementing the clinical teaching of his renowned father, were always of great interest to the students. He was one of the first to attempt to clear up the confusion resulting from the application of the term "Bright's disease" to kidney affections, and to insist upon a proper classification based upon anatomical study. His article upon "Diseases of the Kidneys," written in 1896 for the "American System of Practical Medicine," leaves little to be added at this day. But it was in the field of tuberculosis that he sought and gained his highest honors, continuing the work that had been dearest to his father's heart. The Loomis Sanatorium at Liberty, New York, was one of the first institutions to treat tuberculosis "at the right time, and in the right place, and in the right way, until the patient was well" instead of in the old way—until the patient was dead. In 1896 Loomis was made visiting physician to the New York Hospital, and in 1897 consulting pathologist to the New York Board of Health. Upon the organization of the Cornell University Medical College in New York City in 1898, he was chosen to fill the chair of materia medica and therapeutics. He was an active and talented contributor to medical literature, and especially to the "Transactions of the Climatological Association," his last paper being a very timely "Plea for the Systematic Study of Climatology in the Medical Schools" (1906), that deserves the careful study of every physician.

CHARLES E. NAMMACK.

LOOMIS, Silas Lawrence (1822-1896), a founder of Howard University, Washington, D. C. was the son of Silas and Esther Case Loomis and was born in Coventry, Connecticut, May 22, 1822. When five years old his father died. He taught school in Massachusetts and Rhode Island, 1837-43, in this way being able to work his way through college, graduating in 1844 at Wesleyan University, Middletown, Connecticut. In 1848 he mar-

ried Betsy Ann Tidd, who died in 1850. The next year he married Abigail Paine. He was appointed in 1857 astronomer to the Lake Coast Survey and in 1860 special instructor in mathematics, United States Naval Academy, Annapolis, and ordered on a cruise at sea. In 1861 he became professor of chemistry and toxicology in Georgetown Medical College, but resigned in 1867. During the war of 1861-5 he was acting assistant surgeon, United States Army; served in the Army of the Potomac on the staff of Gen. McClellan, and also in military hospitals in Washington. Associated with others in founding Howard University, he is said to have suggested a university instead of a college and to have organized the medical department. In 1878 he was employed by the United States Department of Agriculture collecting special statis- and estimated the population of the United tics of food products of the United States, States in 1880, being in error only by 18,000. He discovered a process and invented machinery for making textile fiber from varieties of the palm in 1878. He wrote "Normal Arithmetic," 1859; "Analytical Arithmetic," 1860; and "Education and Health of Women," 1882.

His A. M. was from Howard University, his M. D. (1857) from Georgetown. He died June 22, 1896.

DANIEL SMITH LAMB.

LORING, Edward Greely (1837-1888), ophthalmologist of New York, was born in Boston, Sept. 28, 1837, and began his medical studies in Florence, Italy, in 1859, continuing them at Pisa. In 1862 he returned to Boston, entered Harvard Medical School, was graduated in 1864 and became an externe in the ophthalmic clinic of the Boston City Hospital and the Massachusetts Charitable Eye and Ear Infirmary. In 1865 he began practice in Baltimore, but in the following year left for New York to be the associate of C. R. Agnew (q. v.). He became surgeon to the Brooklyn Eye and Ear Hospital, the Manhattan Eye and Ear Hospital, and later in the New York Eye and Ear Infirmary, and a member of the American Ophthalmological Society in 1865. He died of angina pectoris, April 23, 1888.

Loring was a prolific writer, his most notable work being his well known and admirable "Text-book on Ophthalmoscopy" published in 1886. By his writings on ophthalmological subjects and by his perfection of the ophthalmoscope (which is still one of the most popular instruments) he did far more than any other one man to place American ophthalmology abreast with that of the world.

HARRY FRIEDENWALD.

LORING, George Bailey (1817-1891), agriculturist and diplomat, was born in North Andover, Massachusetts, November 8, 1817, graduated in arts from Harvard in 1838 and in medicine in 1842. He was surgeon to the Marine Hospital, Chelsea, Massachusetts, from 1843 until 1849 when he was commissioned to revise the U. S. Marine Hospital system. He served as postmaster at Salem for the four years ending in 1857 and then abandoned his profession to devote himself to scientific agriculture and politics. He was a member of Congress, 1876 to 1881 and from 1881 to 1885 commissioner of agriculture under President Garfield, giving especial attention to the diseases of domestic animals. His study of inoculation resulted in the discovery and use of mallein and other vaccines which were made and distributed by the Department. During his administration, the control of quarantine against diseased animals from foreign countries was transferred from the Treasury Department to the Commissioner. In 1889, President Harrison appointed him Minister to Portugal.

He died at Salem, Massachusetts, September 14, 1891.

Among his published addresses and writings are: "Classical Culture," 1866, "Eulogy on Louis Agassiz," 1873, "The Cobden Club and the American Farmer," 1880, "The Farmyard Club of Jothan" (a sketch of New England life and farming), 1876, "Medical Profession in Massachusetts during the Revolutionary War," Boston, 1875.

LOVEJOY, James William Hamilton (1824-1901), professor and dean in the Georgetown D. C. Medical School, was born December 15, 1824, in Washington, District of Columbia. His father, John Naylor Lovejoy, Jr., was of Georgetown; his mother was Ann Beddo, of Montgomery County, Maryland. He went as a boy to private schools in Washington, and graduated A. B., 1844, A. M., 1847, Columbian College, District of Columbia. After teaching school a few years he studied medicine at the Jefferson Medical College, Philadelphia. After graduation in 1851 he returned to Washington and engaged in general practice. He was appointed professor of chemistry in the Georgetown Medical School, 1851, and became professor of materia medica in 1880; in 1883, professor of

theory and practice of medicine; he resigned in 1898 and was appointed professor emeritus. For five years he was dean and ten years president of the medical faculty. He was active in the management of many charitable institutions, being one of the founders of the Garfield Hospital, and serving as a consultant until death. In 1881 he was elected director and consulting physician to the Children's Hospital. In 1893, when the training school was established in connection with the hospital, he was chairman of the lecture faculty, lecturing here and in the Garfield School for Nurses for several years. He was a member of the Medical Society for forty-seven years, its president in 1876, and corresponding secretary in 1868, also president of the District Medical Association for three years, 1870 to 1872.

On November 24, 1858, he married Maria Lansing, daughter of William A. Green, Brooklyn, New York. She died in 1866, and he, suddenly, March 18, 1901.

DANIEL SMITH LAMB.

LOVELL, Joseph (1788-1836), surgeon-general of the Continental Army, was born at Boston, December 22, 1788, graduated from Harvard in 1807 and studied medicine under Dr. Ingalls, (q. v.) of Boston, graduating M. D. from Harvard in 1811. He entered military service as surgeon of the 9th Infantry in May, 1812, getting charge of the general hospital at Burlington, Vermont, where in August, 1814, he became hospital surgeon. Upon the formal organization of the army medical department he was, in 1818, appointed surgeon-general. He then organized the department and revised and reissued the regulations for its government and in 1821 still further improved and elaborated the organization, giving it the form which it retained up to 1861. In 1834 he instituted the system of examinations for admission to the medical corps and secured the final abolition of the whiskey ration in the army. He also administered the affairs of the medical department in the early part of the Seminole War, and died October 17, 1836.

JAMES EVELYN PILCHER.

LOVETT, Robert Williamson (1859-1924), Boston orthopedist, was born in Beverly, Mass., November 18, 1859, the son of John Dyson, a Boston merchant, and Mary Elizabeth Williamson Lovett. After preparation for college at the private school of G. W. C. Noble he took his A. B. from Harvard in 1881 and his M. D. four years later, having served as house officer at the Boston City Hospital and as assistant surgeon to the New York Orthopedic Hospital. When he began practice in Boston in 1886 he was made surgeon to out patients at both the Carney and City hospitals as well as assistant out-patient surgeon to the Children's and surgeon to the Infants' hospitals and to the House of the Good Samaritan, places enough to keep a young practitioner busy. He used his clinical material for five years to instruct students in Harvard Medical School, holding the position of assistant in clinical surgery in that institution. In the year 1901 he resigned from the Carney and the City in order to devote all of his time to orthopedics and the next year became assistant in that specialty at Harvard. Advancing through the grades of instructor in orthopedics (1906-1909), assistant professor of orthopedic surgery (1909-1914), professor of orthopedic surgery (1914-1915), he reached the position he held at the time of his death, John B. and Buckminster Brown Professor of Orthopedic Surgery, in 1915. Two years before his death he resigned the office of visiting surgeon to the Children's Hospital and also surgeon in chief to the Massachusetts Hospital School, at Canton and to the Peabody Home for Crippled Children, then just starting in its new home in Newton, for Dr. Lovett had incipient heart disease and was obliged to retire from some of his many fields of service to the public. Before the reorganization of the Massachusetts State Board of Health, in 1914, he was a member of that board and gave valuable advice to its chairman. He gave special attention to the study of infantile paralysis and had charge of the investigations of the epidemics of that disease in Vermont following the year 1914. In 1916 he became chairman of the Harvard Infantile Paralysis Commission and directed the affairs of this important commission for the rest of his life. During the world war Dr. Lovett was a member of the Massachusetts State Committee Council of National Defense, Medical Section and was a member of the advisory board of orthopedics of the United States Army, serving with the rank of major, and giving intensive instruction in Boston and Washington to some 350 officers of the Medical Corps destined for work overseas.

To medical literature Dr. Lovett was a frequent contributor. In 1890 appeared the first edition of the treatise on "Orthopedic Surgery" by E. H. Bradford (q. v.) and R. W. Lovett. A second edition came out in 1899.

Another treatise on the same subject under the joint authorship of Sir Robert Jones of Liverpool, England, and Lovett was published in 1923. Among his more important contributions may be mentioned: The Fiske prize essay on Diseases of the Hip, 1891; an article on orthopedics in Park's Surgery, 1896; articles on orthopedic surgery and on diseases of the joints in Keen's Surgery, 1907; and many monographs, notably on lateral curvature, round shoulders and on the treatment of infantile paralysis, the last mentioned disease taking much of his attention throughout his professional career. He numbered among his memberships the American Medical Association, the Massachusetts Medical Society—councilor for several years—, the Boston Surgical Society—president—, the Boston Orthopedic Club, American Orthopedic Association—president as well as a founder, also several foreign medical societies. Lovett was a valued member of the faculty of Harvard Medical School and did much to direct its policies over a series of years and he was a member of the board of editors of the "Boston Medical and Surgical Journal." In 1920 the University of Cincinnati conferred on him its honorary degree of Doctor of Science.

In 1895 he married Elizabeth Moorfield Storey, daughter of Moorfield Storey, a leader of the Boston Bar. They had one child, a daughter. Lovett and his wife travelled freely and were about to seek rest and recreation abroad when he was taken acutely ill on the steamer on his way to England, was carried to the home of Sir Robert Jones in Liverpool and died there, July 2, 1924, at the age of 64.

WALTER L. BURRAGE.

LOVING, Starling (1827-1911), professor in Starling Medical College, teacher and writer, of Columbus, Ohio, was born in Russellville, Ky., in 1827, and graduated from Starling Medical College, Columbus, O., in 1844. After graduation he went to New York City and secured by competitive examination the position of interne in Bellevue Hospital. Subsequently he served in the same capacity in Ward's Island Hospital in 1850-51, and in the Charity Hospital, 1851-53. During his service in New York an epidemic of cholera occurred, and he came into contact with a large number of cases. Compelled by ill health to seek a warmer climate, he accepted the position of surgeon to the Panama Railroad, and served during the years 1853 and 1854. During the next two years he traveled through the West Indies, and practiced for a time in Nassau, Bahama Islands. Returning to Columbus, Ohio, he was appointed demonstrator of anatomy in Starling Medical College in 1856 and was professor of therapeutics from 1857 to 1876. During this time he served as surgeon to the Sixth Ohio Volunteer Infantry, seeing considerable field service. In 1863 he was physician to the Ohio Penitentiary, during the time that Confederate General John Morgan was confined there. In 1876 he was appointed professor of the theory and practice of medicine in Starling Medical College, and acted in this capacity for thirty years. He was dean and trustee of the college for nearly twenty-two years. When Starling Medical College was merged with the Ohio University he was made professor emeritus. As a speaker his language was terse and forceful and when aroused it left no doubt as to his meaning.

He was the author of numerous contributions to medical literature and was an active member of the Columbus Medical Society and once its president. He was a life member of the Ohio State Medical Association, and served as president and also a member, and a vice-president, of the American Medical Association. At the time of his death he was the oldest member of the Bellevue Hospital Alumni Society. He died in Columbus, Ohio, Sept. 2, 1911.

A. G. DRURY.

LOWE, Clement Belton (1846-1923), Philadelphia pharmacist and writer on botany. Lacking only three years of fourscore, Clement Belton Lowe, born April 30, 1846, at Salem, New Jersey, the son of Rev. Samuel and Harriett Newell Belton Lowe, died February 5, 1923. After an education in the little red schoolhouse of his home town, he went to Bucknell University, Lewiston, Pennsylvania. While there, in 1863, he enlisted in Company A, 28th Pennsylvania Militia, and, later, became orderly sergeant attached to General Couch's staff. In 1865, he was graduated from the University with the degree of Ph. B. and, the next year, entered the Philadelphia Polytechnic College, intending to become a civil engineer. Ill health diverted his course, and in 1867 he went into the drug business. After graduating from the Philadelphia College of Pharmacy in 1884, he was elected quiz master of materia medica and botany. The next year, he succeeded Edson S. Bastin as professor of materia medica, becoming professor emeritus upon his resignation as an active member of the faculty in 1921. Meanwhile, he studied at Jefferson

Medical College, taking his M. D. degree in 1887. Dr. Lowe was a member of the executive committee of the Alumni Association of the Philadelphia College of Pharmacy for a decade and its president during 1888-89. In 1907-08, he was president of the Pennsylvania Pharmaceutical Association, from 1899 to 1901, secretary and chairman of the Section on Education and Legislation and, in 1909-10, vice-president of the American Pharmaceutical Association. He was the author of "A Syllabus of the Botanical Natural Orders" (1892) and the editor of the "Alumni Report" and of "The Medicinal Plants of the Philippines" (1901).

On March 17, 1869, he married Abigail Ann Allen of Bridgeport, New Jersey, whose death preceded her husband's by only a few weeks. Of the four children, their two daughters were drowned while in bathing at Ocean City, in 1900. From boyhood, Dr. Lowe took an active interest in church and Sunday School and served as deacon, teacher, and superintendent; from 1895 to 1896, he was president of the Baptists' Sunday School Superintendents' Association of Philadelphia.

LOZIER, Clemence Sophia (1813-1888), founder of the New York Medical College and Hospital for Women and specialist in diseases of women and children, was born December 11, 1813, at Plainfield, New Jersey, the daughter of David Harned and Hannah Walker Harned. She went to Plainfield Academy. In 1829 she married Abraham Witton Lozier, architect and builder, of New York. After the death of her husband, she began the study of medicine in the Rochester Eclectic Medical College in 1849, and graduated at the Syracuse Medical College in 1853. She then began to practice in New York, and gave lectures in her own house on physiology and hygiene in 1860, which proved to be the beginning of the New York Medical College and Hospital for Women, founded through her efforts in 1863. In 1867 she visited Europe to study hospitals and gain improvements for her own. She was clinical professor in the New York Medical College and Hospital for Women, and dean of the faculty of this college for more than twenty years. She specialized in the removal of tumors and in cases of complicated obstetrics. Among the societies to which she belonged may be mentioned: Universal Peace Union, Homeopathic County Society, Woman's Christian Temperance Union (president at one time), National Woman's Suffrage Association (president for five years), New York City Suffrage League (president for three years), N. Y. Abolitionists' Reunion, and Moral Education Society (president for a period). She was a strong advocate of woman suffrage and helped publish the "Revolution," the suffrage organ.

She died at her home in New York City, April 26, 1888, of angina pectoris.

LUCKIE, James Buckner (1833-1908), surgeon of Birmingham, Alabama, was born in Covington, Georgia, July 16, 1833, of Scotch descent, his ancestors emigrating from England and Scotland, and settling in the Carolinas. His father, Judge William Dickinson Luckie, moved to Georgia, where Dr. Luckie spent his boyhood. Educated in the common schools and in Gwinnet Institute, he began the study of medicine when eighteen with Dr. John B. Hendrick and in the winter of '53 attended his first course of lectures in Augusta, Georgia. The following winter he went to the Pennsylvania Medical College at Philadelphia and was graduated in March, 1855. He practiced a year in his native county, then in Orion, Alabama. On the outbreak of the Civil War he received the appointment of assistant surgeon. Serving in Kentucky, he was made medical purveyor by Gen. Kirby Smith, and afterwards inspector of hospitals. He served with Graces' Brigade in the Army of Virginia, closing his army career with the surrender of Gen. R. E. Lee at Appomattox. Dr. Luckie settled in Pine Level, Montgomery County, Alabama, but removed in 1872 to Birmingham. It was he, with Dr. M. H. Jordan, who fought the terrible epidemic of cholera at this place in 1873, he being the last one to have the disease. He was a charter member of the Jefferson County Medical Society, served on the Board of Censors, and was counsellor of the State Medical Association. In his medical career he became noted as a surgeon, and, at a time when such a procedure was practically unknown, he successfuly set a broken neck; following this he had another successful case. He also did the first successful triple amputation in the United States as well as the second.

The name of his first wife was Imogene Fielder, by whom he had one child, and in 1866 he married Susan Oliver Dillard and had nine children, six boys and three girls. Four of the boys studied medicine, but the two oldest died.

Dr. Luckie died at Birmingham, December 11, 1908, aged seventy-five.

LORENZO F. LUCKIE.

LUEDEKING, Robert (1853-1908), pathologist, pediatrician, of St. Louis, was born in that city on November 6, 1853. He was a fine representative of the best type of American citizen of German extraction. He was graduated from the High School in 1871, studied in Heidelberg for two years and took his M. D. in Strassburg and after a year of post-graduate work in Vienna, returned to St. Louis, where his father had kept a school for girls until 1854. To men of science Luedeking was known as one who early in his career had done original and brilliant work in pathological anatomy, while his later writings, laden with the fruits of long experience in clinical medicine, were read eagerly by practitioners. He devoted special attention to the diseases of children. The officers of the Washington University and the faculty of its medical department prized him as an able executive officer and in 1902 Luedeking was chosen dean. Soon after graduation in medicine and return to this country, Luedeking entered the Health Department, and for five years, from 1877 to 1883, served the city successively as dispensary physician, secretary of the Board of Health, and for several periods of a month or two at a time as acting superintendent of the City and Female Hospitals. During the prevalence of small-pox in 1881-83 he often visited the small-pox hospital. His kind face and manner, his jolly laugh, his unfailing cheerfulness were as valuable to the officers as his advice and suggestions. In 1882 he was appointed lecturer on pathological anatomy in the St. Louis Medical College (now a part of the Medical Department of Washington University), and the following year to a professorship in the same branch, a position he continued to hold until 1892, when he was made professor of diseases of children. The chair he continued to hold until his death, although in 1895 a professorship of clinical medicine was added to his duties. He was also chief of the clinic for diseases of children at the O'Fallon Dispensary, and instructor in the children's department of Bethesda Hospital from 1892 on. He was editor of the "St. Louis Medical Review" in 1884-86.

Mrs. Luedeking, who survived her husband, was a daughter of S. W. Biebinger, formerly president of the Fourth National Bank. Two children were both girls.

Lundy, Charles J. (1846-1892), ophthalmologist of Detroit. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 721.

LUSK, William Thompson (1838-1897), New York obstetrician, was born May 23, 1838, in the town of Norwich, Connecticut, and died in New York on June 12, 1897. He was the son of Sylvester Graham and Elizabeth Freeman Adams Lusk, and the great-great-grandson of John Lusk, who emigrated from Scotland and died at Wethersfield, Connecticut, in 1788. William Thompson was educated at the best schools and remembered especially the admonition of the Head Master at Russell's Military School in New Haven in 1854-55, given to some late comers from the Southern States, "Boys, I suppose I must accept these excuses from your parents, but when you pass from here into the outside world you will find that excuses do not count." Entering Yale in 1855, he was the room mate of his life long friend, William Walter Phelps, and the two strove for high honors in the class. He had difficulty with his eyes and left college after a year. A strict training in the classics gave him the mental excellency of the old-fashioned scholarship, a scholarship evidenced in all his writings. Shortly after leaving college he went abroad and studied medicine during two years in Heidelberg and in Berlin, anticipating the receipt of a degree from Berlin at the end of a third year. The outbreak of the Civil War, however, led him to return to America where he enlisted in the army in time to participate in the battle of Blackburn's Ford. He was also engaged in the battles of First Bull Run, Port Royal, Secessionville on James Island, Second Bull Run, Chantilly, South Mountain, Antietam, Fredericksburg and many minor engagements. In the single battle of Secessionville on James Island his regiment, The Seventy-ninth Highlanders of New York, lost 110 out of 484 men. In this battle he acted as aide to General Isaac I. Stevens who officially reported that he "was in all parts of the field, carrying my orders and bringing me information to the great exposure of his life." In 1863 he resumed his medical studies in the newly organized Bellevue Medical College and was graduated the valedictorian of his class. After graduation he married Mary Hartwell Chittenden, daughter of S. B. Chittenden, a New York merchant, and then spent two years of study in Paris, Vienna and Edinburgh. These years of foreign study gave him a mastery of medicine from the world viewpoint. Returning to America he settled in New York

in 1866 and taught physiology at the Long Island College Hospital in Brooklyn. In 1870-71, on an invitation extended by Oliver Wendell Holmes (q. v.) he lectured on physiology at Harvard Medical School. Bowditch returned to Boston about this time and a hesitancy on the part of the Harvard authorities regarding the appointment to the chair of physiology led Dr. Lusk to make an arrangement to become the associate of Fordyce Barker (q.v.), then a leading obstetrician in New York, and to accept the chair of Obstetrics and Diseases of Women and Children in the Bellevue Hospital Medical College, a position which he held until his death. The professorship of physiology at Harvard was offered to him the day after he had completed these arrangements. By this contingency New York, instead of Boston, became his place of residence. He always stated that this experience was illustrative of a man's fate being outside his choice and of success being dependent upon an ability to do well whatever offered in life.

While teaching physiology he engaged in research work concerning the nature of the glycogenic function of the liver. His book, the "Science and Art of Midwifery," was issued in its first edition in 1882. It passed through four editions and was translated into French, Italian, Spanish and, by order of the British authorities in Egypt, into Arabic. Playfair acknowledged it as the only rival to his own book on obstetrics. Dr. Lusk attributed its success to the fact that for the first time in a text-book printed in the English language the attempt was made to explain the phenomena of gestation and labor in accordance with physiological laws. Before the book was issued Dr. Barker caused the publishers anxiety by stating to them his belief that it was too ambitious an undertaking for so young a man. This is only a characteristic judgment of an older generation upon a younger one. Dr. Lusk was an inveterate reader and maintained a knowledge of the medical advances throughout the world. Thus, after reading of the successful mode of operation of Sänger, he performed in 1887 the second successful operation of Caesarean section in New York City, saving the lives of both mother and child, the first having been done in the year 1838. Yale University gave him the degree of LL. D.; he was president of the American Gynecological Society; vice-president of the New York Academy of Medicine; honorary fellow of the obstetrical societies of London and of Edinburgh; fellow of the Paris Academy of Medicine; and corresponding fellow of the obstetrical societies of Paris and of Leipzig.

In a memorial address given before the New York County Medical Association shortly after his death in 1897, Dr. Austin Flint (the physiologist) said: "No eulogy of mine can add to the nobly earned and well deserved reputation of Dr. Lusk; but I esteem it a precious privilege to pay this tribute to his memory, which lives in the hearts of his thousands of pupils and tens of thousands of readers. He was a true and reliable friend and had no enmities, a most accomplished physician, an original thinker and observer, a laborious and successful investigator and a gentleman in the highest sense of the word."

Five children were born after his first marriage, of whom survived Graham Lusk, professor of physiology at the Cornell Medical College; Mary E. Lusk (Mrs. Cleveland Moffett); William C. Lusk, professor of clinical surgery at the University and Bellevue Hospital Medical School; and Anna H. Lusk. In 1876 he married Mrs. Matilda Thorn and a daughter by this marriage, Alice Lusk, married J. Clarence Webster, professor of obstetrics and gynecology at the University of Chicago.

GRAHAM LUSK.

LUTZ, Frank J. (1855-1916) of St. Louis, surgeon, teacher of surgery, and medical librarian, was born in that city, May 24, 1855, son of John T. Lutz and Rosina Miller. He was graduated at St. Louis University in 1873, received his M. D. at the St. Louis Medical College in 1876, and began to practice in St. Louis continuing there throughout his life. He was surgeon-in-chief to the Alexian Brothers Hospital and to the Josephine Hospital, St. Louis; attending surgeon to the Bernard Free Skin and Cancer Hospital. In 1811 he was appointed professor of surgery in the Medical Department of Washington University; other teaching positions held were: Instructor in clinical surgery, and later professor of surgery in St. Louis University; professor of clinical pathology in Beaumont Hospital Medical College. He was a fellow of the American Medical Association, and in 1903 a member of the House of Delegates, and after 1910 a trustee of the Association. He had been president of the Missouri State Medical Association and was chairman of the Judicial Council from its organization in 1903. Dr. Lutz was librarian of the St. Louis Medical Library from its beginning

and his work of building up the library (now the library of the St. Louis Medical Society) is of lasting value; at the meeting of the Society January 29, 1916, the members presented a life size bronze medallion to the Society and Dr. Amand Ravold paid "an eloquent tribute to the untiring and unselfish devotion of Dr. Lutz as librarian."

In 1884 he married May Silver, of Mexico, Missouri. He died March 24, 1916, at his home in St. Louis, of heart disease.

LUZENBERG, Charles Aloysius (1805-1848), surgeon of New Orleans, came to America from Germany when fourteen and settled in Philadelphia, completing his education begun in Landau and Weissemberg. He was born in Verona, Italy, July 31, 1805. Attending the lectures and operations of Dr. Physick (q. v.) brought out young Luzenberg's surgical genius. He took his M. D. from Jefferson Medical College in 1827 and went to New Orleans in 1829, bearing a letter to Dr. David C. Ker of the Charity Hospital, who, after seeing his skill, soon had him appointed house-surgeon. A paper which appeared in the tenth volume of the "American Journal of the Medical Sciences" and the "Révue Médicale" for 1832 proves that if Luzenberg did not first bring into notice what was then a new idea, that is, of excluding light in various variolous disorders to avoid pox marks, he at all events revived it. Two years, 1832-4, were spent studying in European clinics, particularly under Dupuytren, and on his return to New Orleans, full of zeal and schemes for improving surgical and medical procedure, he built the Franklin Infirmary, later the Luzenberg Hospital and there performed operations which brought patients from afar to get the benefit of his skill. Among such operations was the extirpation of a much enlarged cancerous parotid gland from an elderly man. This case, reported in the "Gazette Médicale de Paris," 1835, brought a commendation with a resolution of thanks to the author and enrollment as corresponding member of the Académie de Médicine. Soon after, he excised six inches of necrosed ileum in a case of strangulated hernia. The patient was put on opium treatment and in thirty-five days the stitches came away and he recovered entirely. One other operation he took special interest in doing was couching for cataract and in this he had brilliant results.

When Luzenberg had his hospital on a permanent basis his next idea was a medical school. Being influential, and a friend of the governor of the state, this project, with the help of his medical confrères, was soon embodied in the Medical College of Louisiana with Luzenberg as dean, and, "ad interim" professor of surgery and anatomy. In 1839 he founded the Society of Natural History and the Sciences and to it bequeathed a rich collection of specimens. When the Louisiana Medico-Chirurgical Society was legally incorporated he was chosen its first president. It held brilliant meetings at which the French and English physicians of the state met to exchange views, and it was undoubtedly the spirit of these meetings that caused a college building to be erected for the Medical School, and that started the "New Orleans Medical and Surgical Journal." One thing he had in hand was never finished—at his death piles of manuscript and a fine collection of literature, old and new, on yellow fever, showed that his contemplated work on the cause and cure of the disease would have been a monument of careful research. The manuscript was in Latin. A too active life caused premonitions of failing health to go unheeded but in the spring of 1848 actual pain in the precordial region with paroxysms of palpitation and dyspnea totally incapacitated him for work. A thorough change to Virginia was planned but while passing through Cincinnati he died on the fifteenth of July, 1848.

LYDSTON, George Frank (1858-1923), Chicago professor and writer on genito-urinary diseases and other subjects, was born March 10, 1858 in Tuolumne, California, the son of George N. and Lucy Lydston, migrants of 1849 to California. He was graduated from the University of California and entered the Bellevue Hospital Medical College of New York where he took his M. D. in 1879, standing highest in the competitive examination for an internship in the New York Charity Hospital. In 1881, he settled in Chicago to specialize in genito-urinary surgery and syphilology and became lecturer on genito-urinary and venereal diseases in 1882 and professor in 1891 at the College of Physicians and Surgeons of that city. In 1914, he began his work on testicular implantation and was the first to transplant successfully from a human being, lately deceased by accident.

Lydston was the author of numerous papers and books, including, "Varicocele and its treatment," 1892, "Gonorrhea and Ure-

thritis," 1892, "Stricture of the Urethra," 1893, "Surgical Diseases of the Genito-Urinary Tract," 1899, "Textbook on Genito-Urinary and Venereal Diseases," and "Impotence and Gland Transplantation." He also wrote "Panama and the Sierras; a Doctor's Wander Days," 1900, "The Blood of the Fathers," relating to diseases of society, "Over the Hookah," medical humor and poetry, "Poker Jim, Gentleman," dealing with the Argonaut phase of California, and "Trusty 515," detailing forensic failures in justice, of abnormal life in New York, and the need of prison reform.

In 1884, he married Josie M. Cottier of Chicago; they had two daughters, Josephine and Frances. He died of pneumonia, March 14, 1923.

Dr. Lydston was jovial and courteous, of aggressive personality and strong opinions, often provoking opposition.

LYMAN, Henry Munson (1835-1904), professor in Rush Medical College, Chicago, was born in the then Kingdom of Hawaii, November 26, 1835. The Lymans are of English descent, the American progenitor being Richard Lyman who came over from England in 1632 to escape religious intolerance. Dr. Lyman was graduated A. B. from Williams College in 1858, and there received his A. M. in 1876. His first year of medical study was at Harvard, but he was graduated from the College of Physicians and Surgeons, New York City, in 1861. After a year as house surgeon at Bellevue Hospital he entered the medical service of the U. S. Army and was assigned to duty at the United States Hospital, Nashville, Tennessee. Ill health compelled him to resign in 1863, and in October of that year he went to Chicago. Just before settling in Chicago, he married Sarah K. Clark of Roxbury, Boston, Massachusetts. From 1867-1876 he was an attending physician in Cook County Hospital. He was on the medical staff of the Presbyterian Hospital from 1884, a consulting physician at St. Joseph Hospital from 1890, and at the Hospital for Women and Children from 1893. In 1871 he was called to the chair of chemistry in Rush Medical College, and in 1876 was appointed professor of diseases of the nervous system. From 1877 to 1890 he held the chair of physiology and nervous diseases, and from 1890 until 1900 was professor of medicine in Rush Medical College. He was professor of the practice of medicine in the Woman's College, 1880 to 1888 and was a member of many medical societies, in 1876 being president of the Chicago Pathological Society, president of the Association of American Physicians in 1891, and of the American Neurological Association in 1892.

Dr. Lyman was the author of a number of medical works, among them being "Treatise on the Theory and Practice of Medicine," 1892, and as author and teacher gained his greatest success. He ranked beyond dispute in the highest place among men of letters in the medical profession at Chicago. Failing health compelled retirement from all professional work in 1900, and he died in Chicago, November 21, 1904.

F. D. DuSouchet.

LYNAH, James (1725-1809), Revolutionary surgeon of Charleston, S. C., was born at Dublin, Ireland, in 1725, where he received both his collegiate and professional education. After graduating in medicine he entered the British Naval Service, and received a surgeon's commission. Rescued from shipwreck in the West Indies, he was taken to Kingston, Jamaica, whence he removed to Charleston, South Carolina, about 1765 or 1766. Settling in the wealthy and cultivated Huguenot settlement of St. Stephen's Parish, he soon acquired an extensive and remunerative practice, but on the outbreak of the Revolution he espoused the cause of the colonies and served at intervals with Marion's corps. He was also surgeon in Col. Joseph Maybank's cavalry regiment, and was "chief surgeon of the Regiment of Light Dragoons" in Col. Daniel Harry's cavalry, in which capacity he was present at the siege of Savannah. When Count Pulaski was wounded in this fight, Dr. Lynah, with the assistance of his son and two others, removed him from the line of fire and extracted the bullet on the field. This bullet and a note from one of Count Pulaski's Aides-de-camp is now in the possession of the Historical Society of Georgia. At the close of the war he removed to Charleston, South Carolina, where his attractive personality and professional skill enabled him to build up a large practice. He was one of the founders of the Medical Society of South Carolina, and at the time of his death held a commission as surgeon-general of the state of South Carolina. He died of pulmonary tuberculosis in October, 1809, and was buried at Laurel Spring Plantation.

He married in Ireland, and one son, Edward Lynah, who likewise studied medicine,

was the sole issue of which there is a record. A fine portrait, by an unknown artist, is in the possession of Mr. J. H. Lynah of Savannah, Georgia.

ROBERT WILSON, JR.

LYSTER, Henry Francis (1837-1894), army surgeon, founder of the Michigan College of Medicine, son of the Rev. William N. and Ellen Emily Cooper Lyster, was born in Sanderscourt, Ireland, November 6, 1837. In 1846 the family settled in Detroit, and the boy had his general education in Detroit schools and Michigan University, where he took his A. B. in 1858 and stayed on there at the medical department, obtaining his M. D. in 1860 and beginning practice in Detroit at once, but on the outbreak of war in 1861 he was commissioned assistant surgeon of the Second Michigan Infantry and on July 15, 1862, surgeon of the Fifth Michigan Infantry. He was wounded at the battle of the Wilderness on May 5, 1864; on recovery he returned to his post and was mustered out May 28, 1865. He was surgeon-in-chief of the Third Brigade, First Division, Third Army Corps for some time, also medical inspector and medical director of the Third Corps. Returning to Detroit he continued in practice until disabled by disease. During 1868-69 he was lecturer on surgery at the University of Michigan, and during 1888-90 professor of theory and practice of medicine and clinical medicine. He was a founder of the Michigan College of Medicine, president of its faculty in 1879 and professor of the principles and practice of medicine and clinical diseases of the chest, 1875-76. In 1873-74 he was co-editor (new series) of the "Peninsular Journal of Medicine," and in 1882 assistant editor of "Detroit Clinic." He was a founder of the Detroit Academy of Medicine, of the Wayne County Medical Society, of the Michigan State Medical Scoiety.

Dr. Lyster was about six feet tall and of spare build, dark hair, dark eyebrows and clear blue eyes. On January 30, 1867, he married Winifred Lee Brent, daughter of Capt. Thomas Lee Brent, of the United States Army. Mrs. Lyster with five children survived him, and one son became a physician. Dr. Lyster died of pernicious anemia on the train between Detroit and Chicago, October 3, 1894.

His writings are to be found, for the most part, in the Transactions of the Michigan State Medical Society.

LEARTUS CONNOR.

McBRIDE, James (1784-1817), physician and botanist, of Charleston, was born in Williamsburg County, South Carolina, in 1784. He was graduated from Yale in 1805 and afterwards studied medicine. Settling in Pineville, South Carolina, he practiced there for a few years, but later removed to Charleston, where he died of yellow fever in 1817, only thirty-three, yet when he had already made a reputation as physician and scientist. Botany attracted him most and his chief writings on this subject were contributed to the Transactions of the Linnaean Society. His name has been embodied by Dr. Stephen Elliot in the "Macbridea pulchra," a genus found in St. Johns, Berkeley, South Carolina, of which but two species are known to exist. Dr. Elliott also dedicated to him the second volume of his "Sketch of the Botany of South Carolina and Georgia" (1824).

McBURNEY, Charles (1845-1913), surgeon of New York City, was born in Roxbury, Massachusetts, February 17, 1845, and died at his sister's house in Brookline, in the same state, November 7, 1913. He was the son of Charles and Rosine Horton McBurney and was educated in private schools in and about Boston, and entered Harvard University in 1862, receiving the degree of A. B. in 1866, and A. M. in 1869. He took his M. D. at the College of Physicians and Surgeons in New York City in 1870, and went abroad to continue his medical studies in Vienna, Paris and London; upon his return beginning practice in New York City. In 1872 he was appointed assistant demonstrator of anatomy in the College of Physicians and Surgeons and filled this position until 1880, when he was elected instructor in operative surgery. From 1889 to 1892 he was professor of surgery; from 1892 to 1897 he was professor of clinical surgery, and later professor emeritus. He continued to attend to private as well as to hospital practice until 1907, when he retired to Stockbridge, Massachusetts. He was visiting surgeon to St. Luke's Hospital from 1875 to 1888, and was the only attending surgeon to Roosevelt Hospital from 1889 to 1901. Through the gift of William J. Syms, in 1892, McBurney established the first model elaborate private operating pavilion. He was also consulting surgeon to the New York, Presbyterian, St. Mary's, the Orthopedic, and to the Hospital for the Ruptured and Crippled. He was an honorary member of the Royal College of Surgeons, of the College of Physicians and Surgeons in

Philadelphia, of the Surgical Society of Paris, the Roman Medical and Surgical Society, and other medical organizations. Among his contributions to surgery are: "The Indications for Early Laparotomy"; "The Treatment of Appendicitis"; "A Contribution to Cerebral Surgery"; "Dislocation of the Humerus Complicated by Fracture." He was a contributor to Dennis's System of Surgery, and to the International Text-Book of Surgery. He was long an eminent teacher and his clinics were tremendously popular. In the history of medicine McBurney's name will ever be associated with the vermiform appendix as the first surgeon to point out a ready means of detecting a diseased appendix by pressure on a particular spot, which at once became known as "McBurney's point," and as the originator of a short incision exposing the appendix without cutting the muscle fibres—"McBurney's incision." Operations on the appendix began a new era in surgery, and McBurney was the first to exploit this great field in which he was long the leading authority.

He married Margaret Willoughby Weston, October 8, 1874. They had two sons and a daughter. Mrs. McBurney died June 1, 1909.

FREDERIC S. DENNIS.

MacCALLUM, Duncan Campbell (1825-1904), physician and editor of Montreal, was born in the Province of Quebec on November 12, 1825. By descent he was a pure Celt, being the son of John MacCallum and Mary Campbell; his maternal grandfather, Malcolm Campbell, of Killin, widely esteemed through the Perthshire Highlands, was a near kinsman and relative, through the Lochiel Camerons, of the Earl of Breadalbane. Dr. MacCallum received his medical education at McGill University, at which institution he graduated as M. D. in the year 1850. He then went to London, Edinburgh and Dublin, where he continued his studies, and in February 1851, was examined and admitted a member of the Royal College of Surgeons, England. Returning to Canada, he entered on the practice of his profession in Montreal, being demonstrator of anatomy at McGill from 1854-56; professor of clinical surgery 1856-60; professor of clinical medicine and medical jurisprudence, 1860-68; professor of midwifery and diseases of women and children, 1868-83; after which he was emeritus professor of that university. He was visiting physician to the Montreal General Hospital from 1856 to 1887, when he resigned and was placed on the consulting staff. From 1868 to 1883 he had charge of the university lying-in hospital, and afterwards was consulting physician there.

For a long period he took an active part in the literature of his profession, and articles from his pen appeared in the "British-American Medical and Surgical Journal," the "Canada Medical Journal," and the "Transactions of the Obstetrical Society of London, Eng." In 1854 he, in conjunction with Dr. Wm. Wright, established and edited the "Medical Chronicle" which had an existence of six years. He was vice-president for Canada of the section of Obstetrics in the Ninth International Medical Congress, held at Washington during the week beginning September 5th, 1887.

Dr. MacCallum married Mary Josephine Guy, second daughter of the late Hon. Hippolyte Guy, judge of the Superior Court of Lower Canada, in October, 1867. His family consisted of five children, four daughters and one son.

Dr. MacCallum died November 13, 1904, at his home in Montreal after a short illness, aged seventy-nine.

MacCALLUM, John Bruce (1876-1906), born in Dunnville, Ontario, Canada, June 10, 1876, was the second son of Dr. George A. MacCallum of that town. After going as a boy to the local schools he went to Toronto where he was graduated from Toronto University in 1896. In the autumn of the same year he went to Baltimore to begin studying medicine at the Johns Hopkins Medical School, where he took his M. D. in 1900. While a student there he carried out several investigations on anatomical subjects; the most important of which was that on the architecture of the ventricles of the heart. During this time, at the end of his third year of study, he began to show alarming symptoms of pulmonary tuberculosis which ultimately caused his death. Nevertheless, in the autumn after his graduation he was sufficiently well to accept a position as assistant in anatomy in the University. He held the place for a year, during which time he completed other anatomical studies. That summer he attempted to spend in Germany, but was again prostrated by his old illness and compelled to return to Canada where he spent the winter in the woods in the hope of regaining his health. There with no facilities of any sort he completed the translation and editing of Szymonowicz's "Histolo-

gy." After a stay of two months in Jamaica and another summer on the northern lakes of Ontario, he again felt himself strong and in 1902 went to Denver where he thought to practice. He taught anatomy in the Denver Medical School for a short time, but soon became disheartened and left it all to drift westward to California. There he was invited by Prof. Jacques Loeb (q. v.) to become his assistant in physiology and from his acceptance of this post until his death his work in the new subject was most productive. In 1905, when he had become assistant professor of physiology in the University of California, he again fell ill and hurried east to Baltimore where he remained some time in the hospital. Afterwards another summer in Canada restored him but little. Nevertheless, the West called to him and he insisted on returning to Berkeley where he died in February, 1906, apparently from slowly advancing tuberculosis.

This is an outline of his brief life in which each turning was directed by his illnesses. In his harness to the end, he cheerily though falteringly tested the effects of various drugs on jellyfish when from his weakness he could no longer control a rabbit, and the paper on these experiments which his mother wrote at his dictation was published after his death.

He was indefatigable in his interest in his work and labored as an artist with a grasp of his problem. Throughout his crippled life he bore himself with the courage and cheerfulness which stood so well by R. L. Stevenson.

Most of his writings may be found in the columns of the "Johns Hopkins Hospital Bulletin," "American Journal of Anatomy," University of California publications, and "Journal of Biological Chemistry".

CHARLES R. BARDEEN.

McCANN, James (1837-1893), surgeon of Western Pennsylvania. About the year 1825 a certain Thomas McCann of Scotch-Irish ancestry married one Sarah Wilson and settled on a farm near Verona, Penn Township, Allegheny County, Pennsylvania, and on this farm James McCann was born April 12, 1837. His education was obtained in the public schools in which, at the completion of his course, he served as teacher for one or two years, after which he entered at Cannonsburg, Pennsylvania, but terminated his studies before graduating. About 1858 or 1859 he went to Pittsburg and for a time was employed at clerical work; later becoming a student of medicine under Dr. John Dickson, before attending medical lectures in the University of Pennsylvania. He did not, however, complete his studies at the University at this time, but entered the Union Army as assistant surgeon of the Fifth Pennsylvania Artillery, in which capacity he first saw service at the battle of Gettysburg, July, 1863. Returning to graduate, he took his M. D. at the University of Pennsylvania, March 23, 1864. In 1893, on the day of his death, the LL. D. was conferred on him by Heidelberg College, of Tiffin, Ohio. Steps towards conferring the same degree were also taken by the Western University of Pennsylvania, but his death occurred beforehand.

While originally a general practitioner Dr. McCann soon gravitated towards surgery and at the time of his death occupied the foremost rank in that branch of medicine in Western Pennsylvania. From the time of the establishment of the West Penn Hospital until he died he filled a position of surgeon on the staff. In 1885 he was largely instrumental in organizing the Western Pennsylvania Medical College—now the medical department of the University of Pittsburg, where he occupied the chair of principles and practice of surgery from its inception to the time of his death.

Dr. McCann was a member of the American Surgical Association and of the county, state and national medical societies. He was president of the Allegheny County Medical Society.

In 1862 he married Sarah Boyd and had nine children. His wife died in April, 1883, and in 1889 he married Martha Scott, by whom he had a daughter. His oldest son, Thomas, born April 22, 1863, was graduated M. D. at Bellevue Hospital Medical College in 1887 but died of a chronic pulmonary affection in 1903. Another son, John B., also adopted his father's vocation and settled in Pittsburg.

James McCann died July 13, 1893, at his house No. 928 Penn Avenue, Pittsburg, Pennsylvania. Several years before his death he suffered from septic infection, following an operation on a patient, from which he never fully recovered. The direct cause of death was a cerebellar abscess due, it was believed, to this infection.

His contributions to medical literature were numerous and continued over a long period. Among them may be mentioned: "Clinical Observations in the Treatment of Severe Railroad Injuries of the Extremities"

("Transactions, American Surgical Association," 1884, vol. ii); "Splenectomy for Dislocated or Wandering Spleen; Recovery" (Ibid., 1887, vol. v); "Enterectomy for Removal of Sarcoma of Mesentery; Recovery" (Ibid., 1892, vol. x); Chapter on "Wounds," in Keating's "Encyclopedia of Diseases of Children."

His portrait is in the assembly room of the Allegheny County Medical Society, in the Pittsburg Free Dispensary.

ADOLPH KOENIG.

McCAW, James Brown (1823-1906), of Richmond, Virginia, army surgeon, was born in that city, on July 12, 1823. He came of a race of doctors, being the great-grandson of James McCaw, a Scotch surgeon from Wigtonshire, who came to Virginia in 1771 and settled near Norfolk. His son, James D. McCaw, a pupil of Benjamin Bell, of Edinburgh, and an M. D. of the University of that city, returned to Virginia, and practiced in Richmond until his death in 1842. Dr. William R. McCaw was the father of the subject of this sketch. James was educated in Richmond schools and studied medicine at the University of New York, graduating in 1843, being a pupil of Dr. Valentine Mott. Then he soon removed to Richmond, his home during the rest of his life.

He was a founder and a charter member of the Medical Society of Virginia, and a member and at one time president of the Richmond Academy of Medicine. Dr. McCaw was editor, or co-editor, of the "Virginia Medical and Surgical Journal" from April, 1853, to December, 1855, and co-editor of the "Virginia Medical Journal" from January, 1856, to December, 1859; in 1864 he became editor of the "Confederate States Medical Journal," of which only fourteen numbers appeared—the only medical journal published under the Confederacy. In April, 1871, he became one of the editors of the "Virginia Clinical Record," of which three volumes were issued. At the outbreak of the war, in 1861, he was made surgeon-in-charge and commandant of the Chimborazo Hospital at Richmond. This hospital he organized from its very beginning, and made it one of the largest the world has ever known, in which, during the four years of the war, 76,000 soldiers were treated with a remarkable number of recoveries, considering the poor facilities and scant supplies. He was successively professor of chemistry (1858-1868) and practice of medicine (after 1868) in the Medical College of Virginia. He served as dean of the faculty for twelve years, and at the time of his death was president of the board of visitors. "He was," says Dr. J. N. Upshur, "a man of most distinguished presence, magnetic and successful."

He married, in 1845, Delia Patterson, of Richmond, and had nine children, of whom six survived him; three sons entered the medical profession. He died in Richmond on August 13, 1906, at the age of eighty-three.

ROBERT M. SLAUGHTER.

Maclean, Alexander Campbell (1854-1907), of Salt Lake City, Utah. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila., 1912, vol. ii., p. 122.

MACLEAN, Donald (1839-1903), of Canada and Michigan, was born at Seymour, Canada, December 4, 1839. His father, of Edinburgh, Scotland, became totally blind at the age of fifteen, but by the aid of tutors prepared himself for the ministry, only to be rejected because of his blindness. He then moved to the wilderness of Canada, where Donald was born. The boy's education was obtained partly at Oliphant's School, Edinburgh, and partly at Cobourg, Belleville, and Queen's College, Canada. In 1858 he returned to Edinburgh and entered the medical side at the University, in 1862 becoming a licentiate of the Royal College of Surgeons there. Returning to the United States he became assistant surgeon in the army, working in various hospitals, at St. Louis, Louisville and elsewhere. In 1864 he was professor of surgery in the Royal College of Physicians and Surgeons at Kingston, Ontario. In 1872, lecturer, and later professor of surgery in the department of medicine and surgery, University of Michigan, resigning this position in 1889 for private practice in Detroit, Michigan. In 1884 he was president of the Michigan State Medical Society; in 1894 president of the American Medical Association. He was honorary member of the Ohio State Medical Society, the New York State Medical Society, and member of the Royal College of Surgeons of Edinburgh, also fellow of the Royal College of Physicians. During the Spanish War he was surgeon and stationed at Old Point Comfort, Virginia. When assistant to Syme of Edinburgh, he acquired great dexterity in those operations which made Syme famous. As a teacher he commanded the confidence and enthusiasm of his

pupils. Of spare build, about five feet ten inches high, with sandy hair, smooth-shaven face, clear blue eyes, firm, elastic step, kindly manner, he was a most attractive personality to his friends and a pillar of strength to the cause he championed. Being a ready writer, forceful speaker, a faithful friend and powerful enemy, he exerted a wide influence. In the controversy between the University of Michigan and the Michigan State Medical Society over the introduction of homeopathy into the university. He led the university party. He was a leader in hastening the evolution of the Michigan State Medical Society from a convention with political methods into a society for mutual instruction and fellowship.

He married twice. His first wife was a Kingston lady, by whom he had two children; one, a son, Dr. Donald Maclean, Jr., and a daughter. His second wife was Mrs. Duncan of Detroit. Dr. Maclean died at his home in Detroit, July 24, 1903, from heart disease.

LEARTUS CONNOR.

McCLELLAN, Ely (1834-1893), surgeon in the United States Army, hygienist and writer, was born in Philadelphia, Pa., August 23, 1834. He was a student at the University of Pennsylvania and at Williams, and received his M. D. at Jefferson Medical College in 1856. In 1861 he became surgeon in the United States Army, was promoted major in 1876, and made deputy-surgeon-general with the rank of lieutenant-colonel, in 1891.

He wrote "Obstetrical Procedures among the Aborigines of North America" (1873); "Fibroid Tumors of the Uterus" (1874); "Battey's Operation" (1875); "Cholera Hygiene" (1874); "Common Carriers, or the Porters of Disease" (1874); "A History of the Cholera Epidemic of 1873 in the United States" (1875), and other studies in cholera and sanitation.

McClellan died in Chicago, Illinois, May 8, 1893.

McCLELLAN, George (1796-1847), eminent surgeon and founder of the Jefferson Medical College at Philadelphia, was born at Woodstock, Connecticut, December 23, 1796, and died in Philadelphia, May 8, 1847. His father, a descendant of an old Scotch family, was the principal of the Woodstock Academy, and here he obtained his preliminary education; he was graduated A. B. from Yale in 1816, and while there, formed a friendship with Prof. Silliman (q. v.), which led him to study natural science as well as the classics. He entered the office of Dr. Thomas Hubbard (q. v.) of Pomfret (subsequently professor of surgery in the Medical College of New Haven); after a year he moved, (1817), to Philadelphia and became a pupil of John Syng Dorsey (q. v.), professor of materia medica and anatomy, and entered the medical department of the University of Pennsylvania. In 1818 he was resident undergraduate in the Philadelphia Almshouse. As a medical student he seemed to find himself, like so many before and since, opening up a vista of new interests in life, owing doubtless to the drawing vision of the direct application of the group of interesting scientific medical studies to the intensely practical personal problems. It is said that he worked day and night in the dissecting room, that time-honored vestibule to so many surgical reputations. While at the almshouse he frequented the autopsy room, where he also utilized the abundant "material" to practice the various surgical operations which were then pretty nearly all on the periphery of the body. On reading that Valentine Mott (q. v.) had succeeded in ligating the innominate artery for aneurysm, McClellan sprang from his seat, and made for the dead house, imitated the operation and came back to announce his success. He received his M. D. in 1819, with a thesis entitled "Surgical Anatomy of Arteries." At once beginning practice in Philadelphia he soon became known as a bold, talented surgeon. He opened a dissecting room and gave private courses of lectures, his classes becoming so numerous as to require a larger room. As early as 1821, as one born before his time, he founded an Institution for the Diseases of the Eye and Ear, which lived for four years. With a few coadjutors he founded the Jefferson Medical College which received a charter from the legislature in 1825; here he was professor of surgery from 1826 until 1838, acquiring a very large private practice at the same time. The founding of this second medical school in Philadelphia was an unpopular act, and had a tendency to isolate its author, the friends of the University of Pennsylvania maintaining that there was not enough patronage for two schools, while McClellan prophesied that students would come in numbers proportioned to the increased facilities. A quarter of a century later (1849) Philadelphia actually enrolled a thousand students instead of five hundred in 1825; in

1836 McClellan had three hundred and sixty pupils in his school. In 1838 the trustees vacated all the professorships and excluded Dr. McClellan, for reasons unknown. Losing this position, McClellan at once projected a third medical school! He obtained a charter for "The Medical Department of Pennsylvania College," having its collegiate department at Gettysburg, and with five associates began a course of lectures on surgery in Philadelphia, in November, 1839. The school, starting with one hundred pupils, endured up to the time of the civil war.

McClellan was popular as a lecturer; he had an eager, restless mercurial disposition. S. D. Gross says of him: "He was always brilliant, always interesting and instructive, but like Meigs, superficial and scattering, apparently without any definite aim, forethought or preparation," and "McClellan could never talk without having hold of his watch chain or some other object, perhaps a knife or a pair of scissors, much to the horror of the occupants of the first row of benches." He was one of the greatest men of a distinguished coterie living in Philadelphia; "It is sufficient to say that he was one of the most able, talented and enterprising of the group, with hardly any one of whom he was on good terms either at the outset of his career or afterwards." "His impulsive disposition often brought him into trouble; he lacked judgment, talked too much, and made everybody his confidant."

"With many faults McClellan was unquestionably a man of genius, quick to perceive and prompt to execute. With a better regulated mind he would have accomplished much greater ends and achieved a more lasting fame. Probably no man ever handled a scalpel with more dexterity. One day, as I know myself, he needed a catheter to relieve a woman of retention of urine. Did he send for one to the cutler or apothecary? No. "Sir," addressing the husband, "bring me a quill," and in a few minutes the suffering creature was in elysium. On another occasion his saw broke in amputating a poor man's arm; in a moment the arm was bent over his knee and the bone snapped asunder." His colleague, S. G. Morton (q. v.), testifies to McClellan's coolness in critical operations, a valuable quality in the pre-anesthesia days, but one leading some critical persons to infer that the operator was unfeeling. He had a private dissecting room and lectured there attracting extra-mural students after the fashion of the day. These were also the days when the general surgoen performed all eye operations and it was not without many heart-burnings that he at a later date reluctantly and slowly yielded up this coveted ground to the innovating eye specialists. McClellan was one of the pioneers in the extirpation of the parotid gland, which he did eleven times with one death. When he took hold of this operation it was labelled by a no less surgeon that John Bell as impossible and absurd. In 1838 he extirpated the scapula and the clavicle for malignant disease, without anesthetic and without artery forceps. He also resected the ribs, then a novel operation. He died while attempting to write a text book on the principles and practice of surgery, the first sheets were brought to him in bed when he was too ill to notice them. This book, edited and published posthumously by his son, was a failure financially and professionally. Gross says, "the best thing in it is its cases portrayed by the hand of a master." His description of shock is a classic.

He cultivated the practice of medicine as well as surgery, as did D. Hayes Agnew (q. v.) fifty years later. The difficulty even a vigorous masterful mind has in anticipating the next steps in the path of progress is illustrated by his valedictory advice given at the Jefferson College Commencement in 1836: "We can do very little in the way of theory and nothing in the way of hypothesis . . . reject all inquiry into the secret and undefinable causes of disease." S. D. Gross himself was drawn to Philadelphia by McClellan's reputation and became his private pupil.

In 1820 he married Elizabeth, daughter of John H. Brinton. They had five children. One of his grandsons was George McClellan (q. v.).

He died suddenly, May 8, 1847, from "an ulcerative perforation of the small intestine."

McClellan had a passion for fine horses and a fondness for races. It was as much as one's life was worth to sit with him in his carriage; he was a perfect Jehu, and yet he seldom met with an accident. Gross says "McClellan died poor. He bought town lots, built houses and lost money."

HOWARD A. KELLY.

McCLELLAN, George (1849-1913). This Philadelphia anatomist came from distinguished ancestors, many of whom fought for the Stuart cause in Scotland. The grandfather of his grandfather came to America and settled in Massachusetts. His great-

grandfather held the King's Commission in the French and Indian War and was a brigadier general under Washington in the War of the Revolution. The grandfather of the subject of this sketch, George McClellan (q. v.), was graduated from the Medical Department of the University of Pennsylvania in 1819, married Elizabeth Brinton, a Philadelphia belle, and founded the Jefferson Medical College. He was a celebrated surgeon of great originality, intrepidity, dexterity, energy, independence and force of character. George's father, John H. B. McClellan, was professor of anatomy in the Pennsylvania Medical College, surgeon to St. Joseph's Hospital and to Wills Eye Hospital. The brother of John H. B. McClellan and the uncle of George was General George B. McClellan, the illustrious soldier who commanded the Army of the Potomac during a part of the civil war. George McClellan was born in Philadelphia, October 29, 1849, of the union of John H. B. McClellan and Maria Eldridge. He was the eldest son and was named for his distinguished grandfather. After leaving school he passed three years in the Department of Arts of the University of Pennsylvania. In 1868 he began the study of medicine in the Jefferson Medical College, where he listened to the elder Gross, Joseph Pancoast, James Aitken Meigs, John B. Biddle (q. v. to all) and other famous teachers, becoming intensely interested in surgery and anatomy. He took his M. D. in 1870 and at once began practice. In 1872 he went to Europe and studied under that master anatomist, Professor Hyrtl, of Vienna, being captivated by the teaching of the great Hungarian and determined to take up anatomical teaching as a career. In the way he thought of anatomy, in the manner he studied it, in the method of teaching it, he was essentially a follower of Hyrtl. In 1873 McClellan returned to Philadelphia, again took up practice and taught private students anatomy and surgery. In that year he married Miss Harriett Hare, the granddaughter of a former celebrated professor of chemistry in the University of Pennsylvania. McClellan became surgeon to the Philadelphia Hospital and to the Howard Hospital. In 1881 he founded the Pennsylvania School of Anatomy and Surgery, a very successful institution, where he taught until 1893. In 1890 he was elected professor of artistic anatomy in the Pennsylvania Academy of Fine Arts, and taught there for many years with conspicuous success; and in 1906 he was elected professor of applied anatomy in the Jefferson Medical College. His chief literary work is "The Regional Anatomy" which was published in 1891, went through four editions in the United States; was translated into French, two French editions being published. It is a valuable and beautiful book, the numerous illustrations having been made from photographs of dissections which Dr. McClellan made himself. He also took the photographs and colored the pictures. They show real anatomy; anatomy as it is, not as we might wish it to be. Another book, called "Anatomy in Relation to Art," is a splendid production. An address which attracted great attention was called "The Cerebral Mechanism of Emotional Expression." McClellan was a charming teacher, and was absolutely saturated with his subject. The beauty of his dissections; the clearness of his demonstrations; the accuracy of the white board drawings which he drew with such marvelous speed, and so much artistic beauty, excited the warmest admiration of his class. He dissected a body as a great sculptor would carve a statue, for his anatomy was art as well as science. He was one of the ablest and most interesting of American teachers.

He died March 29, 1913.

J. CHALMERS DA COSTA.

McCLINTIC, Thomas B. (1873-1912). This martyr to scientific medicine succumbed to an attack of Rocky Mountain fever at Washington, D. C., August 13, 1912. The disease had been acquired in Montana where McClintic had been engaged in the study and prevention of the malady since 1911. His work was highly successful and was nearing completion when the "dermacentor venustus" tick of an animal on which he was working transmitted the disease and he had barely reached his home before the end came.

McClintic was born at Warm Springs, Virginia, in 1873; graduated at the Medical Department of the University of Virginia in 1896 and three years later entered the Public Health Service as acting assistant surgeon. He was soon commissioned as assistant surgeon and in 1904 was promoted to be passed assistant surgeon. He had extensive service on army transports and in domestic quarantine; was engaged in yellow fever quarantine work in Tampico, Mexico, in 1904; was on duty at the Marine Hospital, San Francisco, at the time of the earthquake; was medical officer of the Revenue Cutter "McCulloch" on service in Alaskan waters; was later sent to

the Philippines where he served as quarantine officer at Manila. At intervals between these various details he was engaged in special investigations at the hygienic laboratory at Washington, devoting much time to problems of practical disinfection. In 1911 he began his studies in Bitter Root Valley, Montana, on the disease that claimed him in its 90 per cent of victims, his investigations being prosecuted partly in Montana and partly in the hygiene laboratory. He was perfecting measures for the complete eradication of the disease in certain areas when he became infected. He was regarded as an authority on the disease.

Dr. McClintic was a man of unassuming manners, and his tact, consideration, and thoughtfulness made him popular even as a quarantine officer.

He had been married barely a year.

McCLURG, James (1746-1823), a Revolutionary surgeon, was the son of Dr. Walter McClurg, a wealthy citizen and physician of Elizabeth City County, Virginia, who also served his country as a surgeon in the Virginia State Navy in the Revolution. The boy James had the best educational advantages of the day and fully availed himself of them at William and Mary College, from which he was graduated in 1762. He studied medicine at the University of Edinburgh, where he attracted the attention and commendation of Cullen, Black and other professors. Taking his M. D. from this celebrated institution of medical learning in 1770, his professional studies were then pursued in Paris and London. Returning to Virginia in 1773, he settled at Williamsburg, where he came into competition with such men and practitioners as Arthur Lee, (q. v.) and others of like caliber. A professorship of anatomy and medicine having been created at William and Mary, he was elected in 1779 to the chair, but it is not known that he ever gave any instruction in these subjects. During the war of the Revolution he served as a surgeon in the earlier years, and later as a medical director. He was a member of the convention which framed the Federal Constitution in Philadelphia in 1787, but did not sign that document. For many years he was a counsellor of the state also. A member of the Medical Society of Virginia, he was elected its president in 1820 and 1821, though then too feeble to take any part in its proceedings. When Richmond became the seat of government, Dr. McClurg removed from Williamsburg to that city, and was for the succeeding forty years its leading physician, the latter period of his life being almost entirely given up to consulting practice.

"The Philadelphia Journal of Medical and Physical Sciences" was in 1820 dedicated to "The Elegant Scholar and Accomplished Physician, Dr. McClurg." This shows that his reputation extended beyond the confines of his own state.

His inaugural essay entitled "De Calore" was regarded as an original and profound production, but was never published. It is said to have contained suggestions from which were thought to have originated some of the opinions afterwards demonstrated by the founders of the French school of chemistry. While residing in London he published a paper entitled "Experiments upon the Human Bile and Reflections on the Biliary Secretions, with an Introductory Essay" (London, 1772), which attracted much attention both on account of its originality and charming and elegant style. It was translated into several languages. He made several contributions to the "Philadelphia Journal of Medical and Physical Sciences," one of them was "Reasoning in Medicine."

He married, about 1780, Mrs. Elizabeth Selden, and they had two children, one of them Elizabeth, became the wife of John Wickham, attorney-general of the United States.

McClurg died in Richmond, July 9, 1823, at the age of seventy-seven.

The collection of portraits in the Library of the Surgeon-general at Washington contains a likeness of Dr. McClurg.

ROBERT M. SLAUGHTER.

McCORMACK, Joseph Nathaniel (1847-1922), of Bowling Green, Kentucky, surgeon, sanitarian, organizer of medical activities in state and nation, was born in Nelson County, Kentucky, November 9, 1847, the son of Thomas, a merchant and farmer, and Elizabeth Brown McCormack. When he was twelve, he left school to help his father and brothers work on the farm but continued his studies alone and became particularly proficient in Latin and mathematics. He entered Miami Medical College, Cincinnati, at twenty, graduating in 1870 as valedictorian of his class, entering at once upon an internship in the Cincinnati General Hospital. On September 14, 1871, he married Corinne Crenshaw of Glasgow, Kentucky, and his year's service over, returned to his father's home and began a practice which extended over a

twenty five mile radius. He was especially addicted to surgery and did one of the first Cesarean sections west of the Alleghenies. D. W. Yandell (q. v.), called to the same case and arriving late, was so impressed that, upon his return to Louisville, he had the "ad eundum" degree of M. D. conferred upon the young physician by the University of Louisville (1873). Several years later, young McCormack started practice in Bowling Green, especially as a surgeon. In 1878, he aided in stamping out an epidemic of yellow fever prevailing in his vicinity, and when a board of health was created in 1879 to combat cholera and yellow fever, he was appointed a member. It was in that year that McCormack attended the Kentucky State Medical Society meeting where S. D. Gross (q. v.) dedicated the McDowell monument. Gross declared that the burning question of the day was no longer therapeutics and surgery but preventive medicine. Deeply impressed, McCormack resolved to give his life to this field. In 1883, he became secretary of the Board of Health and continued as an executive officer until 1913, when he was succeeded by his son, Dr. A. T. McCormack. From the humble beginning, he lived to see the Board of Health established in Louisville with well equipped laboratories, a school for training physicians and nurses for public health work, and an organized health service in every county. In the eighties, Kentucky utterly disregarded all sanitary measures: the water supply of the cities was impure and unfiltered; thorough sanitary drainage was nil or notoriously imperfect; water-borne and filth diseases were rampant and contagious diseases reigned without regulation or control; while charlatans imposed their nostrums and their follies upon the credulous. Beginning with the passage of an act for the prevention of disease in live stock in 1885, McCormack was instrumental in securing a great body of important medical legislation,—a medical practice law in 1888, licensure laws in 1898 and 1904, a vital statistics law in 1908, and a bill combining health agencies in 1918. He both prepared the bills of the General Assembly for the prevention and control of disease and for regulating the practice of medicine and lobbied them through to their enactment. He then assumed the task of educating the people and of enforcing the law against charlatanism. It is averred that he did not miss a session of the state legislature for forty two years, and in 1912 he served one term as a member. He aided in organizing the conference of State and Provincial Health Officers and was a member of the International Quarantine Commission during the cholera epidemic of 1892, and of the Confederation of State Licensing and Examining Boards in 1899. In 1888, President Cleveland thanked him officially for his labors in the cholera epidemic. Always active in the Kentucky State Medical Society, he was its president in 1883-4. As one of a committee of three on reorganization of the American Medical Association in 1900, he did effective work, and for the next ten years devoted time and energy to the prefecting of the form of organization which was adopted. When the Council on Health and Public Instruction of the Association was organized in 1910, he served as chairman of the committee on organization until 1912. In 1913, he was made the Kentucky state sanitary inspector for the state board of health and moved to Louisville.

McCormack was one of the small group of older men who took up with vision the ideals of the next generation and devoted time and youthful enthusiasm to the problems of disease prevention; of health education, and of the professional and social status of physicians. He had a remarkably strong and winning voice and carried his propaganda far beyond the confines of Kentucky and was everywhere known as one of our best pioneer national spokesmen and leaders. His zeal for work continued unabated until the end.

On May 2, 1922, after an active day at his desk and a happy evening with his family, he retired apparently as well as usual; but after arising the next morning he complained of dizziness and, returning to bed, fell asleep and gradually lapsed into coma which continued until the end the following morning. His body was cremated, and his ashes interred beside his grand-children at Bowling Green.

HOWARD A. KELLY.

McCOSH, Andrew James (1858-1908), surgeon of New York, was born in Belfast, Ireland, in 1858, the son of the Reverend Dr. James McCosh, who came from a professorship in Queens College to be president of Princeton College, now Princeton University. Although only fifty years old, at his death he was one of the leading surgeons of this country, and, in spite of active practice, had contributed much to the advancement of his profession along the modern lines of scientific research. He was a graduate of Princeton

in 1877, took the master's degree in 1878, and received his degree of doctor of medicine from the College of Physicians and Surgeons in 1880, and then had a two-year post-graduate course in medicine at the University of Vienna. He began practice in New York in 1883, becoming attending surgeon to the Presbyterian Hospital in 1888, and retaining this position until his death. In 1905 Columbia University conferred upon him the degree of LL. D., and Princeton paid him a similar honor a year later. Dr. McCosh was professor of clinical surgery in the College of Physicians and Surgeons, Columbia University, a fellow of the American Surgical Association and president of the New York Surgical Society for two years.

Books written by Dr. McCosh, some of which are translated into foreign languages, include: "Appendicitis in Children"; "Iodoform Poisoning"; "Observations on the Results in 125 Cases of Sarcoma"; "Remarks on Spinal Surgery"; "Four Cases of Brain Surgery"; "The Treatment of General Peritonitis," and "Surgical Intervention in Benign Gastric Lesions." He assisted Dr. M. Allen Starr in writing "A Contribution to the Localization of the Muscular Sense." The records of the Presbyterian Hospital show that Dr. McCosh had performed 1,600 operations for appendicitis alone. He made yearly trips abroad and made it a point to keep in touch with surgical progress, holding, in later years, a monthly meeting at his office of the younger men connected with his hospital. He was a man of unassuming modesty and of many social and philanthropic interests.

He died at the Presbyterian Hospital, December 2, 1908, as a result of an accident, in which he was thrown from his carriage and his skull fractured.

MACRAE, Donald (1839-1907), was called the "Father of the Medical Society of the Missouri Valley," having been active in its organization, and its first president in 1888. He was born at Pollewe in Ross-shire, Scotland, October 3, 1839. His father was the Rev. Donald Macrae, minister of Pollewe. He received his education at the University of Edinburgh, from which he received the M. A., subsequently taking his medical degree there in August, 1861. After practicing for a year and a half in the Edinburgh Royal Infirmary, Dr. Macrae accepted a position as surgeon to the Cunard Steamship Company, and crossed the Atlantic seventy-five times during his four years service.

He was for many years identified with the Omaha (Nebraska) Medical College, where, beginning in 1881, he was professor of the principles and practice of medicine. In 1877 he was elected president of the Iowa State Medical Society.

In 1867 Dr. Macrae married Charlotte Bouchette, daughter of Joseph Bouchette, surveyor-general of Canada. Soon afterwards he went to Council Bluffs, arriving in March, 1867, and continued in active practice until illness compelled him to retire a short time before his death. Mrs. Macrae died in March, 1904.

In the death of Donald Macrae, which occurred in Council Bluffs, Iowa, on August 14, 1907, Iowa lost one of her highly honored citizens and physicians.

McCRAE, John (1872-1918), immortalized as the author of "In Flanders Fields," was distinguished as pathologist and soldier, as well as poet; the key-note to his character lies in his own expression, "I have never refused any work that was given me to do."

He was born in Guelph, Canada, November 30, 1872. His father, David McCrae, who, when more than seventy trained a field battery in Guelph and brought it overseas for service, was in the Canadian militia and had the rank of Lieutenant-Colonel, and with these practical gifts combined a "love of the out-of-doors, a knowledge of trees and plants, a sympathy with birds and beasts, domestic and wild." The mother of John McCrae was Janet Simpson, the lovely daughter of the John Eckord who, with his two daughters, emigrated to Canada from Scotland in 1851, and settled in Bruce County "in the primeval forest, from which they cut out a home for themselves, and for their children," a man of much force and deeply religious; it was his mother who received the revealing letters from the soldier John McCrae during his stirring days in Europe. With the heritage of intellectual and religious worth John McCrae came well-fitted into the world. His education began with the Shorter Catechism and was continued at school under William Tyler. In 1888 he entered the University of Toronto, holding a scholarship for "general proficiency," and graduated in the department of biology in 1894; in 1898 he graduated in medicine at the same University. He became resident house-officer in the Toronto General Hospital, but in 1899 went to Baltimore to accept a similar position in the Johns Hopkins Hospital, after which he went to Mc-

Gill University as fellow in pathology and pathologist to the Montreal General Hospital, and later, in the same city, was appointed physician to the Royal Alexandra Hospital for infectious diseases; still later, while assistant physician to the Royal Victoria Hospital, he was lecturer in medicine in McGill University. He was a member of the Royal College of Physicians, London.

His work with John George Adami, "Text-Book of Pathology" (1912; 2nd edition, three, are his contribution to medical literature. His verse ran freely in the pages of 1914) and papers to the number of thirty-"The Spectator," "Punch," "Toronto Varsity," "Canadian Magazine," "Massey's Magazine," Westminster, "Toronto Globe," and the "University Magazine." "In Flanders Fields" appearing first in "Punch," December 8, 1915, was widely copied, became "the poem of the army" and touched the universal heart.

"In Flanders Fields the poppies blow
Between the crosses, row on row,
That mark our place, and in the sky
The larks, still bravely singing, fly,
Scarce heard amidst the guns below.
We are the dead. Short days ago
We lived, felt dawn, saw sunset glow,
Loved and were loved; and now we lie
In Flanders Fields."

Other poems also are known and loved by those who read John McCrae. The tenderness of thought and beauty of wording of the following have appealed to many:

"Beneath her window in the fragrant night
I half forget how truant years have flown
Since I looked up to see her chamber-light
Or catch, perchance, her slender shadow thrown
Upon the casement; but the nodding leaves
Sweep lazily across the unlit pane,
And to and fro beneath the shadowy eaves,
Like restless birds the breath of coming rain
Creeps, lilac-laden, up the village street
When all is still, as if the very trees
Were listening for the coming of her feet
That come no more; yet lest I weep, the breeze
Sings some forgotten song of those old years
Until my heart grows far too glad for tears."

The lines seem singularly to combine the two opposite traits in his character—the sense of gaiety, of laughter, and the minor note present in his poems. In religion he had a strong faith and was strict in observing its outward signs. When fourteen John McCrae joined the Guelph Highland Cadets, becoming 1st lieutenant; he transferred to the Artillery and rose from gunner to major. When the South African War began he served in the field force in 1899-1900; saw hard fighting and received the Queen's medal with three clasps. In the autumn of 1914 he entered into service with the rank of major; went to the front but on June 1, 1915, was ordered to No. 3 General Hospital at Boulogne, his rank now being lieutenant-colonel. His wishes were all for action, but as a medical officer he "did his work and did it well"; he had suffered many years from asthma and his health was growing worse. In December the command of No. 1 General Hospital fell vacant and Dr. McCrae was offered the post. but a few days later a higher honor appeared in store for him, that of consultant to the British Armies in the field. Before matters were concluded Colonel McCrae was taken ill with pneumonia and died at No. 14 General Hospital at Wimereux, January 28, 1918. He was buried in the cemetery at Wimereux, with full military pomp, attended by many officers and men and a hundred nursing sisters in caps and veils. His biographer says "Through all his life dogs and children followed him as shadows follow men. To walk in the streets with him was a slow procession." His dog, Bonneau, and his horse, Bonfire, were his companions and friends; the horse, led by two grooms, and wearing the white ribbon, led the funeral procession.

Colonel McCrae was survived by his father and mother, a sister, Mrs. F. Kilgour, and a brother, Lieutenant-Colonel Thomas McCrae, M. D., professor of medicine in Jefferson Medical College.

John McCrae's book of poems ("In Flanders Fields and other Poems," New York, 1919), edited by Sir Andrew Macphail, contains a sketch of McCrae (pp. 47-141), which is of almost equal interest with the poems; sympathetic and restrained in composition—it is a literary gem.

HOWARD A. KELLY.

McCREERY, Charles (1785-1826), pioneer physician of Kentucky who first removed the entire clavide.

The following extract is from a letter of Miss Tula Clay Daniel of Hardinsburg, Kentucky, a grand-daughter of Dr. Charles McCreery. "Family records show Dr. McCreery

to have been of Scotch-Irish descent. His grandfather moved to this country and settled in Maryland in 1730. His father married Mary McClanahan, and Charles, the seventh son, the youngest of nine children, was born June 13, 1785, near Winchester, Clark County, Kentucky. His brother Robert was father of Thomas Clay McCreery, the noted Senator, lawyer, orator from Daviess County, and his brother James the grandfather of Senator James B. McCreery. Dr. McCreery studied medicine under Dr. Goodlet of Bardstown, moved to Hartford, Ohio County, Kentucky, in 1810. In 1811 he married Ann Wayman Crowe, whose parents came from Maryland with their relations, the Tevis family. In Hartford a family of seven children were born to them."

Dr. McCreery did a large practice in Ohio and adjoining counties, making extended rides on horseback and yet found time to deliver lectures regularly in his home to his own as well as to other students. His surgical instruments were made under his own supervision by an expert silversmith in Hartford. His chief operation, the one that makes his fame enduring, was the extirpation of the entire collar bone in 1813, the first on record ("New Orleans Medical and Surgical Journal," January, 1850). S. D. Gross says of the operation: "This bold, delicate and extraordinary operation was executed for the first time in America in 1813 by the late Charles McCreery of Hartford, in this State. The subject of the case, as I learn from Charles F. Wing, Esq., of Greenville, who was intimately acquainted both with the patient and his surgeon, was a youth of the name of Irvin, fourteen years of age, laboring under a scrofulous affection of the right collar bone. A disease of a similar kind existed at the period of the operation in the right leg, from which several pieces of bone were subsequently removed, and which became so much curved and shrunken as to be upwards of two inches shorter than the other. By degrees the part got well, but the disease recurred two or three times afterwards, though it was always amenable to treatment. The loss of the bone did not impair the function of the corresponding limb". The case of Dr. Valentine Mott (q. v.) of New York, performed in 1828, which Dr. Mott supposed was the first operation of the kind done in the United States, and about the wonders of which surgical writers at the time said much, was not a complete removal, for about one inch of the acromial end of the clavicle was left.

Dr. McCreery was a historian, a great reader, eloquent speaker, ready writer and close student. The love of his patients for him bordered on idolatry, his name being to them a synonym of kindliest sympathy and readiest helpfulness. His home life was characterized by unusual sweetness and tenderness and an intense appreciation of child nature. He was a well formed, handsome man with fine dark eyes. He died of cardiac dropsy, August 26, 1826, at West Point on his return from Shelbyville, where he had gone to bring his two oldest daughters home from Science Hill Academy.

AUGUST SCHACHNER.

McCURDY, John M. (1835-1890), of Youngstown, Ohio, one of the founders of the Mahoning County Medical Society. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 735.

McDERMONT, Clarke (1823-1881), army surgeon of Ohio, born in County Antrim, Ireland, in 1823, immigrated to this country in 1840, and, having had a classical education, was able to become principal of a private school in Lexington, Kentucky. He began to study medicine under Dr. Dudley (q. v.), professor of surgery in Transylvania University and the most noted lithotomist in America, in 1849 graduating from the University of New York, and immediately going to Edinburgh and Dublin for post-graduate work. Returning to this country, for a while he assisted Prof. Detmold (q. v.) in his private classes, and in 1852 went to Dayton, Ohio, and associated himself with Dr. Green. Promptly at the beginning of the War for the Union he was appointed to the surgeoncy of the Second Ohio Volunteer Infantry. In 1862-1863 he served as medical director of the right wing of the Army of the Cumberland, and later was detailed to hospital service in Nashville, Tennessee, and Louisville, Kentucky. In the latter place he had charge of the hospital for sick and disabled officers. In the official report of the battle of Murfreesboro, Gen. Rosecrans commended him for gallantry on the battle-field, and for great humanity in the care of the wounded; in recognition of his services he was brevetted Lieutenant-Colonel, U. S. Volunteers. At the close of the war he was assigned as surgeon to Camp Dennison, until appointed surgeon-general of the state under Governor Hayes. While surgeon-general of Ohio, he prepared a bill to protect the state from the evils of

quackery. The bill was introduced into the Legislature, but failed to pass.

In 1856 Dr. McDermont married Mary E. Winters, daughter of Valentine Winters, of Dayton, O.

True to his lineage, he was full of Irish wit and humor, which bubbled to the surface at the most unexpected times; and this, with the keen observation and information which came from reading and travel, made him a charming companion. He died April 7, 1881.

WILLIAM J. CONKLIN.

McDILL, Alexander Stuart (1822-1875), trustee and superintendent of the Wisconsin State Hospital for the Insane, was the seventh son of James McDill of Clarion County, Pennsylvania, and grandson of Hugh McDill and Roxanna Stuart, the founders of this branch of the family in America. The McDills were of Scottish-Irish origin and were Presbyterians in religion. Hugh McDill and Roxanna Stuart left Broughshane, Ballymena Parish, county Antrim, Ireland, with their three sons and three daughters in 1793 with the intention of joining other members of the family in South Carolina but, their ship being captured by a French privateer, they were landed at Baltimore and from there proceeded to Wayne township, Crawford county, Pennsylvania, to live. Dr. McDill was born March 18, 1822, near Meadville, Pennsylvania. He received his preliminary education at Allegheny College and took his medical degree at the Western Reserve College of Medicine, then situated at Hudson, Ohio, graduating in 1848. For eight years he practiced his profession with notable success in his native state. In 1856 he was persuaded by an elder brother, Thomas H. McDill, to move to Wisconsin. Dr. McDill settled at Plover and later at the town of McDill between Plover and Stevens Point. He soon took a high rank in his profession in middle Wisconsin, but the exigencies of the times naturally forced him into politics, and in 1862 he was elected to the assembly, and in the year following to the state senate; being in the legislature during the turbulent period of the Civil War, serving on many commissions of relief. After the war he took up the charitable and humanitarian work which fell upon the few men left—the care of the widows and orphans and the wrecks of the war, until organized aid of state and government were in operation. He served from July, 1862, to 1868 as one of the trustees of the Wisconsin State Hospital for the Insane near Madison, in which he took so marked an interest that in the latter year, he was placed at the head of the institution. In co-operation with Dr. N. A. Gray, of Utica, N. Y., and other prominent alienists, he succeeded in abolishing cruelty and other abuses of insane patients, resorting to the courts when necessary; also through his efforts the State Board of Charities and Reform was instituted as a philanthropic body to take the place of the former Board of Charities, which was concerned with the finances only of state institutions; the distinguished men of the first board served at his personal solicitation. He was presidential elector in 1864; in 1872 he was elected to represent the Eighth Congressional District, then the northern half of the state, and resigned his position at the hospital in 1873. Becoming weary of political life, on the expiration of his term, he again accepted the superintendency of the Wisconsin State Hospital for the Insane. He entered upon the duties of his office in April, 1875, resolving to devote the remainder of his life to relieving the unfortunate class whose peculiarities he had so long studied and in whose treatment he took so deep an interest; but his useful career was suddenly cut off, and he died of pneumonia after a brief illness on November 12, 1875.

Dr. McGill was a Mason of high rank, and a member of various medical and scientific organizations. He was an ardent and accomplished botanist, and a great lover and student of both nature and of books. Combined with dignity of manner he observed a scrupulous nicety in matters of dress unusual in those days.

On July 31, 1849, at Chathams Run, Clinton county, Pennsylvania, Dr. McDill married Eliza Jane Rich, a daughter of John and Rachel Rich, of what is now Woolrich, Clinton county, Pennsylvania.

JOHN R. McDILL.

MACDONALD, Alexander (1784-1859), pioneer physician of Antigonish, Nova Scotia, was born on the Isle of Skye in 1784 and had his professional education at Edinburgh University, where he was graduated M. D. in 1805. His early intention had been to enter the army, but having met with an accident—a broken leg—he was advised that he would never be able to endure the hardship of marching. He then turned to medicine in the hope that he might be able to join the army as a surgeon. But this he was not destined to do. Soon after graduation he was

appointed surgeon aboard an emigrant ship bound for Charlestown, Prince Edward Island. The captain was a very brutal fellow who ill-used the Highland emigrants in every possible way, and was at constant feud with Dr. Macdonald and Col. Rankin, another cabin passenger, who tried to defend them. The captain made such fiendish threats as to what he would do to Dr. Macdonald on the return trip, when he would not have the Highlanders and Col. Rankin to help him, that the doctor had no desire to accompany this savage captain on the return voyage.

He landed at Antigonish and from there went to Jamaica, where he practiced for three years. While in Jamaica he had a severe attack of fever, in the delirum of which he tore up his diploma. He returned to Antigonish with the intention of going back to Scotland, but fell in love and married Charlotte, the eldest daughter of Daniel Harrington, and never returned to his native land. When Dr. Macdonald came to Antigonish the roads were mere bridle paths, the bridges were few and poor; when he got into practice he had an immense country to cover; long journeys had frequently to be made, often at night and in the severe storms of winter, and the hardships and dangers were terrible.

His hardships were, perhaps, increased by his absent mindedness, and his consequent neglect of comforts in traveling. It is said that on coming home from a distant part of his professional field one cold winter's day, he remarked to his wife, on entering the house, that one of his feet was quite warm while the other was almost frozen. On pulling off his boots it was found that he had put two stockings on one foot and left the other bare. This peculiarity of absent-mindedness led to much practical joking at his expense. On one occasion, some friends, finding his horse ready saddled at his office door, reversed the saddle and awaited results. Out came the doctor, and without noticing what had been done, he mounted and rode away.

But if Dr. Macdonald was absentminded in unimportant matters, there are no stories of his being so in the treatment of his patients. In addition to a large practice, he filled many public positions. He was a justice of the peace, judge of the Court of Common Pleas, prothonotary surgeon of the Militia. He was a man of high professional attainment and sterling character, and his memory will long live in the county of Antigonish, where he died in 1859.

The well-known W. H. Macdonald, M. D. (commonly known as "Dr. Bill"), was a son, and Dr. W. Huntley Macdonald, a grandson of Alexander Macdonald.

DONALD A. CAMPBELL.

MacDONALD, James (1803-1849), pioneer alienist of New York, was born at White Plains, New York State, July 18, 1803. His father, Dr. Archibald MacDonald, a native of Scotland, came to America in childhood. James' first classical instructor was Isaac Hulse, who afterwards became a distinguished surgeon in the navy. Subsequently he was sent to the academy at Bergen in New Jersey, then under the care of Mr. Thomas Gahagan. The profession of medicine was his own determinate choice, in opposition to the wishes of nearly all his friends. In 1821 he began the study of medicine in his native village with Dr. David Palmer, and afterwards a pupil of Dr. David Hosack (q. v.) of New York, under whom he finished his medical studies. After several courses of lectures at the College of Physicians and Surgeons in New York, he was graduated March 29, 1825. Dr. MacDonald was appointed resident physician at the Bloomingdale Asylum, and soon the full responsibility of the institution devolved upon him. He remained there until the close of the year 1830, when he resigned to enter upon general practice in New York. He was sent abroad for one year to visit the Old World asylums in 1831, and upon his return assumed charge of the Bloomingdale Asylum, where he remained until the autumn of 1837. He then resumed his general practice in New York, and was elected attending physician of the New York Hospital. In 1841 he carried into execution a long-cherished plan to establish in association with his brother, Allen MacDonald, a private institution for mental diseases. For this purpose two houses agreeably situated on Murray Hill, then in the suburbs of New York, surrounded with ample grounds and shut out from public view by high enclosures, were at first secured. The establishment was opened in June, 1841. In 1842 he was tendered the appointment as superintendent of the New York State Lunatic Asylum, which he declined. In the winter of 1845 the brothers purchased the mansion of the late Chancellor Sanford, at Flushing, one of the most costly and substantial country houses in America. To this place, which they named Sanford Hall, they removed their establishment.

His only published works are: an essay on the construction and management of insane hospitals; a review of considerations upon the insane, by G. Ferrus, "Philadelphia Medical Journal," 1837; statistics of the Bloomingdale Asylum; letter to the trustees of the New York State Lunatic Asylum, New York State Lunacy Report, 1842; a dissertation on puerperal insanity, "Journal of Insanity," 1848; and several reports on the condition of Blackwell's Island Lunatic Asylum.

He died suddenly of pneumonia, May 5, 1849.

McDOWELL, Ephraim (1771-1830), "Father of Ovariotomy," was born in Rockbridge County, Virginia, on the eleventh of November, 1771. His ancestors removed from Scotland to the valley of Virginia in 1737. His mother was Sarah McClung and McDowell's father was prominent in political life in Virginia, a member of the Legislature of that state, and in 1782 came as a land commissioner to Kentucky (then a portion of Virginia), and soon after removed his family to Danville. Ephraim McDowell went as a boy to a school at Georgetown, Kentucky, then to Staunton, Virginia, to study with Dr. Humphreys, and in 1793 to Scotland to attend lectures at the University of Edinburgh. He remained in Edinburgh during the session of 1793-94, but did not receive his M. D. As far as we know, this degree was not conferred upon him until 1832, when, entirely unsolicited on his part, the University of Maryland gave him her honorary M. D. The Medical Society of Philadelphia, at that time the most distinguished of the kind in this country, sent him its diploma in 1807, two years before he performed his first ovariotomy. While taking the course at Edinburgh University, McDowell attended the private instructions of John Bell, the most able and eloquent of the Scottish surgeons of his day. That portion of Bell's course in which he lectured upon the diseases of the ovaries and depicted the hopeless fate to which their victims were condemned, made a powerful impression upon his auditor. Indeed, McDowell afterwards stated that the principles and suggestions at this time enunciated by his master impelled him sixteen years afterwards to attempt what was considered an impossibility. In 1795 McDowell returned to his home in Danville, then a small village in the western wilderness, and entered upon the practice of his profession. Being a man of classical education, coming from the most famous medical school of the world, he easily gained the first professional position in his locality, and within a few years became known throughout all the western and southern states as the best surgeon in his entire section of the country. During this time his practice extended in every direction, persons coming to him from all the neighboring states, and he frequently made long journeys on horseback to operate upon persons whose conditions would not permit them to visit him at his home. As far as known, he was in the habit of performing every surgical operation then practiced. In lithotomy he was especially successful, and was known to have operated, up to 1828, twenty-two times without a single death. He operated many times for strangulated hernia, and did successfully various amputations and other operations, including tracheotomy.

In 1809, fourteen years after he began practice, he was sent for to see a Mrs. Crawford, living in Green County, Kentucky, some sixty miles from Danville. McDowell found her to be afflicted with an ovarian tumor, which was rapidly growing and hastening to a fatal termination. In the language of Prof. Gross: "After a most thorough and critical examination, Dr. McDowell informed his patient, a woman of unusual courage and strength of mind, that the only chance for relief was the excision of the diseased mass. He explained to her, with great clearness and fidelity, the nature and hazard of the operation; he told her that he had never performed it, but that he was ready, if she were willing, to undertake it, and risk his reputation upon the issue, adding that it was an experiment, but an experiment well worthy of trial." At the close of the interview Mrs. Crawford declared that any mode of death, suicide excepted, was preferable to the slow death which she was undergoing, and that she would submit to any operation which held out even a remote prospect of relief. Mrs. Crawford was forty-seven at the time of the operation, and died on March 30, 1841, aged seventy-eight years. It was not until seven years afterwards, and when he had twice repeated the operation, that McDowell published an account of it. In 1816 he prepared a brief account of his first three cases, a copy of which he forwarded to his old preceptor, John Bell, who was then travelling on the Continent for his health, and had left his professional correspondence in the

charge of Mr. John Lizars. The communication failed to reach Mr. Bell, and another copy of the report was forwarded by McDowell to Philadelphia for publication. The report appeared in the "Eclectic Repertory and Analytical Review" for October, 1816. Two additional cases completed this report, all three patients making complete and prompt recovery. Three years later (October, 1819) McDowell reported in the same journal two more cases. It will be observed that seven years elapsed from the time he first operated until he made his publication, when he was enabled to add two more successful cases. That so long a time should have been allowed to elapse was most probably due to the surgeon's natural aversion to writing. Perhaps the manner in which this report was made did much to provoke the criticism with which it was received. Dr. James Johnson, the very learned editor of the "London Medico-Chirurgical Review," was especially severe and satirical in his criticisms.

How many times during his career McDowell performed ovariotomy is not now certainly known. Dr. J. D. Jackson (q. v.) reports him to have made a long horseback journey in 1822 of some hundreds of miles into middle Tennessee, to do an ovariotomy (successful) upon Mrs. Overton, who lived near the Hermitage, President Jackson's house. The only assistants he had were Gen. Jackson and a Mrs. Priestly. The former seems to have been greatly pleased with McDowell, and took him to his house as guest. Dr. William A. McDowell (q. v.), for five years his uncle's pupil and two years his partner, tells us that up to 1820 his uncle had done seven ovariotomies, six of which he witnessed, and that six of the seven were successful. Dr. Alban G. Smith succeeded Dr. William A. McDowell as partner of Dr. Ephraim McDowell, and while with him Dr. Smith himself twice performed ovariotomy. The younger McDowell states later that he knew of his uncle having during his career operated thirteen times, exclusive of the two cases Dr. Smith operated upon, and of the thirteen eight recovered. McDowell first operated in 1809; in July, 1821, Dr. Nathan Smith (q. v.), professor of surgery in Yale College, performed ovariotomy at Norwich, Connecticut. Dr. Smith had never heard of McDowell's work and operated in an entirely original way. Dr. Alban G. Smith, previously mentioned, reported his first operation (May 23, 1823) in the "North American Medical and Surgical Journal," for January, 1826.

When we think of one living on the border of Western civilization, in a little town of five hundred inhabitants, far removed from the opportunity of consultation with anyone whose opinion might be of value, and nearly a thousand miles from the nearest hospital or dissecting room, performing a new and untried operation of such magnitude upon the living, before the days of anesthesia, with a full sense of the responsibility and danger, without skilled assistants, our admiration for McDowell's courage and skill rises to its full height.

He possessed an excellent medical library for his day and locality, and was in the habit of purchasing most of the principal new works on medicine. While having a fair knowledge of the classics he gave most of his professional leisure to history and belles-lettres.

At the age of thirty-one, Dr. McDowell married Sarah, the daughter of Kentucky's famous "war governor," Isaac Shelby, with whom he lived happily, and had a family of six children, two sons, and four daughters, only three of these surviving him. Mrs. McDowell was his survivor by ten years. In the later years of his life he removed from the village to a country home, where he spent the later years of his life, still continuing his professional work. He died on the twentieth day of June, 1830, after a brief illness.

Careful reflection upon the operative methods of the "Father of Ovariotomy," as I have endeavored to portray them, will demonstrate that, except as to asepsis, but little improvement has been made upon his methods as originally conceived and carried out.

LEWIS SAMUEL MCMURTRY.

McDOWELL, Joseph Nash (1803-1868), picturesque character, founder of a medical college, eloquent lecturer, nephew of Ephraim McDowell (q.v.), was born in Lexington, Kentucky, in 1803, and received his literary and medical education at Transylvania University, taking his M. D. in 1825. Because of his proficiency in anatomy, he held the chair of anatomy in his alma mater for a year and then he became professor of anatomy in the Jefferson Medical College in Philadelphia for one session, when he returned to Lexington and married the playmate of his youth, Amanda Virginia Drake, sister of Daniel Drake. From 1835 to 1839, when the college went out of existence, he was professor of anatomy in the medical department of the Cincinnati Medical

College, where he was associated with Dr. Drake, Dr. Gross, and other distinguished men. Arriving in St. Louis in 1840, he set to work with enthusiasm and unceasing industry to organize a faculty of medicine. He worked under the charter of the Kemper College and his college was then known as the Medical Department of the Kemper College, but later the name was changed to "Missouri Medical College." Dr. McDowell soon became known throughout the West and Southwest. He was an unusually fluent and eloquent speaker, a natural orator and possessed to a pre-eminent degree that rare and wonderful power of adapting himself to any and all kinds of audiences. He literally reveled in antithesis and climax, and as a vivid word-picturer few could equal him. A perfect master of invective and ridicule, never at a loss to entertain any company he might be thrown into. Backed by a fund of inexhaustible anecdotes he made parable, anecdote and quaint comparison an effective means to stimulate and fix the memory of his students. It is said that in his medical lectures he had a story for almost every bone, muscle and nerve in the human body. He was proverbially improvident and careless. He always found it more difficult to keep than to get, for while fortune often indeed aided him, a lack of forethought as quickly undid him. It is said in his early years of residence in St. Louis he delivered a number of acrid lectures against Jesuitism, because, as it was claimed, the Jesuit Fathers of the St. Louis University had allowed a rival medical school (the St. Louis Medical College) to organize under the charter of their college. After the delivery of the lectures the doctor became so obsessed that his life was constantly in danger, that he made and wore a brass breast-plate, and always thereafter carried arms.

Dr. McDowell had so constructed his college building as to be a formidable fortress, and his residence on the opposite corner was also planned to resist an assault. Any one who had ever seen this huge, octagon-shaped stone building could readily see that it had been built on such lines. He had early conceived a plan to go across the plains and capture upper California. With this in view, be bought from the United States Government, for $2.50 each, 1,400 discarded muskets, which were stored in his house and in the basement of the college. Through determination, patience and diligence, he got hold of quantities of old brass, to make cannon. This proposed expedition to Upper California was to be accomplished by persuading his graduates and others to accompany him. It is said that several hundred graduates and young men had promised to go.

Dr. McDowell himself once became very sick and believing himself upon the point of death, called Dr. Charles W. Stevens, his partner in the practice of medicine, and his son, Dr. Drake McDowell, to his bedside and made them take oath that, should he die, they would place his body in an alcohol-filled lead coffin, take it to the Mammoth Cave of Kentucky and have it suspended from the roof of the cave. It is also related that he purchased a cave in Hannibal, Missouri, had it cleaned out and tidied up, and built walls of masonry and an iron gate at its entrance. He took a lead coffin containing the body of one of his children and suspended it from the roof of the cave. Some time after, evil-disposed and mischievous town loafers broke down the gate and opened the coffin. This made the doctor give up the idea of having such a burial place for the dead.

When he delivered his class valedictory, it was always an event dear to every medical student of the town, for such was McDowell's antipathy to the St. Louis Medical College, or Pope's College, as he called it, owing to the fact that the late Charles A. Pope (q.v.) was dean, that he was sure to say something rich in climax, ridicule and comparison. Dr. W. B. Outten said: "I remember to have once heard him say at a commencement in his college: 'That by the Grace of God and the permission of the Pope, I expect to lecture here for the next twenty years to come'." Dr. Montrose A. Pallen (q. v.), who at that time attended the St. Louis Medical College, went to hear one of his valedictories. McDowell, tall and with bushy gray hair brushed back on his forehead, slowly sauntered down the aisle of the amphitheatre with a violin and bow in his hand. Seeing so many students sitting sideways, he commandingly said in his penetrating, high-pitched voice: "Gentlemen, I pray you, gentlemen, sit straight and face the music." After scraping off a few tunes he very gravely laid down his violin and bow and said "Gentlemen, we have now been together for five long months and we have passed many pleasant and delightful moments together, and doubtless some sad and perplexing ones, and now the saddest of all sad words are to be uttered, namely, 'Farewell.' We have floated in an atmosphere of physiology, we have waded knee-deep, nay, neck-deep into a sea of theory and practice, we

have wandered into the tortuous maze and confusing labyrinth of anatomy; we have wearily culled amidst pungent odors and savored the queer elements of materia medica. We have patiently plodded in the crucible of chemicals. Yes, gentlemen, filled with that weariness at times which could have made us sleep sweetly, or snore profoundly upon a bed of flint, and now, gentlemen, farewell. Here we have made the furrow and sowed the seeds. In after years one of your number will come back to the City of St. Louis, with the snow of many winters upon his hair, walking not on two legs, but on three, as Sphinx has it, and as he wanders here and there upon the thoroughfares of this great city, suddenly, gentlemen, it will occur to him to ask about Dr. McDowell. Then he will hail and ask one of the eager passersby: 'Where is Dr. McDowell?' He will say: 'What Dr. McDowell?' 'Why, Dr. McDowell, the surgeon.' He will tell him, gentlemen, that Dr. McDowell lies buried out at Bellefontaine. Slowly and painfully he will wend his way thither; there he will find amidst rank weeds and seeding grass a simple marble slab inscribed, 'J. N. McDowell, Surgeon.' As he stands there contemplating the rare virtues and eccentricities of this old man, suddenly, gentlemen, the spirit of Dr. McDowell will arise upon ethereal wings and bless him. Yes, thrice bless him. Then it will take a swoop, and when it passes this building, it will drop a parting tear, but, gentlemen, when it gets to Pope's College, it will expectorate." McDowell loved to make speeches and the boys on the street would shout to him to give them a talk. Nothing loath, he would mount the steps of the courthouse and soon gather a crowd.

He was a remarkable teacher. His influence was profound; no student ever sat before him and listened to his lectures who remained uninstructed. The students from his college were better and more enthusiastically instructed in anatomy than almost any college in the land. Anatomy here became almost a mania.

His death came on October 3, 1868. Three sons survived him, and two, Drake and John, became physicians.

McDOWELL, William Adair (1795-1853), early advocate of the curability of tuberculosis, was born in Mercer County, Virginia, March 21, 1795, son of Samuel McDowell and Anna Irvine. He was a student at Washington (now Washington and Lee) University 1814-1815. In 1816 he entered the University of Pennsylvania, taking an M. D. in 1818, with a thesis on "Suspended Animation," and practicing medicine with his uncle Ephraim (q. v.). He practiced at Newcastle, Virginia; Danville, Kentucky; Evansville, Indiana; and at Louisville, Kentucky.

His work, "A Demonstration of the Curability of Pulmonary Consumption . . .," 269 pages, Louisville, 1843, was reviewed by L. P. Yandell (q. v.), answered by McDowell in a treatise of three pages (1844); Yandell made a rejoinder, to which McDowell replied in a pamphlet (1844).

In the war of 1812 he served as a private; in his mature years he entered the United States Marine Hospital Service.

In 1819 he married Maria Hawkins, daughter of Matthew Harvey.

He died at Louisville, December 10, 1853.

MACGILL, William D. (1802-1833), who did the first lithotomy in Maryland, was born in that state in 1802; graduated in medicine at the University of Maryland in 1823, and moved to Hagerstown, Maryland, where he practiced all his life. He was the first American surgeon successfully to tie in continuity, in the same subject, within an interval of a month, both primitive carotids. This was in 1813, the second time the operation had been done. He was followed in 1827 by Reuben Dimond Mussey (q. v.), and in 1833 by Valentine Mott (q. v.), December 27, 1825. Macgill did the first lithotomy in Washington County, Maryland.

In the "American Journal of the Medical Sciences," 1827, vol. i, 240, is a review of a "Case of Hydatids of the Uterus, successfully treated by the Ergot," by W. D. Magill, M. D., of Hagerstown.

He died at Hagerstown, March 13, 1833, at the age of thirty-one.

MacGowan, Daniel Jerome (1815-1893), Medical Missionary to China. See Cyclopedia, American Medical Biography, H. A. Kelly, Phila. 1921. vol. ii p. 132.

McGRAW, Theodore Andrews (1839-1921), surgeon of Detroit, a contributor to surgical literature and chiefly known for his advocacy of the rubber ligature in anastomoses between the hollow viscera, was born November 11, 1839, in Detroit, Michigan, the son of Alexander C. and Susana Walker McGraw.

He was graduated A. B. from the University of Michigan 1859, and M. D. from the College of Physicians and Surgeons of New York in 1863 and returned to Detroit to practice. He was a founder of the Detroit College of Medicine and professor of surgery from 1869 to 1912, and at one time president and dean; in 1887 he was president of the Michigan State Medical Society. The University of Michigan conferred its LL. D. on him in 1905.

Dr. McGraw married Alice Simpson of New York, July 10, 1866. He died September 7, 1921.

McGUIRE, Hugh Holmes (1801-1875), pioneer surgeon of Winchester, Virginia, was born in Frederick County, Virginia, on November 6, 1801, and was the son of Edward McGuire, descendant from Thomas MorMcGuire, Lord or Prince of Fermanagh, Ireland, who was born in 1400. He read medicine with Dr. Robert Barton of Winchester, attended lectures in the University of Pennsylvania, and graduated there in 1822, the subject of his thesis being "Tetanus." He was a member of the Medical Society of Virginia. Settling in Winchester to practice, he devoted himself specially to surgery and during his life did most of the surgical work in his section. He is said to have been the first Virginian to operate for cataract, doing the couching or needling operation with a needle made under his direction by a mechanic. He was the first in America to operate for clubfoot. He cut directly down upon the tendons, severing all the tissues covering them—a method which has been revived in recent years. A skilful lithotomist, too, he operated for stone more than thirty times without a death. Thus successful as a surgeon, possessing both judgment and skill, he acquired a national reputation which led to his being called to the chair of surgery in schools in Philadelphia, New Orleans and Louisville—calls declined, however, as he preferred the quieter life of a country town and work among his own people. When the Medical School of the Valley of Virginia was established at Winchester in 1826, he was made professor of anatomy and physiology and filled the chair until the school was disbanded. Upon its revival in 1850 he became dean and professor of surgery, and so continued until it ceased to exist on the outbreak of the Civil War, when, despite advanced age, Dr. McGuire entered the Confederate Army as surgeon and served through the entire war. He married Anne Eliza Moss, and two of the sons, Hunter (q. v.) and William P., became physicians. He died at Winchester in 1875.

ROBERT M. SLAUGHTER.

McGUIRE, Hunter Holmes (1835-1900), army surgeon, organizer of medical schools and societies, leading surgeon of Virginia, was born in Winchester, Virginia, October 11, 1835, the son of Dr. Hugh Holmes McGuire (q. v.), a surgeon of note, and the founder of the Medical College at Winchester, Virginia, and of Anne Eliza Moss McGuire, his wife. First the son studied medicine at the Winchester Medical College, graduating in 1855, and in 1856 matriculating at both the University of Pennsylvania and at the Jefferson Medical College, but was soon taken ill and had to return home. In 1857 he was elected professor of anatomy in the college at Winchester, but desiring greater clinical advantages, resigned the position after one session and returned to Philadelphia. The intense sectional feeling aroused by the insurrection of John Brown in 1859 led to the calling of a mass meeting of the southern students then in Philadelphia, at which it was determined that they should return South. The large majority went to Richmond and entered the College there, the remainder going to New Orleans. Having saved some money from the fees received from his pupils in the quiz classes, he paid the traveling expenses to Richmond of all students who were unable to pay it themselves. The number of these southern students was some three hundred. Dr. McGuire, who led the move, completed the course of lectures in Richmond and received a second degree. He then went to New Orleans and there established a quiz class, but the secession of South Carolina soon after convinced him that war was inevitable, and he returned home and offered his services to his state. When Virginia seceded he volunteered as a private soldier in Company F. Second Virginia Regiment, and marched to Harper's Ferry. Soon after he was commissioned surgeon in the Virginia forces, and in May, 1861, he was made medical director of the Army of the Shenandoah, then under the command of Stonewall Jackson. Later, when Jackson organized the First Virginia Brigade, he requested that Dr. McGuire might be assigned him as brigade-surgeon. Thereafter he served as chief surgeon of Gen. Jackson's command until the death of his beloved commander with whom he was on most intimate terms. He was then attached as surgeon to the Second Army Corps under the

command of Gen. Ewell, and later became medical director of the Army of Northern Virginia under Lieut.-Gen. Ewell. Still later on, he was made a director of the Army of the Valley of Virginia, under Gen. Jubal Early, and so continued until the surrender of Gen. Lee. To him, belongs the credit of organizing the Reserve Corps Hospital of the Confederacy, and of perfecting the Ambulance Corps. After the close of the war he was elected to the chair of surgery in the Medical College of Virginia, which had been made vacant by the death of Dr. Charles Bell Gibson (q. v.). He continued to fill the chair until 1878, when, on account of some disagreements, he resigned. In 1880, however, he was made professor emeritus. In 1893 he headed a movement to establish in Richmond a medical school having a three years' graded course, there being no such college in that section of the South. The school was incorporated and established under the name of the College of Physicians and Surgeons, but its name was changed two or three years later to University College of Medicine. In connection with the school the Virginia Hospital was established, and Dr. McGuire was made president of both institutions. He was also clinical professor of surgery. He was president of each of the local societies organized in Richmond during his residence there, and was one of the founders of the Medical Society of Virginia, serving for many years as chairman of the Executive Committee, until elected president in 1880-81. He was president in 1875 of the Association of Medical Officers of the Army and Navy of the Confederate States, president of the American Surgical Association in 1886, of the Southern Surgical and Gynecological Association in 1889, associate fellow of the College of Physicians of Philadelphia, and president of the American Medical Association in 1893. In 1887 the University of North Carolina conferred upon him the title of LL. D., and the same honor came from Jefferson Medical College.

He married, in 1866, Miss Mary Stuart, of Staunton, Virginia, and had nine children. Two of his sons became physicians, Dr. Stuart McGuire, of Richmond, who inherited his father's skill as a surgeon, and Dr. Hugh McGuire, a physician, of Alexandria, Virginia.

Some six months before his death he suffered a stroke of acute bulbar paralysis, and while, for a time, his general condition improved, he never regained the power of articulation. After many weeks of improvements and set-backs, he rapidly grew worse during the week preceding his death, which occurred suddenly on September 19, 1900, at his home near Richmond.

His contributions to medical literature consist chiefly of journal articles and papers and discussions in society meetings. He wrote the article on "Intestinal Obstruction" in Pepper's "System of Medicine," and that on "Gunshot Wounds" in Holmes' "System of Surgery." Most of his articles appeared in the pages of the "Virginia Medical Monthly."

ROBERT M. SLAUGHTER.

McHENRY, James (1753-1816), Baltimore surgeon of the Revolution was the son of Daniel and Agnes McHenry and was born in Ballymena, Antrim, Ireland, November 16, 1753. He persuaded his father to emigrate to America and the family settled in Baltimore, James studying medicine in Philadelphia under Benjamin Rush (q. v.). Then came his military life. In 1776 he was surgeon of the fifth Pennsylvania battalion; then recommended by congress as hospital surgeon. He was captured by the British at Fort Washington but was exchanged in 1778 and appointed surgeon of the Flying Hospital. Later on, an assignment as secretary to Gen. Washington ended his active medical career, and in 1780 he became nominal aide, but really mentor to the Marquis de Lafayette. He was in the Maryland Senate 1781-86, and was appointed to Congress, holding the position from 1783 to 1786. In the constitutional convention he helped secure the ratification of the constitution against powerful opposition. His last appointment was the secretaryship of war in Washington's cabinet and afterwards in that of Adams. To him the army owes many radical and enduring reforms, and Fort McHenry, near Baltimore, is named in his honor. It was off here that Francis Scott Key, while prisoner on a British man o'war, wrote "The Star Spangled Banner."

After a long and crowded period of work McHenry went to live in his house near Baltimore and died there on May 3, 1816.

JAMES EVELYN PILCHER.

McINNES, Thomas R. (1840-1904), medical superintendent of the insane asylum and Lieutenant-Governor of British Columbia, was the son of John McInnes, a native of Inverness, Scotland. He was born at Lake Ainslie, Nova Scotia, November 5, 1840, and was educated at the Provincial Normal School in the same province. He studied medicine at

Harvard University and at Rush Medical College, Chicago, graduating M. D. at the latter, in 1869. In the same year he was admitted a member of the College of Physicians and Surgeons of Ontario. He practiced for some years at Dresden, Ont., but removed to New Westminster, British Columbia, where he at once entered into a large and lucrative practice. Appointed medical superintendent of the insane asylum January 1, 1879, he remained in office up to 1883, when he resigned. He was also for five years physician and surgeon to the Royal Columbia Hospital, and sat for New Westminster in the House of Commons from 1878 to 1881, when he was called to the Senate by the Governor-General, the Marquis of Lorne. In November, 1897, he was appointed Lieutenant-Governor of British Columbia. As a public man he favored the establishment of a Dominion mint; the political disenfranchisement of the civil service; and compulsory voting. He was the first member of either the Senate or the Commons to advocate on the public platform unrestricted reciprocity with the United States.

His death occurred at Victoria, British Columbia, March 15, 1904.

MACKALL, Louis (1802-1876), of Maryland, the first of three generations of physicians bearing the same name, a practitioner with a philosophical turn of mind, was born at Mackall Square, Georgetown Heights, District of Columbia, January 7, 1802, the son of Benjamin Mackall and Christiana Beall. He was educated at Georgetown in the school of Dr. Carnahan, afterwards president of Princeton, and took an M. D. at the University of Maryland in 1824. He practiced in Prince George's County, Maryland, then retired and moved to Georgetown in 1840. He devoted himself to the study of sciences and wrote "Notes on Carpenter's Human Physiology . . . " (127 pages), essays on "Life in Nature," "Law of Muscular Action," and criticisms on Tyndall and Darwin. In 1828 Dr. Mackall married Sarah Somervell, daughter of Captain John Grahame Mackall, an officer in the War of 1812. She died in 1831, leaving one child, Louis. In 1851, Dr. Mackall married Mary Bruce. He died July 3, 1876, of dysentery.

His son, Louis Mackall, 2d, was born in Prince George's County, April 10, 1831, received an early education at William R. Abbott's Classical Seminary, Georgetown, studied medicine with his father, and was graduated M. D. from the University of Maryland in 1851. He practiced in Georgetown, where he was a member of the Board of Health; he was president of the Medical Society of the District of Columbia, and was professor of clinical medicine and afterwards professor of physiology at Georgetown University. He was author of "Treatment of Diphtheria with the Permanganate of Potash," and "Treatment of Epilepsy with Choral Hydrate."

In 1851 Louis Mackall 2d married Margaret Whann McVean; they had nine children. An attack of gastritis was the cause of his death April 18, 1906.

A son, Louis Mackall, 3d, was a physician of Washington, D. C.

McKAY, William Morrison (1836-1917), of Edmonton, New Brunswick, has been described as the doyen of the medical profession of the west. He was one of the first practitioners to go out to the Mackenzie district in the days when the only settlements of white people were the trading posts of the Hudson's Bay Company. Born in Stirling, Scotland, in 1836 he was educated at Edinburgh and intended to become an engineer. An accident occurred, however, by which he lost the sight of an eye, and during the time spent in the infirmary as a result of this, he determined to take up the profession of medicine. In 1858 he received the degree of M. D. from the University of Edinburgh. After practicing for a few years, Dr. McKay joined the Hudson Bay service and on June 13, 1865, sailed from London for Canada. He landed at York Factory, which at that time was inhabited by about sixty white people, and there he spent three years serving as doctor to the post. In the summer of 1868 he went to Fort Simpson in the Mackenzie district and from that centre he made many long excursions—in winter usually by dog sleigh—to minister to the Indians during the frequent outbreaks of infectious diseases. The succeeding years were spent at various trading posts, first as doctor, then as doctor and trader, until in 1882 he was placed in charge of Fort Dunvegan, where he stayed for seven years. In 1889 he went to Fort Chipweyan and, ten years later, to Edmonton, where he lived in retirement for nearly twenty years. He died February 25, 1917.

McKECHNIE, John (1703?-1782), pioneer and log-cabin physician of Maine left behind him a diary containing a good deal of information, medical and biographical, well worth rescuing for a while from the oblivion

of more than a century. Dr. John McKechnie was born in Scotland about 1730, studied medicine either at Aberdeen or Edinburgh, obtained a license or a degree in 1752, and practiced in his native land for three years. Accomplishing but little in that time he decided to come to America, the land of promise. Embarking on the brig "Crawford Bridge," Curry, captain, he, with sixteen others, left Greenock, Scotland, at 4 P. M. July 26, 1755, and landed all well ón board at the end of Long Wharf in Boston, September 12, of the same year, at 7 P. M., as his diary exactly informs us. It is not known how long he practiced medically in the neighborhood of Boston, but it is a fact that wearying of the attempt to make a living as physician or teacher, he became an official of the Plymouth Land Company with the rank of Lieutenant and the position of a land surveyor. With this Association he remained four years. We find further traces of his engagement with the Kennebec (Maine) Company in 1760 and later and during this period he surveyed large tracts of land on the Kennebec and Penobscot Rivers. His work was so accurate that it has to this day remained the standard, and farms still pass from owner to owner under the so-called "McKechnie" surveys. While thus occupied he went occasionally on business to Boston, both for the Company as well as for his private affairs, and in one old receipt we find him signing as Lieut. McKechnie. The earliest document styling him "Doctor" McKechnie is dated at Pownalborough in 1764, and concerns the sum of twelve shillings received for services and medicine to a patient. Some time in the year 1760 he was teaching at Pemaquid, Maine, where he met Mary North, the daughter of Capt. North, the commander of the Fort, and married her. Her father officiated at the wedding, although he is said not to have favored the match, either because Dr. McKechnie was too old, or had no settled profession. For the next six years the happy couple moved from place to place as the husband's duties as surveyor, teacher or physician called him. We find him treating a patient for small-pox at Swan's Island in 1764. He followed the usual routine of "blooding" patients, as his old diary shows, and, like other physicians of that time, supplied them with large quantities of drugs. He settled permanently at Bowdoinham, not far from Brunswick, the seat of Bowdoin College, in 1764, and, according to all accounts, remained practicing there until 1771 when he moved to Winslow, near Fort Halifax, on the east side of the Kennebec River, opposite what is now called Waterville, Maine. At Winslow then, he built his cabin and partitioned off a room for a dispensary of the drugs which were so extensively dealt out to sick people in that era. His practice increased with considerable rapidity, and in four years he built a still larger home, on the other side of the local stream, the Cobossecontee. Having also put a good deal of his earnings into growing timber, he enlarged the capacity of his saw mill. When Benedict Arnold set out on his illfated expedition to Quebec, in 1775, his march carried him through Winslow, and some of his soldiers requiring medical care were left in charge of Dr. McKechnie. Among others mentioned in an old diary we find the following cases attended by Dr. McKechnie: Mortification of the hand, contusion of the shin, toe cut with an axe while hewing a road through the primeval forests, jaundice, camp fever, strangury, deafness resulting from a cold in the head, and finally a bad injury to the hand from the bursting of a musket.

After having been a prominent man in Winslow before the Revolution, he was held in suspicion as a loyalist during that stormy period. Although a man of means (one person showed him, for instance, a thousand dollars on a note) he was not one of the seven citizens asked to buy ammunition for soldiers enlisting from the settlement in the Revolutionary War. He is said to have had no sympathy with the "Rebels," as he called them, and the Sons of Liberty kept him under constant surveillance. Once upon a time they called upon the good doctor to ask just what certain words of his were meant to imply. But taking down his sword which he had worn during his Lieutenancy his only answer was, "Gentlemen, if at any time I have said anything that you did not understand, I am sorry for it."

He was a faithful physician, travelled long distances for his few patients, grew aged before his time and was worn out in looking after the interests of his practice, his business, and his large family of thirteen children. None of these, however, appear to have taken up their father's practice. The cause of his death, April 14, 1782, is unknown, but he is said to have died suddenly. He was a deeply religious man, as these few titles of books from his library prove: "The Unbloody Sacrifice," "Justification" and "The Four Fold State." Oddly enough, his widow, surviving him, married again, a curious man, who was

willing that his wife should be buried beside her first husband, but as for himself he would never consent to be buried in that lot of ground, because a man whom he had hated all of his life was already buried there.

JAMES A. SPALDING.

McKEEN, James (1797-1783), professor of obstetrics and of the theory and practice of medicine in the Medical School of Maine, was the son of Joseph McKeen, first president of Bowdoin. Born in Beverly, Massachusetts, November 27, 1797, he was graduated at Bowdoin in 1817 and while a student was noted for his scientific zeal and attainments. He read much about Napoleon and followed him in his marches by pins stuck into the map of Europe. He was fond of astronomy. One night the college president observed a lantern shining on the steps of one of the dormitories. Suspecting some silly trick on the part of the students he crept up to ascertain what was going on, and found young McKeen studying the heavens with a sidereal map; the lantern was to show him the positions of the constellations on the map after he had gazed at them in the skies above. After graduating from Bowdoin, he studied with Dr. Matthias Spalding of Amherst, New Hampshire, a man very active in vaccination and more than once president of the New Hampshire Medical Society. Later, he studied with Dr. John Ware (q. v.) of Boston, and graduated at the Harvard Medical School in 1820. He then established himself at Topsham, Maine, a small town near Brunswick, the seat of Bowdoin College, and practiced there with great success for more than fifty years. In 1825 he was chosen professor of obstetrics in the Medical School of Maine, a position occupied honorably to himself and beneficially to his scholars for fourteen years, and also he was professor of the theory and practice of medicine in the same school. He was one of the founders and incorporators of the Maine Medical Society. He wrote several papers; one in 1829 was an essay "On the Influence of the Imagination upon the Fetus in Utero." Later on, this Society dying out, the Maine Medical Association was established, largely upon his initiative, and of that he was long secretary and the second president. During a yellow-fever epidemic in New York (July, 1832), he was so much interested in satisfying his medical curiosity regarding the symptoms and studying the best treatment so as to be ready if it should break out in Maine, that he left Topsham without telling anybody where he was bound, and braved the terrors of a stage-coach journey and all the risks of contagion in New York. No one in our times can have any idea of the terror in those days of epidemics. Public travel was paralyzed for fear of spreading the disease. One very delightful episode of this long journey, so valuable medically to McKeen, was that while waiting in New Haven for the coach for New York he was accosted by a handsome stranger who asked if he were not a physician and, having come through Boston, could he give him any idea of the chances of cholera there. McKeen told him the situation, and one thing leading to another they talked until four o'clock in the morning when the coach was ready. Finally he regretfully shook hands with Daniel Webster, then on his way home from Washington.

Setting out for Europe in 1837 Dr. McKeen was obliged, owing to the unsettled state of financial credit, to take with him eleven hundred dollars in silver coin for his expenses. Arriving in Dublin he took lodgings which he soon found to be disreputable. He accordingly transferred his silver dollars, bag by bag of a hundred each, to a respectable place, but darkness coming on during his last trip with a single bag he was waylaid by two footpads. He shook off both assailants, but one of them had captured his umbrella. Not intending to lose even that, he chased the rascal and hitting him on the back with the remaining bag of hard cash knocked him end over end. Policemen then came on the scene, and Dr. McKeen was charged with having committed an assault, but fortunately for him he received a quick discharge when the character of the assaulted man was verified by the police.

Fifty years after graduating from Bowdoin College, he collected the few remaining members of his class at Topsham, and there rekindled within them the youthful enthusiasm of half a century before. He had a deservedly successful career in medicine, and died without long illness on the day after his seventy-sixth birthday at Topsham, Maine, November 28, 1873.

JAMES A. SPALDING.

MACKIESON, John (1795-1885), was the first superintendent to take charge of the original lunatic asylum of Prince Edward Island. He was born October 16, 1795, in Stirlingshire, Scotland, and was educated at the University of Glasgow, receiving his diploma as M. D., November 15, 1815. He was a fine

classical scholar, and also spoke French and German fluently. After practicing his profession, first in Stirling and then in Liverpool, he resolved to come to Canada, and sailed for Prince Edward Island in the brig "Relief," arriving at Charlottetown, November 15, 1816. Here he soon acquired an extensive practice, and in 1840 was appointed health officer of the city. Elected superintendent of the new lunatic asylum in 1846, he continued in office until 1873, when he retired after nearly 28 years' service.

Dr. Mackieson always took a great interest in military affairs, being appointed assistant surgeon of the tenth battalion in 1817, and subsequently (1822) its surgeon by Lieutenant-Governor Charles Douglas Smith; while by order of the Militia General Headquarters, he, in 1848, became surgeon-general of the militia forces of the province. After his retirement from the asylum, he continued in private practice in Charlottetown until his death in the latter part of the year 1885.

McKINLEY, John (1721-1796), first governor of Delaware, was born in the north of Ireland, February 24, 1721. Nothing is known of his parentage and family aside from the knowledge implied by his having been educated and able to begin at once the practice of medicine when he came to this country. He was a charter member of the first Delaware Medical Society, which was the third medical society in the United States. In 1757 he was appointed sheriff of New Castle County under the Colonial Government. He held this office for three years and in 1759 was chosen chief burgess of the small borough of Wilmington. Continuous re-election by his fellow townsmen kept him in this office for fifteen years. In 1777 he became the first governor of Delaware, or "President" of the State, as the title then was. Dr. McKinley was prompt to take a stand against British oppression, and, like others of his race, became an ardent, outspoken patriot. He was of fearless and decided character, and greatly popular with those who opposed taxation without representation. In September, 1777, just after the Battle of the Brandywine, a detachment of British soldiers appeared in Wilmington, and after looting the governor's house, took him prisoner as a valuable prize. After one year in close captivity he returned once more to his home on the northwest corner of Third and French streets and resumed his practice and other duties. The public library at New York contains a sworn statement by Dr. McKinley, as to damage done his property by British soldiers, but it is doubtful if the infant Republic made good his loss.

In the First Presbyterian Church, of which he was a trustee, and now used as the building of the Delaware Historical Society, is a large lantern. It is of iron with glass panels, and bears the following inscription:

"The lantern of Dr. John McKinley, of Wilmington, Delaware." "This lantern lighted the path of that devoted able physician during his nightly visits to the sick and afflicted, borne by his devoted African servant, 'Fortin' when street lamps were unknown. "There are a few persons still living in Wilmington who bear kindly recollections of master and man."

He left no children: his wife's name was Jane Richardson and they were married about the year 1764.

Dr. McKinley died at the age of seventy-five years on the thirty-first of August, 1796, in Wilmington.

ALBERT ROBIN.

MacLaren, Laurence (1817-1892), pioneer physician of St. John, New Brunswick. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 747-748.

McLAUGHLIN, James Wharton (1840-1909), of Austin, Texas, is best known for his indefatigable labors in the search for truth in the chemical and biological laboratories, his investigations into the causes of immunity and infection, and especially his discovery of the bacillus of dengue, the results of which were published in the medical journals of America and Europe. Briefly summed up, his record is that he was born on September 7, 1840, and came south just prior to the Civil War, enlisting as a private soldier in Company D, First Kentucky Infantry (C. S. A.). He served through the entire war with Johnson, Jackson, Morgan and Forrest, then settled in La Grange, Texas, studied medicine, and graduated at Tulane University, New Orleans, in 1867. He met and married in September, 1867, Tabitha Bird Moore, of Fayette County, and returning to La Grange practiced medicine until 1869, then removed to Austin, Texas, and died there on November 13, 1909, survived by his wife, three sons, Dr. Bird McLaughlin, of New York; Dr. Cyrus McLaughlin, of California, and Dr. James W. McLaughlin, Jr., of Austin, and three daugh-

ters, Evelyn, Minnie and Frances. He practiced for forty years in Austin save for an interval of eight years when he occupied the chair of practice in the University of Galveston. In 1894 he was president of the Texas State Medical Association and a university regent. His interest in his work was very keen even to the end. The Mayos of Rochester had extirpated his entire cervical and maxillary glandular system in the desperate hope of arresting the dread cancer, which, beginning on the lip, spread downwards. His paper—his favorite theme—"Theory of Immunity by Wave Interference and Catalysis"—as opposed to that of Ehrlich—had only recently appeared in the "New York Medical Record," and a week before he died he discussed his presidential address for the Texas Academy of Science on the subject of Ehrlich's "Side Chain Theory of Immunity," which Dr. Hilgartner was to read for him. Some of his other papers were: "Researches into the Etiology of Dengue," 1886; "An Explanation of the Phenomena of Immunity and Contagion Based on the Action of Physical and Biological Laws," 1890; "Fermentation, Infection and Immunity," 1892, and "The Bacteriology of Dengue," 1896.

DAVINA WATERSON.

MACLEAN, John (1771-1814). After the year 1796, when the faculty of Princeton College, then the college of New Jersey, consisted of the president, one professor and two or three tutors, John Maclean, recently arrived from a European training, was the one professor. He taught chemistry for seventeen years to the students of the college and to students of medicine in the surrounding country; during a part of that time he was in addition professor of mathematics, natural philosophy and natural history. He was born in Glasgow, Scotland, March 1, 1771. His father, for whom he was named, was a surgeon both in civil and military service, and was present at the capture of Quebec, when he was the third man who succeeded in scaling the Heights of Abraham. Before going to Canada he married Agnes Lang of Glasgow and John was their youngest child. On his return the father practiced surgery in Glasgow until his death. Deprived of his parents while yet young, the son was educated at the Glasgow Grammar School and at the University of Glasgow, showing proficiency in Latin and chemistry, and being a member of the Chemical Society. He owed much to a Mr. Charles Macintosh, four years older than he, who stimulated and assisted him in the preparation of papers on chemical subjects before the college society. Determining to become a surgeon he attended lectures on anatomy, botany and midwifery and repaired to Edinburgh where he sat under Black in chemistry, going on to London and Paris for further medical study. In 1791 he received a diploma to practice surgery and pharmacy from the Faculty of Physicians and Surgeons of the City of Glasgow and was admitted a member of the faculty the same day, in the twenty-first year of his age. While a student in Paris he was fortunate in studying with Lavoisier, Berthollet and Fourcroy and his knowledge of the French language became almost as intimate as of English. It was here that he seemed to have imbibed views on the comparative merits of monarchical and republican forms of government that eventually led him to emigrate to the United States.

Maclean spent four years in his native city, practicing surgery and then he sailed for New York in April, 1795. Before leaving Scotland he had adopted and had engraved upon his watch seal, a simple Scotch pebble, the motto: "Ubi libertas, ibi patria." From New York he went to Philadelphia bearing letters of introduction and was advised by Benjamin Rush to settle in Princeton, and there he practiced with Dr. Ebenezer Stockton for two years. Having delivered a course of lectures on chemistry at the instance of the president of the college and having made a favorable impression, he was chosen professor of chemistry and upon the decease of Dr. Walter Minto, the professor of mathematics and natural philosophy, assumed his duties and began instruction in natural philosophy in November, 1796. From this time he gave himself wholly to the service of the college until his resignation in 1812, when he accepted the chair of natural philosophy and chemistry in William and Mary College at Williamsburg, Virginia. After a brief service there his health failed and he returned to Princeton to die February 17, 1814.

Dr. Maclean's duties as lecturer at Princeton absorbed most of his time so that he wrote but little. In 1796 Dr. Joseph Priestley, the discoverer of oxygen, at that time in America, published a pamphlet entitled: "Considerations on the Doctrine of Phlogiston and the Decomposition of Water." This Dr. Maclean reviewed in two supplementary lectures which were afterwards printed under the title, "Lectures on Combustion" and they

were followed by articles in the New York "Medical Repository" continuing a discussion participated in by Priestley, Woodhouse and Mitchell and espousing the views of Lavoisier. In 1808 he was associated with Dr. Benjamin Silliman (q. v.) of Yale, in editing the first American edition of Henry's Chemistry. From one of Dr. Maclean's letters to his friend, Dr. Cleghorn of Glasgow, we find this reference to the "metallic tractors" of Dr. Elisha Perkins (q. v.) of Connecticut, two pointed pieces of metal about three inches long not unlike horseshoe nails that had a great vogue and were supposed to relieve pain when rubbed over an affected part: "I have been told by a gentleman from Maryland that it is common in that country to rub the blade of a knife over a rheumatic joint. From the Philosophical transactions it seems that much good has resulted from rubbing with the hand, and every Scotchman has been relieved by scratching."

The Rev. Samuel Miller said of Dr. Maclean: "As a physician, a surgeon, a natural philosopher, a mathematician, and, above all, a chemist, Dr. Maclean was very eminent. As a college officer he was uncommonly popular and useful." He was a corresponding member of the Academy of Medicine of Philadelphia and a member of the American Philosophical Society.

In 1798 he married Phebe Bainbridge, eldest daghter of Dr. Absalom Bainbridge of New York, and sister of Commodore William Bainbridge, U. S. N. Their son, John, became president of Princeton College.

MACLEANE, Laughlan (1728?-1777), writer on inoculation, born about the year 1728, son of John Macleane, a gentleman of small fortune in the north of Ireland, was transferred, at the age of eighteen, from a school near Belfast, to Trinity College, Dublin. Here he became known to Burke and Goldsmith, and proceeding to Edinburgh to study physic, his name appears in the list of the Medical Society, January 4, 1754, a year after that of Goldsmith, by whom he was introduced. He afterwards visited America—whether at first as a private practitioner, or medical officer in the army does not appear; probably, as was then not unusual, officiating in both capacities. He became identified with American medical history through a work on inoculation, published in Philadelphia in 1756. The title-page reads: "An Essay on the Expediency of Inoculation, The Seasons most proper for it. Hunbly Inscribed to The Inhabitants of Philadelphia by Laughlan Macleane, M. D. . . . Philadelphia . . . Printed by William Bradford at the Corner-House of Market and Front street, 1756." While the author's name appears here as "Laughlan Macleane," the official list of the University of Edinburgh gives the name Lachlan Macleane, and the date of his graduation as 1755, with a thesis entitled "De Erysipelate." Macleane declares that "before the Practice of Inoculation was introduced Small-Pox was certainly the surest and largest Penny in the Doctor's Purse." "And now every Country Apothecary, nay even Nurses confidently esteem themselves very equal to the task, and taking persons of all ages affected with small-pox, naturally two in eleven die, while if inoculated, one in sixty dies."

In 1761, while surgeon in Otway's regiment, quartered at Philadelphia, a quarrel took place with the Governor, against whom Macleane, who was a man of superior talents, wrote a paper distinguished for ability and severity, which drew general attention. . . . Under the patronage of Colonel Barre, he returned to England, renewed his acquaintance with Burke, and procured an office under government. Soon afterwards he became successively private secretary to Lord Shelburne, and under-secretary for the Southern Department, retiring from office with his patron on the dissolution of the ministry drawn together by the Duke of Grafton. In May, 1771, Lord North gave him the situation of superintendent of lazarettos. In January following, he received the collectorship of Philadelphia; this was soon exchanged for an appointment in India, . . . he became a kind of agent to Mr. Hastings. In that capacity he brought home the Governor General's conditional resignation of office, yet the latter . . . took a speedy opportunity of disavowing both his agent and his act . . . In proceeding again to India, intending, it is said, to take strong measures for an explanation of behavior that seemed to throw censure upon his honesty or honor, the ship, in which he embarked, foundered, and all on board perished.

Graydon says in his memoirs: "Among the persons who were acquainted and visited at my grandfather's were Doctor Laughlin M'lean and his lady. . . . The doctor was considered to have great skill in his profession, as well as to be a man of wit and general information, but I have never known a person who had a more distressing impediment in his speech. Yet notwithstanding this

misfortune he, some years after, on his return to Europe, had the address to recommend himself to a seat in the British House of Commons. "He is understood to be the same Lauchlan Macleane who, at Edinburgh, evinced a generous benevolence in administering to the relief of the celebrated Oliver Goldsmith, as related in the life of that poet."

HOWARD A. KELLY.

MacLEOD, James (1845-1900), foremost in securing the passage of the medical law for the Canadian provinces, editor of the "Maritime Medical News," and president of the Maritime Medical Association, was born at Uig, Scotland, June 13, 1845, the third son of the Rev. Samuel MacLeod. He graduated M. D. from the McGill University Faculty of Medicine, Montreal, and at the time of his death was well known as a prominent surgeon in Charlottetown, Prince Edward Island, and for his work in connection with the two hospitals there. He married Margaret Alma Gates, and died in 1900.

McLOUGHLIN, John (1784-1857), known to Americans as the "Father of Oregon" and to the Indians as the "Great White Chief," was born October 19, 1784, in La Rivière du Loup, Canada, son of John Mcloughlin, an Irishman, and Angelique Fraser, a Scotch-Canadian, both Roman Catholics. There were seven children, John coming second. He was educated in Canada and Scotland and on his return to Canada joined the Northwest Company, in 1821 being put in charge of Fort William. There he married the widow of a fur trader, Alexander Mackay, and had four children, Eliza, John, Eloisa and David. He came overland to Fort George (Astoria) in 1824, then founded and remained in Fort Vancouver twenty-two years. The Indian population of Oregon numbered some 100,000; the state was half as large again as Germany and he had no one on whom to depend save the few subordinates of the company with him, yet, through his strong justice, no wars occurred during his rule and he firmly stopped the sale of liquor to Indians by excluding the sale of it even to the whites. When the American immigration set in (1843-5) Mcloughlin, though sternly observant of his loyalty to the Hudson Bay Company, aided in the usual immigrational distress with food, farming supplies and medical help, often doing all this at his own expense. He founded Oregon City and opened up the country; he averted a war between the United States and Great Britian; smoothed the way for missionaries and preserved his integrity when endowed with absolute power as chief factor of the Hudson Bay Company west of the Rocky Mountains, yet—the story is too long to give here—he said when near death "I might better have been shot forty years ago. I planted all I had here and the government has confiscated my estates." Worried by mendacity and ingratitude he died a brokenhearted man, at Oregon City, September 3, 1857, and was buried among the Roman Catholics, he having joined their church in middle life. (See biographies of Dr. John McLoughlin by Frederick V. Holman, 1907 and Marcus Whitman by Myron Eells, 1909.)

MacMONAGLE, Beverly (1855-1912), pioneer gynecologist of San Francisco, was born October 17, 1855, in Sussex, New Brunswick, Canada, the son of Hugh MacMonagle. He was educated at Harvard University, graduating from the Harvard Medical School in 1876, at the age of twenty-one. For two years he served as interne in the Massachusetts General Hospital, in Boston, then returned to his home in St. John, where he engaged in the practice of his profession until 1880, when he went to California, as assistant to Dr. Scott, at the California Woman's Hospital. MacMonagle lived and practiced in California for thirty-three years, until his death and was prominently identified with the medical life of that state. He was one of the first in San Francisco to practice gynecology as a specialty and ranked with the foremost gynecologists of his time. He was surgeon-in-chief to the Woman's Hospital of California, surgeon and gynecologist to the Hospital for Children and Women, San Francisco; consulting surgeon to the German Hospital, San Francisco; member of the San Francisco County Medical Society; California State Medical Society; California Academy of Medicine and a member of the Faculty of the University of California until 1909. He was also a member of the American Gynecological Society, the American Medical Association, and an honorary member of the Massachusetts Medical Society.

In 1890 MacMonagle married Minnie Corbitt, of San Francisco. Of the three children born to them, two died in childhood, a son, Douglas, surviving.

Dr. MacMonagle died in Paris, France, May 22, 1912.

McMURTRIE, Henry (1793-1865), of Louisville, Kentucky, and Philadelphia, Pennsylvania, physician, naturalist, and educator, was born in Philadelphia, in 1793. He was educated at William and Mary College in Virginia and graduated from the medical department of the University of Pennsylvania in 1814, his thesis being on "Eupatorium Ayapana." During the War of 1812, he served as surgeon on the "Penrose" and was captured with his vessel and held a prisoner for two years. Upon his release, he returned to America, married, and settled in Louisville, Kentucky, in 1816.

Through his strong appeals in the daily papers, he assisted in the establishment of the Louisville City Marine Hospital in 1817, and his "Sketches of Louisville and its Environs", published in 1819, was the first history of the city. This work contains geological data, a Florula Louisvillensis, which catalogues four hundred genera and six hundred species and descriptions of the people and their industries, —a valuable picture of Louisville of that day. In speaking of diseases there, he discusses bilious remitting fever and predicts the appearance of yellow fever "unless greater attention be paid to cleanliness in every way," attributing it to marsh miasms and decayed vegetable matter, and also urges the danger of "seasoning" against endemic fevers. He compares the people to a pile of combustibles needing but "the application of a single spark to rouse them into flame." While confined to his home in Louisville by malarial fever, he made the first English translation of Cuvier's "Animal Kingdom". His scholarly accomplishments and scientific attainments made him a favorite in Louisville society and won for him a splendid practice. As the climate of Louisville did not agree with him, Dr. McMurtrie returned to Philadelphia. The popularity of his translation of Cuvier's work brought many requests for scientific lectures. He was the author of other scientific works, including the "Lexicon Scientiarum" (1847), a dictionary of terms used in various branches of the natural sciences; "Women's Medical Companion and Nursery Adviser" (1871); and "Domestic Medicine" (1871).

In January, 1839, he was appointed professor of anatomy, physiology, and natural history in the Central High School of Philadelphia, a chair he held for twenty two years until retirement from active life. Though learned in science, he never felt it derogatory to descend to the level of its application in every day life. The transparencies used in his lectures were painted for him by his artist son, William. In 1861, his collections were purchased by the school to form the nucleus of the scientific museum in biology. His herbarium also proved valuable to the students in botany.

Professor McMurtrie was rotund of form and abounding in energy; his manner was bluff and hearty, sometimes violent and dogmatic, and even stern for discipline's sake. He was ever concerned for the welfare and advancement of his pupils. In 1861, he resigned his chair in the High School on account of age, to be succeeded by Henry Hartshorne (q. v.) and on May 26, 1865, Dr. McMurtrie —the inspirer of many generations of students to make science their life work, died.

A son, George Saltor McMurtrie, born in Philadelphia, January 3, 1826, was a graduate of the Central High School, in 1860 received his M. D. from the Pennsylvania Medical College, and began practice in Philadelphia where he was connected with the Maternity Hospital for several years and associated with Ellwood Wilson (q. v.) and Albert E. Smith (q. v.). In 1866, because of tuberculosis, he moved to Central City, Colorado, where he practiced for twenty years and was the United States Examining Surgeon for Pensions from 1871 to 1883. He was a founder of the Colorado State Medical Society and one of its early presidents. In 1885, he retired and moved to Denver, hoping to regain his health, but he grew worse steadily and died in a hospital in New York City, August, 1887, soon after an operation for the removal of stone in the bladder.

McMURTRY, Lewis Samuel (1850-1924), of Louisville, Kentucky, pioneer gynecologist of the Southwest, was born in Harrodsburg, Kentucky, September 14, 1850, the son of Lewis R. and Amanda Reid McMurtry. He received his A. B. from Centre College, Danville, Kentucky, in 1870, and was graduated in medicine from Tulane University, New Orleans, in 1873. The former college gave him an A. M. in 1875, and the latter, the LL. D. in 1909. For one year, he was chief of clinic at the New Orleans Charity Hospital, then began practice in Danville; in 1876 he moved to Louisville. After studying in New York in 1881 he accepted the chair of anatomy in the Kentucky School of Medicine in Louisville, which he kept for a year. A portion of 1883 was spent in Philadelphia where he began the study of gynecology and pelvic surgery, and

in 1889 he went to Europe to study. Although engaged in general practice, following the usual custom of men who had a strong surgical bent he performed many of the major operations, such as ligature of the subclavian artery for aneurysm, excision of joints, and others. Owing to his skill and his agreeable manners, his services were soon in demand all over the state. In 1883, he did his first ovariotomy and this resulted in a practice devoted exclusively to gynecology and abdominal surgery. Operations then were often done at the homes of patients without skilled assistants or trained nurses. For many years he was professor of gynecology and abdominal surgery and president of the faculty in the Medical Department of the University of Louisville. He was also professor of gynecology in the Hospital College of Medicine (Medical Department of the Central University of Kentucky) in Louisville, and surgeon to the Louisville City Hospital, surgeon-in-charge of the Jennie Casseday Free Infirmary for Women, and gynecologist to St. Mary's and St. Elizabeth's Hospitals. Because of his great interest in the work of Ephraim McDowell, (q. v.) he was instrumental in having erected the monument to the "Father of Ovariotomy" in Danville in 1879.

In a real sense, McMurtry was a pioneer in the Southwest in gynecology and abdominal surgery. He was president of the Kentucky State Medical Society in 1880-81; of the Southern Surgical and Gynecological Association, at the meetings of which he was a well known figure, in 1890; of the American Association of Obstetricians and Gynecologists in 1893, and of the American Medical Association in 1905-06. He was also one of the founders of the International Periodical Congress of Gynecology and Obstetrics and represented the American Medical Association at the Sixteenth International Medical Congress, Budapest, Hungary, 1919.

Dr. McMurtry was a frequent contributor of brief articles to the literature of obstetrics, gynecology, and surgery. He wrote several chapters for "Reed's Textbook of Gynecology" and the chapter on surgery of the uterus in the "International Textbook of Surgery." His lecture on the life of Pasteur, at the invitation of the French government, before the College of Physicians at Philadelphia, was subsequently issued as an official French publication.

On September 16, 1879, he married Mary E. Ball of Covington, Kentucky, who died a year later. He was survived by a daughter and loving companion, Mary Louise, who always called him Lewis.

Latterly, he aged rapidly, though all the old geniality remained. He died from pneumonia at his home, February 1, 1924. McMurtry was a man of strong social instincts, keenly appreciative of the amenities of his wide friendships. He was vivacious in conversation, an excellent raconteur, and an active partisan in all that interested him as well as a sturdy opponent. There was much in him that savoured of the aroma of the old South in its best chivalric days.

HOWARD A. KELLY.

MacNAUGHTON, James (1796-1874), was one of the founders of the City Hospital, Albany, New York, and surgeon-general of that state. He came over to the United States in 1817, lived here some fifty-seven years and became known as a leading surgeon. He was born on December 10, 1796, at Kenmore, Scotland, and entered Edinburgh University when sixteen. Graduating M. D., four years later he took a ship's surgeoncy and landed at Quebec, afterwards settling in Albany and remaining there the rest of his life, marrying the daughter of a Mr. Nicholas McIntyre who had befriended him on arrival.

When he was appointed professor of anatomy and physiology in the College of Physicians and Surgeons of the Western District of New York the number of students increased from 100 to over 230 and the same success attended him when called to the chair of the theory and practice of medicine in Albany College. During the epidemic of Asiatic cholera in Albany, 1832, he was unwearied in his efforts to check the disease and provide hospitals.

He died in Paris of heart disease, while away on a holiday on the eleventh of June, 1874.

MACNEVEN, William James (1763-1841), his name being sometimes written Macnevin, a pioneer professor in the College of Physicians and Surgeons, New York, litterateur in medicine, was born at Ballynahowne, County Galway, Ireland, March 21, 1763. A descendant of a race of country gentlemen living on their own estate, which was transmitted by the law of primogeniture from eldest son to eldest son, he was the oldest of four sons, and when ten years of age was sent for by his uncle, Baron (and Doctor) Macneven, court physician to Maria Theresa, Empress of Austria. The boy was educated partly in Prague

and partly in Vienna and received a medical diploma at the University of Vienna in 1785. Then he established himself in active practice in the city of Dublin. Endowed with a genial personality, wonderful gift of speech and ability in organizing men, he pushed to the fore in the troublous times in Ireland, that culminated in the Order of United Irishmen in 1791. His arrest in 1798 for sedition, his imprisonment in Kilmainham prison and his removal to Fort George, Inverness, Scotland, when Rufus King, United States Ambassador at London, refused to give him permission to settle in the United States, were the chief events in his life at the end of the Eighteenth century. Dr. Macneven was released from imprisonment in 1802, traveled through Switzerland, visited his relations in Vienna and finally arrived in France, where he joined the Irish Brigade, organized from Irish fugitives in France, with the intention of invading Ireland. This scheme failing, he sailed for America and arrived in New York on the afternoon of July 4, 1804, in the midst of the celebrations in commemoration of the Declaration of Independence. He was received by his friends with open arms, acknowledged his intention of becoming a citizen, and began practice at once, and obtained an honorary degree of M. D. from Columbia College in 1806.

Beginning with the opening session of the College of Physicians and Surgeons in 1807, Dr. Macneven delivered a winter course of clinical lectures at the New York Hospital, where he was a physician on the staff. In 1808 he was appointed professor of obstetrics. The school was reorganized in 1810, Dr. Samuel Bard (q. v.) was chosen President, Dr. Macneven was elected professor of chemistry and during the absence of Dr. J. W. Francis (q. v.) in Europe, the chair of materia medicine was added to his duties. This arrangement continued until 1820, when Dr. Samuel Latham Mitchell (q. v.), became lecturer on materia medica and on natural history.

Dr. Macneven was an excellent linguist, capable of conversing in Irish, German, French, and English of course, and in command of a ready pen, so that as a litterateur in medicine, he stood on a high level. Leaving aside mere mention of his innumerable political tracts, printed in Ireland, chief emphasis should be laid on his "Rambles through Switzerland" and his translations from the German, on Mining Engineering, whilst his "Exposition of the Atomic Theory," 1820, was received with much favor and his "American edition of Brande's Chemistry," met with a ready sale. He did good service, also in editing, with Dr. Benjamin De Witt, The "New York Medical and Philosophical Journal" and in contributing to its pages many transitory, yet readable medical essays. Taken all in all, Dr. William James Macneven was a light of no ordinary luster in the annals of American medical history, whilst the inclusion of his career in the English Dictionary of National Biography proves the high opinion in which he was held in Great Britain's national history.

In 1810 he married Mrs. Jane Margaret Tom, daughter of the magnate Samuel Riker of Newton, Long Island. By this marriage he had several children, most of whom, however, died early of tuberculosis. In March, 1838, he suffered from a serious illness which finally terminated in a severe fit of gout. His professional business now became irksome and he retired from practice. In November, 1840, he received a painful injury of the leg, which, with the shock from a fall, occasioned a long and wearing illness. From this time on his strength gradually failed and July 12, 1841, he died.

McPHEETERS, William Marcellus (1815-1905), professor of medicine and sanitarian of St. Louis, the son of Rev. William McPheeters, was born December 3, 1815, in Raleigh, North Carolina, and died March 15, 1905, in St. Louis. After finishing at the University of North Carolina, he studied medicine under Hugh L. Hodge (q. v.) of Philadelphia and was graduated from the University of Pennsylvania in 1840. He spent one year as resident physician at the Philadelphia Hospital and then settled in St. Louis. In 1843, he took the chair of clinical medicine and pathological anatomy in the St. Louis Medical College and in 1844-61 that of materia medica, therapeutics, and clinical medicine. With Charles A. Pope, (q. v.) S. G. Moses, J. B. Johnson, George Johnson, and J. I. Clark, he established the first public dispensary west of the Mississippi about 1844. From 1856 to 1861, he was surgeon to the United States Marine Hospital in St. Louis. At the outbreak of the Civil War, he abandoned his educational work and a large practice to cast his fortune in with the Confederacy; for three years, he served in the army as chief surgeon to Major-general Thomas I. Churchell's division and medical director on Major-general Sterling Price's staff. He was

professor of materia medica and therapeutics at the Missouri Medical College until, in 1874, he took over the medical directorship of the St. Louis Mutual Life Insurance Company. During 1876-77, he was a member of the St. Louis Board of Health.

He was president of the Medical Association of the State of Missouri in 1852 and of the St. Louis Medical Society in 1856, and vice-president of the American Medical Association in 1873. He edited the "St. Louis Medical and Surgical Journal" from 1843 to 1861. The most important work he has left is a "History of Cholera in St. Louis in 1849" (St. Louis Med. and Surg. Journ., VIII, 1850) which is a concise summary of facts. Starting in December, 1848, in New Orleans, the epidemic, in the absence of quarantine restrictions, was early carried up the river by numerous steamboats plying between the two ports. A series of tables depicts the progress of the epidemic and the depopulation of the city from about 70,000 in the beginning to 50,000 at the end of the epidemic. A notable feature was "the almost reckless apathy on the part of our authorities" in maintaining a vigorous Health Police force and in dealing with the filthy conditions of the city. These matters had finally to be dealt with by "an irresponsible Committee of Health composed of private citizens." The cause of the disease was "a peculiar, unknown atmospheric poison." Large quantities of alcoholic liquors were drunk by all classes in a foolish belief in its prophylactic powers with a corresponding increase in deaths from "mania a potu." Dr. George Engelmann (q. v.) cooperated with McPheeters in furnishing accurate statements of the weather during the cholera reign, since it was his custom to keep regular accounts of the barometric and thermometric changes including rainfall.

Dr. McPheeters was married twice: to Martha Selden of Virginia in 1845 and to Sallie Buchanan of St. Louis in 1849 by whom he had six children.

McRAE, Floyd Wilcox (1861-1921), surgeon, of Atlanta, Georgia, was born December 6, 1861, in Telfair County, in that state, the son of Murdock M. and Elizabeth Willcox McRae. In 1885, he was graduated with honors from the Atlanta Medical College, Atlanta, Georgia, and took post-graduate courses in the New York Polyclinic and New York Post Graduate Medical School and Hospital from 1887 to 1890, supplemented later by study elsewhere in this country and abroad. He settled in Atlanta as a physician and surgeon, specializing during his latter years in gynecology and abdominal surgery. His name as an expert in appendicitis arose from the fact that his first forty nine cases recovered. He originated a method for continuous drainage of the bladder, following urethrotomy. After graduation he was demonstrator of anatomy in his alma mater and later professor of surgery; he was also professor of physiology in the Southern Dental College. McRae was the author of several articles on treating organic stricture of the male urethra by combining internal and external urethrotomy with perineal drainage, also on appendicitis, stone in the bladder, diaphragmatic hernia, and gastro-enterostomy and he contributed the section on penetrating wounds of the abdomen to "Gynecology and Abdominal Surgery" by H. A. Kelly and C. P. Noble; he organized and for a number of years edited the "Medical Journal of Georgia." He was president of the Atlanta Society of Medicine in 1892, of the Medical Association of Georgia, and of the Southern Surgical and Gynecological Association.

In 1888, he married Fannie, the daughter of Judge John Collier of Atlanta. Of their three sons, Floyd Willcox, Jr., and John Collier have followed in the footsteps of their father. Strain and overwork contributed to a severe illness in 1920, followed by pneumonia, from which he never fully recovered; he was gradually getting back into his old pace, when he was found dead in his room from a revolver wound, August 13, 1921.

McREE, James Fergus (1794-1869), botanist of Wilmington, North Carolina, was one of four sons of Griffith J. McRee, an officer in the American Revolution, and Ann, daughter of John Fergus, surgeon in Braddock's army. He was born November 18, 1794, at "Lilliput," his father's plantation near Wilmington, North Carolina. At the age of seven, he lost his father, and his education went forward under difficulties; at sixteen he was in the office of Dr. Nathaniel Hill, medical botany being an important part of his studies. He began collecting works on this subject until he had a considerable library, part of which he bequeathed to the Library of the Surgeon General. Well-grounded in his preliminaries, he was graduated after one course of lectures at the New York Medical College (now College of Physicians and Surgeons) in 1814, but returned for another course. In 1814, with James Henderson (son-in-law of Nathaniel Hill) he entered into practice at

Wilmington, North Carolina, succeeding to Dr. Hill's practice; when Henderson moved to Raleigh, McRee held the chief practice in Wilmington. From 1829 to 1831, he was magistrate of police, equal to mayor, and commanded a troop of cavalry during the "negro insurrection."

Dr. McRee was ever an earnest student of botany; his biographer says: "His practice was largely in the country, and the young doctor could ride along the solitary roads for miles, greeted at nearly every step with the happy faces of old and new floral friends. From savanna to sandhill, from river swamp to causeway, in the flaring heat of an August sun or the nipping frost of January, he caught the glowing colors of the liatris, the coreopsis, the solidago, the gerardia, and was enlivened by the busy hum of the insects among the sarracenias and droseras." In 1834-35, he retired from practice to his plantation at Rocky Point, fifteen miles from Wilmington, where he found time to indulge his botanical taste. He was the authority on many rarities listed in the "Enumeration of the Plants growing spontaneously around Wilmington, North Carolina" by Rev. M. A. Curtis (1834), and later added about 40 new plants to the catalogue. Curtis named "Galactia Macreii" for him, (now a synonym of Galactia mollis). His herbarium was constantly replenished with fresh specimens, and he maintained a large botanical correspondence. Later, he resumed practice at Wilmington and bought the old estate of the Revolutionary patriot, Cornelius Harnett, where after the fashion of the day, he made beautiful botanical gardens and cultivated kitchen gardens.

McRee was noted in his locality as a diagnostician and as a surgeon; in 1840, he performed a plastic operation for the restoration of a perineum. He was president of the New Hanover County Medical Association.

He died suddenly in Wilmington, August 9, 1869.

HOWARD A. KELLY.

McRUER, Daniel (1802-1873), of Bangor, Maine, a typical Scotchman with a "burr" in his talk, is worth describing. He was born in Knapdale, Argyleshire, Scotland, January 12, 1802, the son of a clergyman, who before the birth of his son had settled in Greenock. Daniel's parents left him an orphan at the age of five, but, befriended by relatives, he studied medicine with a surgeon apothecary, and after obtaining a degree from some source unknown he had sufficient political influence to get the position of surgeon's mate in the English Navy. The vessel on which he was on duty was shipwrecked off Boothbay Harbor, Maine. He was rescued with others by a passing vessel, and brought safely to St. John, New Brunswick, where he practiced for a while, but learned to like America and decided to move into Maine, where he practiced at Nobleborough and Damariscotta. In 1824 he took the degree of M. D. at the University of Pennsylvania.

At the latter place he married Mary Ann Wright, about 1825. When Dr. McRuer wished to become a member of the Maine Medical Society, in the year 1826, his election was refused on the ground that although regularly nominated, he, as a foreigner, had never exhibited any testimonials regarding his qalifications as a practitioner. He was, however, finally admitted. In 1834 he removed to Bangor, where he practiced until his death. A man of sterling worth, he did great service in the Civil War as an army surgeon; he had also a large consulting practice and did twenty-six ovariotomies in days when that operation was rare and few physicians dared to do it, with perfect results in twenty of them. He was a student, interested not only in medicine, but independent and original in thought and language. Of a calm and cheerful nature, he made the best of life, despite the terrible misfortune of his later years, terminating in blindness from glaucoma. He contributed to the pages of the "Boston Medical and Surgical Journal," 1838, 1849 and 1853, papers on "Women's Diseases"; "Cod Liver Oil," and "Removal of an Ovarian Tumor," respectively. He also wrote a pamphlet of fifty pages on "Ulcerations and Abrasions of the Cervix Uteri."

Having lost his sight, an affliction he was enduring with remarkable cheerfulness, he was next loaded down with physical pain and renewed burdens in the shape of gallstones. Every attack weakened him more and more until he was willing to give in. He died suddenly April 5, 1873.

JAMES A. SPALDING.

McSHERRY, Richard (1817-1885), professor in the University of Maryland, writer, was born at Martinsburg, Virginia, November 21, 1817, son of Dr. Richard McSherry, who was graduated from the University of Pennsylvania in 1816. He first went to Georgetown College and then studied medicine at the University of Pennsylvania, graduating in 1841. In 1842 he married a daughter of Rob-

ert Wilson, a lawyer of Baltimore. McSherry entered the Army and served under General Taylor in the Seminole War; leaving the Army in 1843 he entered the Navy as an assistant surgeon under Dr. E. K. Kane and served for nine years in the East and West Indies, and in South America, coursing around the world in the old "Constitution". In Scott's campaign in Mexico he was surgeon to the marines. Resigning in 1851, he settled in Baltimore. He was professor of materia medica and therapeutics in the University of Maryland (1863-64); upon the death of Samuel Chew (q. v.), he was made professor of principles and practice of medicine (1864-85). He was president of the Medical and Chirurgical Faculty of Maryland in 1883-1884; president of the Maryland State Board of Health in 1884. McSherry was a facile writer on subjects both professional and literary. "El Puchero" (1850) gives an account of Scott's campaign, with military sketches; he wrote "Essays and Lectures on Various Occasions" (1869); and "Health and How to Promote It" (1879).

He died at Baltimore, October 7, 1885.

HOWARD A. KELLY.

McWILLIAMS, Alexander (1775-1850), Navy surgeon, botanist of Washington, D. C., was of Scotch descent, the first of a family who came to this country having escaped threatened arrest for treason on account of political connection with the party of the pretender. He was born in St. Mary's County, Maryland, in 1775. Soon after graduating he entered the navy (1802) as assistant surgeon and afterwards was ordered to sea in one of Jefferson's gun-boats. He served during the Tripolitan War, and was present at the burning of the "Philadelphia." On his return voyage he was taken ill with a continued fever and was left at Gibraltar, remaining there several weeks, finally returning home on the frigate "Constitution" and getting a post at the navy yard, Washington. But this he resigned and began private practice, settling near the navy yard, then the most thickly populated part of the city and seemingly offering the best prospect for a doctor. He was an honorary M. D., 1841, Columbia College, District of Columbia; an incorporator of the Medical Society, District of Columbia, under both charters; assistant surgeon, United States Navy, 1802-05, and president of the Medical Association, District of Columbia, 1847-50. Dr. McWilliams was very fond of natural science, more especially of botany, to which he devoted much attention, and often, during the proper season, neglected his professional work to make excursions in search of new plants and flowers. During the early years of the medical department in Columbia University he was professor of botany, and subsequently published the "Flora of the District of Columbia." He was one of the "Botanic Club" which published, in 1830, the "Prodromus of the Flora Columbiana." He was the first resident to build a conservatory, which he filled with many rare plants. This he superintended and managed in person for his own amusement, without any commercial purpose. Connected with the conservatory was a large aviary, in which he had many rare foreign birds. He was also a good mineralogist, and made a large collection of minerals.

His inventive genius was somewhat remarkable, but unprofitable. He invented a ship gauge to measure the draft of water a vessel would draw and to determine the depth of the water. This was approved by a board of naval officers, but never adopted and consequently he failed to realize any profit from its manufacture. Many models of other inventions were destroyed by a fire in the patent office. He was among the first to employ adhesive plaster to make extension in case of fractured legs.

At the time of his death, March 31, 1850, he had for some time confined his professional labors exclusively to his duties at the Alms House, of which he was the physician. He was an active thinker on medical subjects even at that advanced age.

DANIEL SMITH LAMB.

MADDIN, Thomas La Fayette (1826-1908), medical teacher of Nashville, Tennessee, was born in Columbia, in that state, September 4, 1826, of Irish ancestry. His parents were the Rev. Thomas Maddin, D. D., and Sarah Moore. The son was educated in the common schools of Middle Tennessee and North Alabama and his medical education was gained under Dr. Jonathan McDonald, of Limestone County, Alabama. He took his M. D. from the medical department of the University of Louisville. Constant overwork in a large country practice in Alabama proved a severe trial to a physical constitution never very rugged, and he went to Nashville, Tennessee. The opportunities for medical observation offered him in Alabama were various and extensive, and a number of serious epidemics of typhoid fever gave him large experience in

that disease. In 1854 Dr. Maddin began private tuition in the various branches of medicine, and erected rooms for that purpose. For several years his classes were large, and his reputation as a teacher great. In 1857 Shelby Medical College was founded as the medical department of a projected university of the Methodist Episcopal Church South, which has since developed into the Vanderbilt University. He occupied for two years the chair of anatomy there, and afterwards that of surgery. At the time of the War, Maddin was in charge of one of the largest of the hospitals established in Nashville by Confederate authorities. During the subsequent years of the War, the large number of wounded quartered in and near the city afforded Dr. Maddin an extensive surgical experience, and he performed a number of interesting operations, notably two for traumatic aneurysm. One of these required the ligature of the external iliac artery, the aneurysmal tumor extending from the inguinal region to a line drawn from the crest of the ilium to the umbilicus. The other was an aneurysm of the left subclavian artery, necessitating the ligature of that artery in its middle third and a number of subsidiary vessels. The delicate operation, which from its difficult and hazardous nature was declared inadmissible upon consultation with Dr. Frank H. Hamilton (q. v.), then medical inspector of the army of the Cumberland, was witnessed by that surgeon, who also gave his assistance. It was pronounced by him, resulting as it did in the relief of the formidable tumor, a great surgical triumph. In the circuit of his private surgical practice, Dr. Maddin is also credited with the first successful ovariotomy performed in Tennessee.

In 1867 Dr. Maddin was called to the chair of institutes of medicine in the medical department of the University of Nashville, and after several years' acceptable service therein was transferred, about the time of the alliance of that institution with the medical department of Vanderbilt University, to the chair of theory and practice of medicine and clinical medicine. Dr. Maddin was a member of the state medical society, the county and city medical societies, and contributed a number of able papers to their archives, and also to the medical journals of the time. For several years he was co-editor of the "Monthly Record of Medicine and Surgery," published at Nashville.

He died April 27, 1908, at his home, 109 Ninth Avenue South, Nashville, Tennessee.

WILLIAM D. HAGGARD.

MAGRUDER, Ernest Pendleton (1875-1915), of Washington, D. C., a victim of typhus in the World War, was born October 23, 1875, in Upper Marlboro, Maryland, the son of Caleb C. Magruder, clerk of the Maryland Court of Appeals, and Elizabeth Rice Nalle. After attendance at Marlboro Academy and Georgetown (D. C.) College, he matriculated at Johns Hopkins University, from which institution he graduated A. B. in 1895. Following several months of post-graduate study in chemistry and biology, he accepted the post of superintendent of schools in Williamsport, Maryland; later, on removing to Washington, he engaged in teaching special classes of prospective university matriculants. He was graduated A. M. in 1900, and M. D. in 1902 from Columbian (now George Washington) University. A short period in private practice was terminated by his election as superintendent of Emergency Hospital, an office he held for four years. He also served as associate surgeon in Emergency and Georgetown University hospitals and as clinical professor of surgery in Georgetown University. He was a member of Kappa Alpha Fraternity, of the Medical Society of the District of Columbia, Washington Surgical Society, Medical Society of Northern Virginia, and fellow of the American Medical Association and American College of Surgeons.

In 1911 Dr. Magruder married Maryel Alpina, youngest daughter of a fellow clansman, Sir Malcolm MacGregory, R. N., and of Lady Helen Laura, daughter of Hugh Seymour, Earl of Antrim.

Upon the outbreak of the European War, Dr. Magruder was among the first to volunteer his services to the American Red Cross. He was appointed chief surgeon of Unit No. 3 as well as second surgeon-director and treasurer of the contingent which sailed for Siberia on November 21, 1914. Within a few months all but three of eighteen surgeons and nurses contracted typhus fever, Dr. James F. Donnelly dying in March. While hastening to Belgrade to attend Dr. Edward W. Ryan, chief surgeon of Unit No. 1, Dr. Magruder was stricken with the disease, to which he succumbed on April 9, 1915. His remains rested temporarily in Belgrade, until certain quarantine regulations had been satisfied. He was survived by his widow and an only child, Ernest P. Magruder.

Dr. Magruder was a liberal contributor to the literature of surgery, dealing especially with the treatment of fractures and poliomyelitis.

FRANK J. STOCKMAN.

MAGRUDER, George Lloyd (1848-1914), professor of materia medica and hygienist of Washington, D. C., was born in that city, November 1, 1848, the son of Thomas Contee and Elizabeth Olivia Morgan Magruder. His earliest American ancestor on the paternal side was the immigrant Alexander McGregory, who came from Scotland about 1650, settled in Maryland, and changed his name to Magruder soon after his arrival. Dr. Magruder's father was paymaster on the Washington aqueduct and Capitol extension, and disbursing officer under Quartermaster-general M. C. Meigs. Dr. Magruder was educated in private and public schools and by private tutors. He received the degree of A. B. in 1868, and A. M. in 1871, from Gonzaga College, Washington; graduated in medicine in 1870 at Georgetown Medical School; afterwards until his death, he practiced medicine in Washington. He was professor of chemistry at Gonzaga College 1871 to 1873; was for some time prosector of minor surgery at the Georgetown Medical School; afterwards from 1883 to 1896 professor of materia medica, and also dean and treasurer of the medical faculty. Later he was made emeritus professor of materia medica and therapeutics. He was physician to the poor 1871-2; physician to the police and fire departments 1883-7; was consulting physician to Providence and Emergency Hospitals, and member of the board of visitors of the Government Hospital for the Insane. He was a member of the Medical Association and Medical Society of the District of Columbia; of the American Medical Association; of the Washington Obstetrical and Gynecological Society; of the American Public Health Association, and of the Washington Academy of Sciences. Dr. Magruder joined the Medical Society October 1, 1873, and was therefore a member over forty years; was corresponding Secretary 1876-7; member of the board of examiners 1881-3; vice-president 1895; member of the committee on legislation 1895-1901; and of the executive committe 1902-3. Dr. Magruder and Dr. H. H. Barker were the principal persons who founded the Central Dispensary, which was opened to patients May 1, 1871; about 1880 an emergency department was added, and the name became Central Dispensary and Emergency Hospital. He was also one of the founders of the Georgetown University Hospital.

He was very active and energetic in regard to two matters especially—the water supply and the milk supply of this District. In 1894 he began the campaign for a pure water supply, and was chairman of the committee appointed by the Society February 7, to investigate typhoid fever in this District. He was active in obtaining a hearing for the Medical Society in 1901 before the committee of the House of Representatives in regard to the filtration plant, and was a member of the committee appointed by the Society to favor slow sand filtration as against mechanical filtration; the former was eventually adopted. With a like energy and persistance he agitated the matter of a pure milk supply for the District; and this meant, of course, a pure water supply at the dairy farms. In the report of June 6, 1894, this subject was considered and, through a suggestion of his to the District Commissioners, the Society was requested to consider the draft of a bill to regulate the milk supply. He secured an investigation by the Department of Agriculture in 1906-7 into the water supplies of dairy farms that furnished milk to the District, and in 1907 also secured the appointment of a milk commission for the District; also an investigation into the milk industry in the District itself, and the publication of Bulletin 41 by the Hygiene Laboratory on "Milk and its relation to Public Health," under the authority of the Bureau of Public Health and the Department of Agriculture.

Dr. Magruder was married November 22, 1882, to Belle Burns, daughter of General W. W. Burns, U. S. Army, and Priscilla R. Atkinson Burns.

He died of disease of the heart January 28, 1914, at the Georgetown University Hospital, Washington, D. C., leaving his widow, a son, Lieut. Lloyd Burns Magruder of the Coast Artillery, and a daughter.

Among his published writings are the following reprints: "Some Practical Observations Made at the Department of Diseases of Children at the Central Dispensary, Washington, D. C.," 1880; "The Milk Supply of Washington," 1907; "Report on Typhoid Fever in the District of Columbia," 1894, published by U. S. Government; "Milk as a Carrier of Contagious Disease and the Desirability of Pasteurization," Department of Agriculture, 1910; "The Dissemination of Disease by Dairy Products and Means of Prevention," Department of Agriculture, 1910; and he also published on his own account the following: "The Solution of the Milk Problem," 32 pages, 1913.

DANIEL SMITH LAMB.

MALL, Franklin Paine (1862-1917), professor of anatomy in the Johns Hopkins Medical School and director of the department of embryology of the Carnegie Institution of Washington, was born in Belle Plaine, Iowa, September 28, 1862, and died in Baltimore, November 17, 1917, of complications following an operation for gallstones. He was the son of Francis and Louise Miller Mall, both of German descent. In 1895 he married Mabel Stanley Glover of Washington, D. C. He was survived by his widow and two daughters, Margaret and Mary Louise Mall. In 1883 he was graduated in medicine from the University of Michigan and then went to Germany, where he studied first in Heidelberg and then under His and Ludwig in Leipsig. On his return to America he was first fellow in pathology in the Johns Hopkins University, then adjunct professor of anatomy at Clark University, professor of anatomy at Chicago University, and finally when the Johns Hopkins Medical School opened, he undertook the direction of the new department of anatomy. When he started work, medical education in this country was at a very low ebb. He reorganized the teaching of anatomy by developing a laboratory in which his subject was taught by professional anatomists, devoted to research, and his influence can be seen from the fact that twenty-five of the chairs of anatomy in the different medical schools in this country have been filled from his department. In science he ranked with the great leaders of his generation and his work, embodied in one hundred and four publications, led up to certain scientific generalizations. In anatomy he broke away from the study of pure morphology and studied structure from the standpoint of how all of the tissues of an organ are adopted to their function. This work led to the conception that organs were made up of structural units which are equal in size and in function, the size of these ultimate, histological units being determined by the length of the capillary. These units, sometimes called primary lobules, are grouped together into secondary lobules in various ways in different organs. These conceptions of structure find their best expression in Dr. Mall's studies of the intestine, the stomach, the liver and the spleen.

In the science of embryology, Dr. Mall was the first to trace the development of an individual organ all the way from the time when the entity has been determined in the embryo to its condition in the adult. For example, he followed the development of the loops of the intestine from their beginning through the stages in which they are displaced out into the cord, their return to the coelom and finally their position in the adult. He determined the normal position of these loops in the adult and then by experiments on animals he showed that when they are displaced they tend to return to the normal position. This type of work may be summed up in the term "organogenesis." Through the complete development of organogenesis the study of anatomy may be rationalized, for thereby normal structure and the limits of variation may be understood.

The later years of Dr. Mall's life were devoted to the organization of a research institute of embryology under the Carnegie Institution of Washington. One of the most striking points in his career is that in these years, devoted to the organization of a new institute, he accomplished some of his best scientific work. He made an exhaustive study of the causes of monsters. To his study he brought a mastery of all the older literature on the subject, a critical judgment in analyzing the results of recent experimental embryology combined with an extensive first-hand knowledge of abnormal human embryos, he arriving at the conclusion that "monsters are not due to germinal and hereditary causes, but are produced from normal embryos by influences which are to be sought in their environment." They are due to causes bound up with what may be termed faulty implantation whereby alterations in the nutrition of the embryo at an early critical stage produce changes which range all the way from complete degeneration of the embryo up to a monster which survives to term. In the new institute of embryology Dr. Mall proposed to complete the study of organogenesis and to analyze problems associated with growth, which need for their solution large amounts of material and expert technical assistance.

In addition to his contribution to the development of his science, Dr. Mall was a great teacher. He will be remembered as having trained a large group of the men who are now prominent in scientific medicine. He was one of the foremost men in the reorganization of the American Association of Anatomists, making it one of the distinguished scientific bodies in the country. He played a prominent part in the development of scientific publications in this country, being largely responsible for the establishment of the

"American Journal of Anatomy," the "Anatomical Record," and, finally, the "Contributions to Embryology," published by the Carnegie Institution of Washington. He was a man of rare personality; modest, generous, unswervingly devoted to ideals and possessed of a genius for stimulating thought.

He held the degrees of Honorary A. M., University of Michigan, 1900; University of Wisconsin, 1904; Sc. D. University of Michigan, 1908; LL. D. Washington University, St. Louis, 1915, and he was a member of the National Academy of Sciences; associate fellow, American Academy of Arts and Sciences; College of Physicians, Philadelphia; American Philosophical Society, and Society of American Naturalists.

FLORENCE R. SABIN.

MALLETT, William Peter (1819-1889), who did a cesarean section in North Carolina in 1852, was born at Fayetteville, in that state, January 16, 1819. He received his general education at Trinity College, Hartford, Connecticut, and in 1841 was graduated M. D. at the Medical College of Charleston, South Carolina. He settled at Fayetteville where he had an extensive practice and was noted for his cleanliness and dexterity in surgery. In 1857 he moved to Chapel Hill, North Carolina, that his children might be educated at the State University. Here his activities were those of a general practitioner, surgeon and consultant, and he served largely as the University physician. When the Civil War broke out he entered the Confederate Army as a surgeon and remained until discharged on account of illness

Dr. Mallett's fame is enchanced by a skilful and successful cesarean section in 1852, done near Fayetteville, the famous old "Cape Fear section." The patient, undersized and seventeen years old, was in labor with her first child when Mallett visited her March 26, 1852. On rupturing the tough membranes the cord prolapsed and a fully developed dead child's head was found locked above the pubes in transverse presentation; after due patience and consultation with Dr. H. A. McSwain, Mallett presented the alternative of inactivity and certain death or cesarean section with one chance in twenty; he operated without an anesthetic, although chloroform was used in the preliminary examination. The excision extended four inches above the umbilicus and to within three of the pubes; the hemorrhage and shock were slight. The wound was dressed with four or five needles, transfixing and uniting the sides by twisted suture; adhesive straps and a roller compress gave good lateral support, and a cold water dressing was used for four days, while abstinence from food, perfect quiet of mind and body and occasional saline purges completed the treatment. The upper two-thirds of the wound healed by first intention, and in nine days the patient was out of bed. Whitehead says she gave birth to several children later.

Dr. Mallet died at Chapel Hill, October 16, 1889. A grandson is Dr. William deB. MacNider of the Medical Faculty of the University of North Carolina.

HOWARD A. KELLY.

MANIGAULT, Gabriel Edward (1833-1899), Charleston, South Carolina physician and osteologist was born in that city of Huguenot ancestry, January 3, 1833, being the son of Charles Manigault and Elizabeth Heyward Manigault, daughter of Nathaniel Heyward. As an infant he was taken to Paris, France, and again at thirteen years of age. There he finished two classes in the College Bourbon. He was a pupil at the famous Coates school in his native city and afterwards entered the College of Charleston, from which he was graduated with honors in 1852. In 1854 he received his degree in medicine at the Medical College of the State of South Carolina, and after his graduation returned to Paris to continue his medical studies. There he became interested in natural history and decided to devote his life to its pursuits.

Upon the outbreak of the Civil War Dr. Manigault volunteered his services and was made adjutant of the Fourth Regiment under Col. Rutledge. After the war he returned home and in 1873 was elected curator of the Charleston Museum to succeed Prof. John McCrady, in which position he spent the remainder of his life laboring for the advancement of science. He was also a devoted student of art, and his collection contained many valuable works. He was president of the South Carolina Art Association. Dr. Manigault's skill was especially displayed in the development of osteology and the exceptionally fine osteological collection in the Charleston Museum is the result of his efforts. He gave public lectures on osteology. He was an active worker in the Elliot Society of Science and Art and it is worthy of note that he was the first to suggest to General Edward McCrady the importance of writing a history of South Carolina. He died September 15, 1899, in Charleston, South Carolina.

MANN, Edward Cox (1850-1908), New York alienist, was born in Braintree, Massachusetts, Aprli 21, 1850. His father Cyrus Sweetser Mann (1820-1914), son of the Rev. Cyrus Mann (1785-1859), was born in Worcester County, Massachusetts, was a student at Dartmouth College in 1837-8 and in 1843 received his M. D. at Harvard University; in 1858 he was a member of the Massachusetts Legislature, and in 1863 he was in Louisiana as a surgeon of the 31st Massachusetts Volunteers; he settled in 1868 in Brooklyn, N. Y., and was sanitary inspector connected with the Board of Health, and also practiced. He married Harriet Field.

Edward C. Mann was educated by private tutors, and studied medicine with his father at the College of Physicians and Surgeons, New York, and at Long Island College, Hospital Brooklyn, graduating at the latter in 1870; then he settled to practice in Brooklyn and New York City, specializing in nervous and mental diseases. He was medical superintendent of what is now Wards Island State Hospital; later he conducted a private asylum, "Sunnyside." He was a member of the New York Medico-Legal Society; the American Association for the Cure of Inebriates; the American Archaeological Society; and president of the New York Academy of Anthropology.

His publications include "Manual of Psychological Medicine" (1883); "Psychological Aspect of the Guiteau Case" (1882); "A Treatise on Medical Jurisprudence of Insanity" (1893). He contributed largely to medical and psychological journals.

In 1870 Dr. Mann married Barbara Busteed of New York. They had two sons and one daughter. He moved to Massachusetts after he retired, and died there in January of 1908.

HOWARD A. KELLY.

MANN, Gustav (1864-1921), physiologist, of Tulane University, New Orleans, was born Nov. 6, 1864, at Darjeeling, East India, the son of Gustav Adolph Heinrich and Marianna Stovel Mann. He took his M. D. from the University of Edinburgh, Scotland, in 1894, and his B. Sc. from Oxford, England, in 1898. He was assistant to Prof. William Rutherford of Edinburgh during 1892-94 and to Prof. Gotch of Oxford during 1894-1908, then came to America as professor of physiology at Tulane University, New Orleans, serving until 1916, when he became research chemist for the Freeport Oil Company of Houston, Texas. While on a scientific oil mission at Tampico, Mexico, he died, July 18, 1921.

Mann was awarded the Dobbie Smith gold medal and the Ellis, Gunning-Victoria, Goodsir, and Rolleston prizes for researches in physiology, and the Edinburgh gold medal for his medical thesis. He was the author of "Physiological Histology," 1902, "Chemistry of the Proteids," 1906, and articles on the evolution of flowering plants, comparative physiology of the brain, and changes in nerve and gland cells.

He married Agnes Sinclair Orosz of Edinburgh, July 11, 1890.

MANN, James (1759-1832), army surgeon, who served three years in the Revolution, another three years in the War of 1812, thirty years later, and wrote most interestingly of military medical problems, was born in Wrentham, Massachusetts, July 22, 1759. After graduating in arts from Harvard College in 1776, in the same class with Aaron Dexter (q. v.), he became a pupil in medicine, as was the custom of the day, with Dr. Samuel Danforth (q. v.), a leading practitioner of Boston, and at the age of twenty on July 1, 1779, was appointed surgeon to Colonel Shepard's 4th Massachusetts Regiment. He was reported a prisoner of war in June, 1781, and was imprisoned on Long Island in July and August of that year. Because of failing health he resigned from the service April 14, 1782, and settled in practice in his native town, and this year Yale conferred on him her honorary A. M., and Brown did the same in 1783. We hear of him next, April 13, 1791, when the records of the Massachusetts Medical Society inform us that "a letter from Doctor James Mann of Wrentham on Diabetes was received and read." He joined that medical society in the year of its reorganization, 1803, and published in the second volume of its Medical Communications papers on "Observations on the lymphatic swelling of the inferior extremities of puerperal women" and "Observations upon menorrhagia and leucorrhoea and the beneficent employment of blisters, acetate of lead, and the submuriate of mercury in those diseases." He gained the Boylston Prize, December 31, 1806, by a dissertation on Dysentery. During the rebellion in western Massachusetts in 1786-87, called Shay's Rebellion, Dr. Mann was ordered to visit the militia camps and report to General William Shepard. Previous to 1812 he practiced in New York, and on the opening of war joined the United States Army as hos-

pital surgeon and was afterwards head of the medical staff of General Dearborn's Army, which was stationed on the Canadian frontier in Northern New York. He was present at the battle of Plattsburgh, and had charge of the wounded on that memorable day. He was invited to lecture on the theory and practice of physic at the Fairfield Medical School, Herkimer County, New York, but was obliged to decline because of his army duties. Brown University gave him her honorary M. D. in 1815. After peace was declared Dr. Mann became post-surgeon (April, 1818), and assistant surgeon (May, 1821).

His chief writing was published in Dedham, Massachusetts, in 1816—a book of 318 pages, entitled "Medical Sketches of the Campaigns of 1812, 13, 14, to which are added surgical cases; observations on military hospitals attached to a moving army, also an appendix with a dissertation on the dysentary of 1806 and the winter epidemic in Sharon and Rochester, Mass., of peripneumonia notha in 1815-16." This book gives a vivid picture of army life, of the medical questions that had to be solved, and of the surgeons with which he came into touch, but unfortunately the book casts too little light on the personality of the writer.

After the war Dr. Mann was elected consulting physician to the Massachusetts General Hospital in Boston in place of Dr. Danforth. There he personally assisted in the attempt to reduce the dislocated hip joint of Charles Lowell in the case of Lowell "versus" Faxon and Hawkes, as related in the biography of M. C. Hawkes (q. v.). In 1821 he was made chairman of a committee of five of the Massachusetts Medical Society "to report on what measures could be adopted to secure a better education of those persons who undertake to compound, put up or sell medicines in conformity with the prescriptions of physicians." The committee reported to the council in October of that year, and the report was adopted. It was about this time that he did a successful amputation at the elbow joint, reporting it in the "Medical Repository," New York, 1822, vol. xxii, 14-20, under the title, "Observations on Amputations at the Joints."

Dr. Mann became a member of the Society of the Cincinnati and of the American Academy of Arts and Sciences; he did not return to private practice but remained and died in the public service, being stationed at Governor's Island, New York Harbor, when the end came, November 7, 1832.

WALTER L. BURRAGE.

MANN, Matthew Derbyshire (1845-1921), gynecologist of Buffalo, New York, the son of Charles A. and Emma (Bagg) Mann, was born July 12, 1845, in Utica, New York. After a preliminary education in the public schools of Utica, he spent two years abroad with a private tutor; in 1867, he was graduated from Yale in 1871, received his medical degree from the College of Physicians and Surgeons, New York, and an Honorary A. M. from Yale. The following two years were spent studying medicine in London, Paris, Heidelberg, and Vienna. He was a frequent visitor at the Woman's Hospital in the State of New York in the days of Sims, Emmett, Thomas, Hunter, and Lee. Dr. Mann practiced in New York, 1873-79, and in Hartford, Connecticut, 1879-82, as a specialist in the diseases of women. He became clinical lecturer in gynecology at Yale in 1880 and from 1882 to 1910, he was professor of obstetrics and gynecology in the University of Buffalo. From 1885 until his active affiliation with the University ended, he was also dean of the Faculty, and it was largely due to his efforts that departments of pharmacy and dentistry were instituted. Meanwhile, he became consulting gynecologist to the Erie County Hospital and consulting gynecologist and obstetrician to the Buffalo General Hospital. He was the pioneer in western New York in the newer methods of gynecology inaugurated by Sims and Emmet; with the latter especially, maintained close personal relations. He was an active and contributing member of the American Gynecological Society during its best years and was its president in 1895. He presided over the Buffalo Academy of Medicine in 1900, and was a foundation member of the International Congress of Obstetricians and Gynecologists and its vice-president in 1901.

Mann wrote a manual of prescription writing in 1879 which passed through several editions. His best work was the editing of the "System of Gynecology by American Authors" (1888), crystallizing and promulgating the newer teachings. For this book he wrote "Diseases of the Vulva." In 1882, at the American Gynecological Society, he presented his most ambitious paper on operations on pregnant women, excluding abdominal operations; the conclusion was favorable to surgical intervention even then in the dawn of the aseptic technique. He also wrote on extrauterine pregnancy and uterine displacements, and inflammation of the ureters. His minor writings cover some eighty titles, in-

cluding most subjects of current interest in his rapidly developing specialty. He was a public character in his community and civic welfare claimed much of his attention: with the idea of promoting the higher education of women in Buffalo, he assisted in founding and was for twenty years chairman of the board of trustees of St. Margaret's School for Girls; he also started the movement toward the establishment of a department of liberal arts of which he was twice director; and he was one of the founders of the Guido Chorus and its president for many years.

When President McKinley was shot in 1901, Dr. Mann was called to operate upon him and was chief surgeon in charge until his death, a matter of keen regret to Roswell Park (q. v.) who was absent at the time.

He married Elizabeth Pope of St. Paul, Minnesota, November 11, 1869; there were nine children, three girls and six boys. One son, Arthur S. Mann, died a missionary in China; Edward C. Mann is a physician in San Diego, California.

Dr. Mann died March 3, 1921. He was spare of habit, alert, wiry, a sturdy partisan, naturally critical and somewhat captious, but generous and ever appreciative of good work, and a warm friend. His portrait is in the Album of Fellows, American Gynecological Society, 1918.

HOWARD A. KELLY.

MANSON, Otis Frederick (1822-1888), professor of pathology in The Medical College of Virginia, he was born in Richmond, Virginia, October 10, 1822, and went as a lad to the schools of his native city; studying medicine and graduating from the medical department of Hampden-Sidney College in 1840, at the age of eighteen. He at once settled in Granville County, North Carolina, and soon acquired a large practice. He was a charter member of the Medical Society of Virginia, member, and later an honorary member, of the Medical Society of North Carolina, the latter society choosing him a member of the first Board of Medical Examiners, organized in the year 1859.

At the beginning of the war he went to Richmond at the request of Gov. Vance of North Carolina to look after the health of the troops of the state, and when a hospital for these soldiers was established, he was selected by the governor as surgeon-in-chief. In 1862 he was commissioned surgeon in the Confederate Army and served as such through the war, acting at the same time as a medical adjutant with rank of major for the state of North Carolina. At the close of the war he settled in Richmond, and in 1867 was elected professor of pathology in the medical college of Virginia, to which chair was added a year later that of physiology. He resigned in 1882, and was made professor emeritus. In 1871-72 he was associate editor of the "Richmond Clinical Record," and for a number of years, president of the City Council.

While living in North Carolina he availed himself of the abundant opportunity for studying malarial fevers, and accumulated a very large library, which contained much literature, both American and European, on that subject, and, in consequence, he acquired a remarkable knowledge of the disease. He was the first American writer to describe "Puerperal Malarial Fever," an honor eventually gracefully accorded him by Dr. Fordyce Barker (q. v.), who had claimed the priority. Manson was among the first of the leaders who brought the use of quinine sulphate into prominence in the treatment of other diseases than intermittent fever, such as pneumonia, cholera infantum and puerperal fever, advocating its use in large doses. Many of his doctrines and methods of treatment were received with bitter opposition, but are now generally accepted.

He was an extensive contributor to medical journal literature, the following being a few of his contributions: "Quinine in the Febrile Paroxysm," ("Stethoscope," and "Virginia Medical Gazette," vol i, No. 2); "On Large Doses of Quinine in Fever and Inflammation" ("Ibid.," vol. ii, No. 3); "Endemic Diseases of the Roanoke Valley and North Carolina" ("Virginia Medical Journal," vol iv, No. 1); "Quinine in Remittent Fever" ("Virginia Clinical Record," October, 1871); "The Intermittent Form of Malarial Pneumonia" ("Ibid.," vol iii); "A Treatise on the Physiological and Therapeutic Action of the Sulphate of Quinine," 1877; "Malarial Hematuria" ("Transactions of the Medical Society of Virginia," 1886). At the time of his death he was engaged in the preparation of an exhaustive work entitled "A History of Fevers from the Earliest Times." Dr. Manson was a man fo refined personal tastes and of winning manners.

He married, in 1841, a daughter of Spottswood Burwell of Granville County, North Carolina, and had six children. She died in 1871, and he married again in 1881, as his second wife, Mrs. Helen Gray Watson, of Richmond, by whom he had no children.

After some months of feeble health from nervous prostration due to overwork, he died at his home in Richmond from an apoplectic stroke, February 1, 1888.

A phototype portrait illustrates the memorial sketch of him by Dr. S. S. Satchwell.

ROBERT M. SLAUGHTER.

MARCH, Alden (1795-1869), of Albany, New York, inventor of surgical appliances and organizer of the Albany Medical College, won his way to fame although handicapped by slender means and adverse circumstances. He was born in the town of Sutton, Worcester County, Massachusetts, September 20, 1795. His ancestors were of English origin, and settled in Massachusetts, their descendants becoming identified with the early history of that state. The name of March first appears in the history of the town of Newbury as early as 1653. Dr. March spent his early years on his father's farm, working in the busy season and going to school in winter. When nineteen years of age, by the death of his father, the charge of the homestead devolved upon him for about one year. In the winter of 1817 he taught a writing school at Hoosick, Rensselaer County, New York, and also spent a part of the summer in quarrying and cutting slate stone for the roofing of houses. His brother, Dr. David March, an army surgeon, suggested to him the study of medicine, and under this brother he began to study Latin and Greek as well as medicine. In 1818 and 1819 he attended medical lectures on anatomy and surgery at Boston, and was graduated M. D. at Brown University, Providence, R. I., September 6, 1820. Shortly after receiving his diploma he visited Cambridge, Washington County, N. Y., where an elder brother resided. While here he performed his first surgical operation, which was for the remedy of the deformity known as hare-lip. As an operator he was quick, dexterous, cautious, bold and successful. There is no record of his surgical operations during ten years of his professional life. Yet those of which there is record number 7124. In the "Transactions of the American Medical Association of 1853," on pages 505 and 506, we find in connection with his essay on morbus-coxarius, mention of an invention designed by him, to fulfill a very important indication in the treatment of this disease. Dr. Bryan, professor of surgery in the Philadelphia College of Medicine, in speaking of Prof. March's essay on an improved forceps for hare-lip operation, says: "It embodies so much that is valuable that we think this production of one of the most distinguished surgeons of New York ought to be made to assume a permanent form, and be embodied in the standard works." In 1860 Dr. March also invented instruments for the removal of dead bone; and, in 1867, employed a new method for removing urinary calculi.

Dr. March delivered one the first courses of lectures ever given in New York, on anatomy, with demonstrations and dissections of the recent subject. They were given to a class of fourteen students, in the fall of 1821. "The first subject," he says, "ever dissected for public demonstration, to the medical students in Albany, I procured from Boston, by what might now be called the overland route, by horse power across the Green Mountains, for you will please bear in mind there was no railroad communication at this time. It was then that I prepared arterial anatomical specimens, and formed the nucleus of the museum of the Albany Medical College." In 1834 he established a Practical School for Anatomy and Surgery, the Albany Medical School having been broken up by a disastrous fire which destroyed the building, and with it much of March's valuable anatomical and pathological preparations. When the Albany Medical College was established in 1839, through March's efforts, he was appointed professor of surgery, giving his first course of lectures that year, 1839, and remaining professor of surgery until his death, a period of thirty years; also he established surgical clinics which were not common at that time.

His appointments included: 1825, professor of anatomy, Vermont Academy of Medicine, Castleton; 1827, professor of anatomy, Albany Medical Seminary; 1833, professor of anatomy and operative surgery, Albany Medical School; 1834, professor of surgery, Albany Medical College; 1832 and 1833 president of the Albany County Medical Society; 1857, president of the New York State Medical Society; 1863, president of the American Medical Association. Other appointments were: honorary member of the Pennsylvania State Medical Society, the Connecticut State Medical Society, and the Rhode Island State Medical Society. The degree of LL. D. was conferred on him by Williams College in 1868; in 1869 he became an honorary member of the "Institutes Archivistes de France."

Nearly all his essays and reports were read by him before the New York State Medical Society, and published in the "Transactions." In 1841, 1848 and 1856 he visited Europe,

not only to perfect himself in his profession, but also to investigate, critically, that grave malady, morbus coxarius, or hip disease.

March married Joanna P., daughter of Mr. Silas Armsby of the town of Sutton, Massachusetts, February 22, 1824. His family consisted of four children, two boys and two girls. Two died in infancy. Henry became a physician.

About the middle of May, 1869, he felt the symptoms of approaching illness which terminated his life. On the twenty-seventh he visited his daughter, where he became sick and remained all night, expecting to return to his home the following day, but he was not able. He lingered until Thursday, June 17, 1869, when he died.

JAMES L. BABCOCK.

MARCY, Henry Orlando (1837-1924), of Cambridge, Massachusetts, introducer into America of the antiseptic treatment of wounds, was born in Otis, Massachusetts, June 2, 1837, the son of Fanny Gibbs and Smith Marcy whose father, Thomas Marcy, settled the town of Freedom, Portage County, Ohio, and a descendant of Elijah and Israel Gibbs who fought in the American Revolution and were with Gates at the surrender of Burgoyne. After studying at Wilbraham Academy and Amherst College, he entered the Harvard Medical School and received his M. D. in 1864. Amherst gave him an honorary A. M. in 1870 and Wesleyan, an LL. D. in 1887. In April of 1863, he was commissioned assistant surgeon of the 43rd Massachusetts Volunteers and the following November, surgeon of the 1st Regiment of colored troops, recruited in North Carolina. In 1864, he was medical director of Florida and later held a like position on Sherman's staff in the Carolina campaign. Under his supervision the sanitary renovation of Charleston, South Carolina, was accomplished. He resigned his commission in June, 1865. During his period of service, he established classes among his negro troops by whom he was beloved. At the close of the war, Dr. Marcy returned to Cambridge, Massachusetts, where he practiced until the spring of 1869. He then went to Europe for a year of study at the University of Berlin, in London, and in Edinburgh where he was Lister's first American pupil. To Marcy the great credit of introducing into America the Listerian doctrines and the new methods of antiseptic wound treatment is said to be due. For the next ten years he devoted his attention to laboratory and practical study of antiseptic methods of wound treatment and investigated the repair processes of bones. He used and recommended the buried catgut-ligature under the new conditions and devised and introduced the tendon suture, especially that from the kangaroo, over which he spent such labor. In order to devote himself more exclusively to surgery, he established in 1880 a private hospital in Cambridge for the treatment of surgical diseases of women, where he worked over the closure of aseptic wounds in layers without drainage and the reconstruction of the inguinal canal in hernia. He was largely instrumental in introducing plastic splints and did much to perfect them in the quality of the materials used and in the methods of preparation.

Probably the best known of his writings are "The Reproductive Process," a translation from the Italian of Professor Ercolani's work, in two volumes, 1884, and his own "Anatomy and Surgical Treatment of Hernia," 1889. Among others are, "The Radical Cure of Hernia," 1889; "The Perineum, Its Anatomy and Surgical Treatment," 1889; and "The Semi-Centennial of the Introduction of Antiseptic Surgery in America," 1921.

In 1884, when president of the American Academy of Medicine, he initiated the movement which resulted in the medical practice act in Massachusetts ten years later. He was president of the section in gynecology of the 9th International Medical Congress in Washington, 1887. In the American Medical Association, he was vice-president in 1879, chairman of the section of obstetrics in 1882, member of the judicial council in 1886-89, and president in 1892. He was a founder member of the American College of Surgeons. Marcy was a well-known figure at most large medical meetings, presenting specimens, reading papers, and taking an active part in discussions. He was a good clear debater and though often mildly sarcastic, never caustic. Despite his medical activities, he found time for active interest in public affairs. Some of the most valuable property in Cambridge, on a part of which the Technology buildings now stand, was purchased by him and redeemed from marsh land. A keen, shrewd knowledge of conditions was always in evidence when he appeared before the State Legislature, advocating new propositions. He was chief director in the renovation of the Charles River Basin, in the building of the Harvard Bridge and in completing the Cambridge Esplanade and Parkway.

In October, 1863, he married Sarah E. Wendell of Somersworth, New Hampshire. A son, Henry O., Jr., a physician of Newton and Boston, died in the late spring of 1922.

On New Year's Day, 1924, Dr. Marcy died at his home, active in professional and public life until the last year.

He was a rather small, keen, vivacious man, with a high-pitched, rasping but not unpleasant voice. He was catholic in his interests. He had an unusual memory. Marcy embodied a rare combination of the scientific and the practical worker, the latter predominating. He entered the field when surgery was first turning from the old to the radically different new ways and bore a large part in effecting that momentous change.

MARION, Otis Humphrey (1847-1906), who introduced first aid to the injured in the Massachusetts Militia, the son of Abner and Sarah Prescott Marion, was born in Burlington, Massachusetts, January 12, 1847, graduated at Kimball Union Academy in 1869, Dartmouth College in 1873, and Harvard Medical School in 1876, and became house surgeon at the Boston City Hospital in 1876-77, spending the winter of 1878 studying abroad, and settling eventually in Allston, a part of Boston, Massachusetts. He served as surgeon of the First Regiment, Massachusetts Volunteer Militia, and introduced into the Massachusetts Militia the system of "First Aid to the Injured," physician training and athletics. He was medical director of the First Brigade, Massachusetts Volunteer Militia, and surgeon-general of Massachusetts on the staff of Gov. John L. Bates, with the rank of brigadier-general.

He died of pneumonia, November 27, 1906, leaving a widow, a daughter and two sons.

MARKOE, Thomas Masters (1819-1901), pathologist and professor of surgery of New York, was descended from a refugee Huguenot family who had emigrated to the West Indies. His direct ancestor, Peter Markoe, settled in the Island of Santa Cruz, and the doctor's father, Francis Markoe, was sent to be educated to the United States and settled in New York, marrying Sarah Caldwell, of Philadelphia, where their son was born, September 13, 1819. He was graduated from Princeton in 1836 and from the College of Physicians and Surgeons in 1841, becoming an assistant in the New York Hospital while still a student. In 1842 he became assistant curator in the pathological museum and lecturer on pathological anatomy, while from 1852-92 he was surgeon to the New York Hospital. He was elected adjunct professor of surgery in the college of Physicians and Surgeons, New York, in 1860, holding the full chair after 1870, but in 1879, on its division, he became professor of the principles of surgery. Throughout the war he served as surgeon in the Union Army and afterwards returned to his practice.

His genial personality was much appreciated by the students, and his lectures were interesting even apart from their practical bearing. His telling descriptions of the processes of repair and his "healthy laudable pus" stood out clear and strong in their minds. His writings were not many, but his work on "Diseases of the Bones" (1872) was an authority for many years. Apart from his busy professional life much of his time was given to other interests. He was trustee of the Astor Library in 1863 and up to 1895 its president, and took, moreover, a lively interest in the museums of Natural History and Art.

In 1850 he married Charlotte Atwell How and had five children: Charlotte How, Thomas Caldwell, Francis Hartman, James Wright and Sallie Caldwell. Francis and James became physicians in New York.

His son James Wright Markoe was born in 1862, graduated from the College of Physicians and Surgeons New York in 1885. After a stay abroad he specialized in gynecology and obstetrics, and on his return became house surgeon to the Sloane Maternity Hospital. He was the medical director of the New York Lying-In Hospital from its organization until his retirement in 1917. For this institution he secured a large endowment from Pierpont Morgan. He was assassinated in St. George's church while taking up the collection April 18, 1920, by a lunatic who fired a pistol point blank at his forehead.

MARKS, Solon (1827-1914), the Nestor of the Milwaukee medical profession, was born in Stockbridge, Vermont, July 14, 1827, and died September 29, 1914, at Milwaukee, Wisconsin. He came to Wisconsin in 1848. In 1853 he was graduated at Rush Medical College of Chicago, practiced his profession at Jefferson, Wisconsin, until 1856, and then removed to Stevens Point, where he remained until the outbreak of the war. On September 27, 1861, he was commissioned surgeon of the Tenth Wisconsin Volunteer Infantry,

served throughout the war, was wounded and captured, received merited promotion, and was discharged in November, 1864, being at this time chief surgeon of the First Division, Fourteenth Army Corps. Upon his return from military service he settled in Milwaukee, where he gained a wide reputation as a surgeon, many of his operations having received national notice. In particular may be mentioned an operation for the removal of a bullet from the region of the heart, performed in 1870, the patient having carried the ball since 1864. This is probably the first operation ever reported for suture of a heart wound. (See "Medical Fortnightly," 1893, vol. vi.) In 1866 he was chief surgeon of St. Mary's Hospital. In 1873 he went to Europe and visited the hospitals of England, France and Ireland. He was a member of the State Board of Health since its organization and served as its president during the greater part of its existence. He was professor of military surgery, fractures and dislocations, in the Wisconsin College of Physicians and Surgeons, and was the donor of the laboratory equipment of that institution. From 1870 to 1901 he was chief surgeon of the Chicago, Milwaukee and St. Paul Railway Co. and was a prominent member of the National Association of Railway Surgeons.

Dr. Marks's contributions to medical literature have been as follows: Mechanical Treatment of Diseases of Hip Joint, 1868; Aneurysms, Treatment and Report of Case, 1868; Observations on European Methods, 1874; the Animal Ligature as a Hemostatic Agent, 1875; Sewerage and Drainage, 1876; Hydrophobia, 1877; Trephining the Sternum for Removal of Foreign Body from Anterior Mediastinum, Report of Case, 1883; Prevention of Typhoid Fever, 1878; Dislocation of the Fifth Cervical Vertebra, Report of Case, 1898.

Dr. Marks reached the venerable age of 87 years and though suffering from the physical infirmities of old age, he remained ever young at heart and active in mind, and retained a keen interest in medical affairs until the end.

GILBERT E. SEAMAN.

MARSHALL, John (1855-1925), chemist and toxicologist, was born February 9, 1855, in Reading, Pennsylvania. His father, John Gloninger Marshall, as well as his grandfather and great grandfather, practiced medicine in and about Reading; his mother was Susan A. Kline of Colonial descent. The boy spent much time in his mother's drug store and early evinced an interest in chemistry which he developed at the Pennsylvania, now Gettysburg College. In 1878, he was graduated in medicine from the University of Pennsylvania where his knowledge of chemistry led to his appointment as assistant demonstrator during student days; his doctoral thesis on substituted salicylic acids won the faculty prize. His Ph.D. thesis, dealing with mass action among certain organic salts was also awarded a substantial prize.

He went abroad to further his study of chemistry: first to Göttingen under Wöhler and Hübner; next Tübingen with Hüfner, under whom he made a study of the absorption of carbon monoxide by the blood, which brought him the degree of Doctor of Natural Sciences; and later to the University of Christiania where he turned his attention to physiological chemistry. Marshall returned to an assistant professorship in his alma mater. In addition to his teaching and research, he was dean of the veterinary medical school, 1889-97, and dean of the medical school, 1892-1902. In 1897, he succeeded Theodore G. Wormley (q. v.) whose daughter Mary he had married April 24, 1884, in the chair of chemistry and toxicology, which he held until 1922 when he became professor emeritus.

He was an active member of the American Philosophical, the American Chemical, the Biochemical, the Physiological and other scientific societies. Gettysburg College conferred her LL. B. upon him in 1899.

Despite his varied activities, he contributed some thirty-six papers to chemical science and three books: "A Course of Qualitative Testing", 1879, "Chemical Analysis of the Urine", 1881, and "Medicus's Qualitative Analysis"—translated from the German, 1892 (8th edition 1913). Unfortunately, he had to lay aside his studies on snake venoms and other animal poisons. His opinion was often sought in industrial matters, involving questions of pure food and the toxic quality of drugs and alcohol, and he was frequently called upon to give expert testimony in court in murder cases. Marshall was indefatigable in his teaching and investigation, painstaking in analyses, a sympathetic adviser, a good executive.

He died January 5, 1925, after a long illness, survived by his wife, a son, Theodore, and a daughter, Mrs. Hiram Eliason.

MARSHALL, Moses (1758-1813). The fame of this expert medical botanist has been somewhat eclipsed by that of his uncle

Humphrey (not a doctor), of whom Darlington left studious and loving record in his "Memorials of Bartram and Marshall," but Moses made several long exploring journeys through the wilds of the West and rendered valuable assistance to his uncle in preparing the "Arbustum Americanum" (1785). He was the son of James and Sarah Marshall and the grandson of Abraham Marshall who came from Gratton, Derbyshire, England, to Delaware in 1697. He was born in West Bradford, Pennsylvania, in 1758 and studied medicine under Dr. Nicholas Way of Wilmington, but never took any medical degree, none being required at that time for practicing in Pennsylvania, but, it being customary to attend a course of lectures, he went to those by William Shippen and Rush His diary at this time shows medicine not wholly absorbing, for frequent mention is made of a certain Polly Howell and Sally Samson, the latter "behaving for three evenings, especially the last, in a most engaging manner." Then followed a year or two employed in desultory medical work, including inoculating in the neighborhood of London Grove, Pennsylvania, and in keeping an apothecary's shop "which came to nothing and less." The truth was he had not found his true vocation—botanizing—but his uncle writes to Franklin in 1785, and Moses himself to Dr. Lettsom in London, suggesting a government supported exploration of the western states. In 1786 Sir Joseph Banks wrote Humphrey Marshall asking for one hundredweight of fresh ginseng roots. Moses spent twenty days in the Alleghanies getting these and charged Lettsom $1.25 a pound. Lettsom and he seem to have carried on a brisk correspondence, especially concerning the "Talinum Teretifolium" hitherto undescribed by botanists. He sends Lettsom three tortoises and some plants, one of which, a polygala, is thus mentioned in a letter: "Should this prove to be a new genus I had designed the appellation of Lettsomia, with this provision that it might not be unpleasing to thee, and that, in the interim, I should not be able to discover a plant more exalted, conspicuous and worthy." He also asks for a "surgeon's pouch of instruments" to be sent him, and Lettsom hastens to acknowledge the compliment of a floral godchild and encloses ten pounds in case Moses should be out of pocket for seeds asked for. A plant was also named after Moses but many authorities claim the "Marshallia" for his uncle. Two letters of 1792 have recently come to light which settle the question. Muhlenberg, the correspondent, was himself a leading Philadelphian botanist:

"Dear Sir:

"I beg leave to inform you that the new edition of the Genera Linnaei is safely arrived. I am happy to see that the editor, my friend Dr. Schreber, has done what I requested of him. He has given your name to a hitherto undescribed plant that belongs to the Syngenesia, which he names the "Marshallia". Give my best respects to your uncle, Mr. Humphry Marshall, and believe me with great esteem, sir,

Your humble servant,

Henry Muhlenberg."

In the collection of the Marshall papers in the possession of Gilbert Cope there is the following copy of the reply to this note in the handwriting of Dr. Marshall:

"West Bradford, April 13, 1792.

"Reverend Sir: I have just received yours of the ninth instant, and am much pleased to hear of the arrival of the Genera Plantarum. I am very sensible of the honor done me, through your request, by Dr. Schreber, and think myself but too undeserving. I shall be pleased in your calling on your intended journey, and hope you will consider my uncle's house as a welcome stage. I am, with all due respect,

Your much obliged friend,

Moses Marshall."

Marshall's letters speak of many long trips which meant fatigue, danger and expense. His appointment as justice of the peace curtailed these excursions, but he continued exchanging specimens and seeds with European confrères. About 1797 he married Alice Pennock and had six children. After his uncle's death there is not much told of his scientific work and he died on the thirteenth of October, 1813.

HOWARD A. KELLY.

MARTIN, Ennalls (1758-1834), army surgeon and practitioner of Maryland, was born at "Hampden," in Talbot County, Maryland, August 23, 1758, the son of Thomas and Mary Ennalls Martin. At a very early age he was sent to Newark Academy, Delaware, where he did well as a Latin and Greek scholar. In 1777 he was taken to Philadelphia by his father and put under Dr. William Shippen (q. v.), the anatomist, then surgeon-general of the Continental Army, who assigned him to duty in the apothecary department. As the army was greatly in need of surgeons, particularly for the hospitals, and as young Mar-

tin proved himself an unusually apt scholar, he soon received a commission from Congress as hospital surgeon's mate, with the understanding that he was to attend the medical school of Philadelphia, then conducted by Shippen, Rush, and Kuhn. He was at once stationed at Bethlehem Hospital, and took his M. B. in 1782 from the University of Pennsylvania. Meanwhile he was appointed demonstrator of anatomy by Shippen, to which work he applied himself with great zeal and became a skilled dissector, sometimes even taking Shippen's place. To show Martin's zeal and faithfulness it is said that during his five years' service he left his station but twice, once to visit his father, who was an extensive farmer, tanner, and tobacco planter, and again to go on to Saratoga to bring away the sick and wounded after the defeat of Burgoyne. Martin settled in practice at Talbot Court House, afterwards called Easton, although Shippen did everything to induce him to remain in Philadelphia. He was an occasional contributor to the "Medical Repository," then the only medical periodical in the country. He was inflexible in carrying out the treatment which his judgment suggested. It was useless to object, and he was known repeatedly to take a recalcitrant patient by the nose and force the medicine down his throat. His bluntness and brusqueness caused his patients to fear him and his colleagues to apply to him the soubriquet—"Abernethy of Talbot." He was the first to introduce vaccination into Talbot, and by his strong force of will to overcome the prejudice against it. He was one of the founders and incorporators of the Medical and Chirurgical Faculty of Maryland in 1799, was its orator in 1807, and became president in 1815, holding the office until 1820 when he declined further election. The subject of his oration was "Fever." He was also the author of "An Essay on the epidemics in the winters of 1813 and 1814 in Talbot and Queen Anne's Counties, Maryland," read at the annual convention of the Faculty in 1815, and was engaged on a work on the diseases of the Eastern Shore of Maryland at the time of his death. He died at Easton, December 16, 1834, at seventy-six, after an active professional life of over fifty-two years. He left a large family. His wife, Sarah Haywood Martin, died June 3, 1835, aged sixty-eight. He received the honorary degree of M. D. from the University of Maryland in 1818.

EUGENE F. CORDELL.

MARTIN, George (1826-1886), Philadelphia botanist, was born near Claymont, Delaware County, Pennsylvania, in 1826, going as a boy to the West Town Friend's School and afterwards to the University of Pennsylvania where he took his M. D. in 1849. He first practiced at Concordville, Delaware, for some three years, then for five at the Fifth Street Dispensary, and then worked with his cousin, John M. Sharpless, at the chrome works of the latter. During the war he helped in the military hospitals in Chester and settled in West Chester about 1866, remaining there until his death in that town on October 28, 1886. He was a fellow of the College of Physicians of Philadelphia and from 1878 had devoted much time to mycological studies, especially in the examination of the parasitic leaf fungi and only a few days before his death had completed "A Synopsis of the North American Species of Septoria" as a continuation of a series of myological papers he had already contributed. He was also a zealous botanist and in close association with the leading botanists of the day. His writings included: "New Florida Fungi" (Journal of Mycology," i, 97); "Synopsis of the North American Species of Asterina, etc." ("Ibid"., i. 133, 145); "New Fungi" ("Ibid"., ii, 128); "The Phyllostictas of North America" ("Ibid"., ii, 13, 25).

JOHN W. HARSHBERGER.

MARTIN, Henry Austin (1824-1884), of Roxbury, Mass., introducer of true animal vaccination into America, eldest son of Henry James Martin, was born in St. James, London, July 23, 1824. He came from an old Huguenot family and was cousin to Lord Kingdale. He came to America when a boy and studied at Harvard Medical School, graduating in 1845 and settling in practice in Roxbury where he was a leading doctor for forty years. He was, besides being a very eloquent speaker and finished writer, a very skilful surgeon. During the Civil War he was a medical director, and surgeon-in-chief of the Second Division of the Second (Hancock's) Corps.

In 1870 he introduced true animal vaccination into America, and by vast effort and continual writing, succeeded in having that method universally adopted within two years. In 1877 he presented to the American Medical Association a paper on the "Use of Pure Rubber Bandages in Surgery," and Martin's bandage became known throughout the profession. ("Surgical Uses, Other than Hem-

ostatic, of the Strong Elastic Bandage," "Transactions, American Medical Association," Philadelphia, 1877, vol. xxviii.) He was a great student all his life, getting up long before daylight in winter, and always reading or writing several hours before breakfast. One of his hobbies was the collecting of old line engravings, on which he was an authority, and filling his rooms with all that an antiquarian and bibliophile loves to possess.

He married Frances Coffin Crosby, eldest daughter of Judge Nathan Crosby of Lowell, Massachusetts, on August 9, 1848. They had five children, two of whom, Stephen Crosby and Francis Coffin, became physicians.

Dr. Martin died at his home, 27 Dudley St., Roxbury, from diabetes, December 7, 1884.

FRANCIS C. MARTIN.

MARTIN, Henry Newell (1848-1896), physiologist and biologist of the Johns Hopkins University, was born at Newry, County Down, Ireland, of Irish parentage, July 1, 1848, the eldest of a family of twelve. His father was a congregational minister, who afterwards became a school-master. The boy's education was acquired chiefly at home and at the age of fifteen he matriculated at the University of London (an exemption as to age being made in his favor) and at the same time became apprentice to a Dr. McDonagh in the vicinity of University College. It was stipulated that his duties as apprentice should not prevent his attending lectures and doing hospital work. It was during his apprenticeship, in 1867, that the friendship began with Michael Foster, and the latter relates that, although Martin was able to give only half the usual time to his course on practical physiology, he learned more than the rest of the students in their whole time. He greatly distinguished himself at University College, taking several medals and prizes. In 1870 he obtained a scholarship at Christ's College, Cambridge, and was appointed demonstrator of physiology. He did much by his personal qualities and bright ways to make natural science popular in that University. He distinguished himself in Cambridge as he had in London, gaining first place in the Natural Science Tripos in 1873. While there he took the B. Sc. and M. B., London, gaining in the former the scholarship in zoology. He proceeded later to the D. Sc., being the first to take the degree in physiology. About this time he began to do research work, his first paper being on the structure of the olfactory membrane. In the summer of 1874 he assisted Foster in his course on biology and subsequently acted as assistant to Huxley. Under Huxley's supervision, he prepared a text-book of his course, which appeared under their names with the title "Practical Biology." In 1874 he was made fellow of his college, and was fairly launched upon his career. Shortly after this, the Johns Hopkins University was founded, and in 1876 Martin was invited to the chair of biology. He accepted the offer and thus nearly the whole of his scientific career was passed in America. He came prepared to develop the higher teaching of biologic science and especially to foster the spirit of research, and during his stay in Baltimore (1876-1893) he produced a very marked effect on American science, fully carrying out the great aim of the university which had adopted him. He carried on many important investigations, among which may be especially mentioned those on the excised mammalian heart, one of which formed the subject of the "Croonian Lecture" of the Royal Society in 1883. The whole was published by his friends and pupils in 1895, under the title "Physiological Papers." He turned out from his laboratory many trained physiologists, who have maintained the high standard he set. He wrote several text-books, of which his "Human Body," 1881, was most important, becoming very popular. He became a fellow of the Royal Society in 1885; he was also given the honorary M. D. by the University of Georgia. He was one of the founders of the American Physiological Society. In 1892 he lost his wife, and his health, which had already begun to fail, gave way rapidly, so that in 1893 he found it impossible to continue his labors, and resigned his chair. He had never acquired American citizenship and he now returned to England, hoping to obtain improvement there and to be able to resume his investigations. But his health got worse, and on October 27, 1896, he was carried off by a sudden hemorrhage while living at Burley-in-Wharfedale, Yorkshire. A memorial tablet has been erected to Prof. Martin in Johns Hopkins University which commemorates "his brilliant work as investigator, teacher and author," by which "he advanced knowledge and exerted a wide and enduring influence." There is also an oil portrait

of him there. He was somewhat under the ordinary stature and very youthful looking. In 1879 he married the widow of Gen. Pegram, a Confederate officer, celebrated under her maiden name of Hetty Cary as a beauty and woman of great fascination. She was considerably older than he. She died in 1892 without children.

EUGENE F. CORDELL.

MARTIN, Solomon Claiborne (1837-1906), of St. Louis, editor of the "American Journal of Dermatology and Genito-Urinary Diseases". On the twenty-seventh of March, 1906, the city of St. Louis lost Prof. Solomon Claiborne Martin, dermatologist, of Barnes University. His death, unexpected, did not lack a certain tragic feature, since but an hour before he had spoken of feeling it his duty to resume his lectures at the great institution of which he was one of the founders. He was born in Claiborne county, Mississippi, October 26, 1837, and went to the University of Michigan, from which institution he was graduated in 1859, taking his M. D. from Tulane University in 1865. During the Civil War he was attached to the staff of Gen. Wirtz Adams' Independent Cavalry Corps with the rank of major. Later he served under Gen. Albert Sydney Johnston and was at the side of Gen. Johnston when wounded. After exchanging the sword for the surgeon's lance, Martin spent three years in Europe at the great clinics in Heidelberg, Vienna and Paris. He was a perfect linguist, speaking fluently German and French. He organized and edited the St. Louis "Medical Era," and contributed a large number of valuable articles to medical literature, most of his contributions pertained to dermatology and syphilology. Finding that the "Medical Era" which he edited did not justify the publication of too many editorials on his favorite subjects, the "American Journal of Dermatology and Genito-Urinary Diseases" was established, a journal which afterwards became one of the most popular special magazines in the medical world.

He was married to Miss Anna Rosa Calhoun, of Port Gibson, Mississippi, and in 1870 removed to St. Louis, where he spent the rest of his life. They had five children. The eldest son, Dr. S. C. Martin, Jr., succeeded his father as editor-in-chief of the two journals in which he was assisted by his younger brother, Dr. Clarence Martin, an army surgeon.

MARVIN, Joseph Benson (1852-1913), professor of the practice of medicine in the University of Louisville, was born in Monticello, Florida, August 3, 1852, the son of Joseph Manning Marvin and Mary Louise Linton. Immediately after the Civil War he entered the Virginia Military Institute at Lexington, Virginia, and graduated therefrom in 1870. He was at once appointed instructor in chemistry and physics and taking the graduate course in sciences, received his bachelor degree in 1871. He came to Louisville, Kentucky, in 1873 to take up the study of medicine, graduating at the Hospital College of Medicine in 1875. From the first he was much interested in laboratory work and shortly after his graduation he spent a considerable time in New York in the study of chemistry and pathology. Upon his return to Louisville he was at once appointed professor of chemistry and microscopy in his alma mater, occupying this position for about ten years. During this period he became one of the founders of the American Microscopic Society and was for a time one of its most active members. In fact, his greatest interests were always in the laboratory side of medicine and, more than any other man, was he influential in introducing and fostering laboratory work in the medical curriculum of the schools in Kentucky and the South. His interest in pathology laid the foundation for accurate observation and enabled him later to achieve a reputation as a diagnostician of no little merit. After ten years of work in the Hospital College of Medicine he was elected professor of medicine in the Kentucky School of Medicine, a position he held to the time of the merger of all of the medical schools in Kentucky with the University of Louisville, and in this school he occupied the position of chief in the medical division and professor of the practice of medicine until the time of his death.

Dr. Marvin was most active in the elevation of medical standards and medical teaching and, more than any one man in his state, was he responsible for the ultimate bringing about of the merger between the medical schools in Louisville. His interests were in the scientific side of medicine, in laboratory work and medical research, rather than in actual practice. Being a man of some means, he was enabled to follow his bent in this direction and as a result of his independent position the influence which he wielded in his community and state was not only a very great one, but one of inestimable

value and of tremendous stimulus to the profession. During the yellow fever epidemic of 1878 in the South, Louisville became the Mecca of a fleeing host in the endeavor to escape the infection. Through Dr. Marvin's efforts and upon his initiative, a yellow fever hospital was established in the city at this time, of which he became, and continued to be during this epidemic, the resident physician. As a result of his work he wrote a valuable treatise "On the History of the Diagnosis, Pathology and Treatment of Yellow Fever." He was the author of many other papers and reports on medical subjects which are to be found in the current medical literature. He took an active part in obtaining, for the city of Louisville, its new Municipal Hospital, and was a member of the hospital commission appointed by the mayor to supervise its construction. His connection with this commission was terminated by his death, but during the time that he served he was successful, in causing to be accepted, his suggestion that it be made a teaching hospital and in having the plans drawn looking to that end. In addition to his medical work, Dr. Marvin found much time to devote to charity and religious work in which he took the very greatest interest. He was a trustee of the Lincoln Institute and of the Oneida Institute of Kentucky, the latter a mountain school doing a useful work. He was a member of the staff, either active or consultant, of practically all of the hospitals in Louisville which had staffs. He was a member and an active and influential one of his local, state, and national societies.

Dr. Marvin was married on April 30, 1879, in Louisville, Kentucky, to Juliet Henry Norton, and of this union there were three children.

Dr. Marvin lost his life in a railroad accident near New Haven, Connecticut, September 2, 1913.

LOUIS FRANK.

MASTIN, Claudius Henry (1826-1898), Alabama surgeon, was born in Huntsville, in that state June 4, 1826, the son of Francis Turner, planter, and Ann Elizabeth Caroline Livert. His paternal grandfather, Francis Turner Mastin, came from Wales when Lord Fairfax settled in Maryland. His mother was a daughter of one Claudius Livert, a physician of Lyons. The boy went to Greenville Academy, Huntsville, and afterwards to the University of Virginia, then studied medicine with Dr. John Y. Bassett (q. v.), who in those anti-legal dissecting days had a room whereunto in the darkness often the dead body of a negro from some nearby plantation burial ground was conveyed up the back stairs by the students. Mastin spent many night hours there over his anatomical studies and easily took his M. D. from the University of Pennsylvania in 1849. He returned to Huntsville, went to Nashville, Tennessee, but eventually attended lectures at Edinburgh University, the Royal College of Surgeons, London, and in Paris, finally settling in Mobile, Alabama, to practice with his uncle, Dr. Livert. In 1861 he served as a Confederate States volunteer, afterwards with the regulars as medical director on the staff of Gen. Leonidas Polk until after the battle of Shiloh when he became inspector of the army of the Mississippi under Gen. Beauregard. The war over, he returned to Mobile and showed himself an expert surgeon, doing most of the major operations of his day. His uncle had made a series of experiments upon animals in 1828, using metallic ligatures for ligation of arteries, leaving the gold, silver or lead wire to become encysted. Nephew Claudius put the knowledge thus obtained into actual practice upon the human subject, ligating the external iliac with silver wire for aneurysm of the femoral artery at Scarpa's triangle, in June, 1866. He was thus the first to tie successfully with a metallic ligature a large artery in the human body. Having considerable ingenuity, he was the inventor of several instruments; he also wrote many articles, chiefly dealing with genito-urinary surgery.

In September, 1848, he married Mary E. McDowell of Huntsville, a descendant of Ephraim McDowell, the ovariotomist, and had two sons and two daughters. He died when seventy-two on the third of October, 1898, after an immediate illness of one week. He was a man of most striking appearance, tall, erect and with piercing eyes.

He received an LL. D. from the University of Pennsylvania, and was president of the American Surgical Association in 1890-1. His keen interest in the advance of medical science led to his founding the Congress of American Physicians and Surgeons and being a prominent organizer of the American Genito-Urinary Association. He was also a member of the Boston Gynecological Society, of the Southern Surgical and Gynecological Association and of the Central Council of the University of Pennsylvania.

His articles include: "Inguinal Aneurysm; successful ligation of external iliac artery by

means of silver wire," 1866; "Internal Urethrotomy as a Cure for Urethral Stricture," 1871; "Chronic Urethral Discharges," 1872; "A New Method of Treating Strictures of the Urethra," 1873; "Subcutaneous division of Urethral Stricture," 1886.

CLAUDIUS HENRY MASTIN, JR.

Mathers, George Shrader (1887-1918), of the John McCormick institute for Infectious Diseases, Chicago. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. page 768.

MATHEWSON, Arthur (1837-1920), senior surgeon of the Brooklyn (N. Y.) Eye and Ear Hospital, was born September 11, 1837 in Brooklyn, Connecticut, the son of Rufus Smith and Faith McClellan Mathewson and the ninth lineal decendant of John Alden. He was graduated at Yale in 1858 and took his medical degree from the New York University in 1861. For a short time he was at the Naval Hospital in Brooklyn and served for two years on the Winona in Farragut's Squadron, being promoted to the rank of surgeon in 1865. He settled in Brooklyn, New York, in 1867, to specialize in ophthalmic and aural surgery. During the next year he aided in establishing the Brooklyn Eye and Ear Hospital where he was senior surgeon for thirty two years. He delivered the first course of lectures on ophthalmology and otology in Yale Medical School in 1876. In 1886 he was appointed professor of otology in the Long Island College Hospital. After retiring from practice in 1904, he moved to Washington. During 1894-97, he was president of the American Otological Society and during 1906, was president of the American Opthalmological Society.

In collaboration with Dr. Homer G. Newton, he translated Doctor Adam Politzer's work on diseases of the ear and published it under the title, "Membrana Tympani, in Health and Disease, Clinical Contributions to the Diagnosis and Treatment of Diseases of the Ear." In the "Transactions of the International Otological Society" for 1876, he described a new operation for the removal of bony growths from the external auditory meatus.

Dr. Mathewson married Harriet Stilliman Blagden; two sons and a daughter survived him. After suffering several years from paralysis, he died December 31, 1920.

MATTHEWS, James Newton (1852-1910), of Illinois, physician, "Poet of the Prairie", was born near Greencastle, Indiana, May 27, 1852. He was the son of Dr. William and Deborah S. Matthews, and was a lineal descendant of Samuel Matthews, one of the early colonial governors of Virginia, and a cousin of the historian, John Clark Ridpath, Dr. William Matthews, the father of James, was an able practitioner of medicine for nearly thirty years, and was possessed of uncommon literary ability, writing forcefully for the press upon a great variety of topics. In 1858 young Matthews was brought by his parents to Mason, Illinois, and in 1868 he had the distinction of being the first student to enter the University of Illinois at Urbana and was graduated there in 1872. In 1878 he received an M. D. from the Missouri Medical College and in 1894 also had the degree of M. L. from the University of Illinois. After his graduation in medicine he entered active practice at Mason, Illinois, and for more than thirty years was a typical country physician. He stood at the head of the local profession and took an active interest in the local and state medical societies. He was a frequent contributor to the daily and weekly papers and his writings, especially his poetry, attracted much attention and found its way into the leading magazines of the country. In 1888 he published a volume of poems under the title, "Tempe Vale and Other Poems." In 1896-97 he delivered lectures of a literary nature throughout Indiana, Illinois and Iowa. He was one of the founders of the Western Writers' Association and was connected with the Delta Tau Delta fraternity. In 1911 "The Lute of Life" was published. It consists of a collection of the poems written by Dr. Matthews, edited by Walter Hurt, and with a foreword by James Whitcomb Riley, who was a close personal friend and admirer of the author. Dr. Matthews numbered among his associates many of the most famous literary persons of his time, and they have placed a very high estimate on the quality and value of his verse. He was well known as "The Poet of the Prairie." His poems indicate a deep sympathy with the country, the sky, the woods and flowers, the rivers and prairies. The experiences of a general practitioner of medicine are also reflected in the deep insight into and sympathy with human feelings and suffering as well as pleasures. Some of his poems have direct medical interest.

Dr. Matthews was married in 1878 to Luella Brown, and in 1896 to Madeline Wright. He had three children, William V. and James R. by his first marriage and Courtland Wade by his second. He died of pneumonia at Mason, Illinois, March 7, 1910.

GEORGE H. WEAVER.

MATTHEWS, Washington (1843-1905), surgeon, U. S. A., writer on anthropology, having lost his mother in early infancy, his father, a physician, brought him while still a child to the United States and settled in Dubuque, Iowa. Young Matthews studied medicine under his father and later attended lectures at the University of Iowa, where he obtained his M. D. in 1864. In the same year, entering the Army of the United States, he served as acting assistant surgeon until the close of the Civil War. In 1868 he was promoted to the rank of captain, and in 1889 to that of major. During a great part of his military life Matthews was on duty at various army posts in the West. Coming in contact with many Indian tribes, he became deeply interested in Indian ethnology and philology, and wrote numerous articles on anthropological subjects, among which may be mentioned: "The Human Bones of the Hemenway Collection," "Myths of Gestation and Parturition," "On Measuring the Cubic Capacity of the Skull," etc. A volume of "Navaho Legends" was published in 1896. Matthews died at Washington D. C., April 29, 1905.

ALBERT ALLEMANN.

MAURY, Frank Fontaine (1840-1879), of Philadelphia, a rising surgeon, teacher, and first in America to do gastrotomy, was born in Danville, Kentucky, August 9, 1840, the son of a clergyman, the descendant of Huguenot stock. He passed through Centre College, Danville, in 1859, and attended a course of lectures at the University of Virginia, and then went to complete his medical course at the Jefferson Medical College, Philadelphia, where he received his M. D. in 1862, and settled in Philadelphia. He served for a time in a military hospital and then began to devote all his energies to surgery. He was made lecturer on venereal and cutaneous diseases in his alma mater, and a surgeon to the Philadelphia Almshouse (Blockley). He was chief of the clinic of the elder Gross, and a surgeon to the Jefferson College Hospital.

He did the first American gastrotomy on June 25, 1869, the tenth recorded case, on a man dying from a syphilitic stricture of the esophagus (Sedillot's operation, 1849); the patient, in extremis at the time of operation, died immediately after ("see Am. Jour. Med Sci.," 1870, p. 365). On October, 1873, he excised the left brachial plexus of old Davy, the janitor, who was an extreme sufferer from multiple neuromata of the shoulder; the case had been described the previous year in the same journal by Duhring. The outcome was a paralysis of the arm and a failure to give adequate relief, as the writer recalls. He reported in the "American Journal of the Medical Sciences" for January, 1878, in conjunction with C. W. Dulles, a remarkable series of cases in which "Kelly the Bum," a tramp and professional tattooer, had infected large numbers of men in various cities, by mixing his pigments with his saliva as he injected them under the skin in his decorative efforts. Twenty-two cases were studied, and the determination was reached that saliva contaminated by mucous patches is contagious, as well as the secretions of the secondary lesions; a warning is also given against the indiscriminate use of common utensils. He operated four times for exstrophy of the bladder, and twice for extirpation of the thyroid gland.

In conjunction with Duhring he edited the "Photographic Review of Medicine and Surgery" for the two years of its existence. He was an impressive lecturer, and gay and attractive to young men; but unfortunately held the utterly lax moral code common in his day.

He died on the fourth of June, 1879, two weeks after his wife, who died of a sudden acute peritonitis, leaving two children.

HOWARD A. KELLY.

MAURY, Richard Brooke (1834-1919), pioneer gynecologist, and eminent public citizen of Memphis, Tenn., was born February 5, 1834, in Georgetown, District of Columbia, and spent his boyhood in Fredericksburg, Va., growing up in that atmosphere of refinement and culture which seemed to emanate from him through life. He was a descendant of Mathew Fontaine Maury who settled in Virginia in 1718. At 16 he studied at the University of Virginia for two years and then taught school for four years and returned to study medicine under John Staige Davis, (q. v.) James Cabell (q. v.) and Henry Howard. He took his degree in 1857 and went to New York as an intern at Bellevue Hospital. While there he attended lectures at the Med-

ical Department of the University of New York, and got a diploma in 1858. Towards the close of his internship, warned by pulmonary hemorrhage, he went south at Dr. Metcalf's advice and settled at Port Gibson, Miss. When war broke out he was made surgeon to the 28th Mississippi Cavalry, and later transferred to Gen. Joseph E. Johnston's hospital for officers at Lauderdale Springs, Miss., also supervising other hospitals. In 1867 he went to Memphis, and became associated with Dr. R. W. Mitchell, when he laid the foundation for his special work in gynecology. He organized the Woman's Hospital in Memphis, later merged into the Lucy Brinkley Hospital, of which he was surgeon-in-chief. He held the chair of gynecology in the Memphis Medical College for 12 years, and was the first to introduce graduate trained nurses into Memphis. In 1907 he organized the City Club to eliminate party politics from the municipal government and inaugurated a commission form of government, and a bureau of municipal research for the purpose of instituting business methods in the city's management. In 1911, through his efforts, the West Tennessee Audubon Society was organized and made successful; he often lectured to the children on birds. In 1914 public recreation centers were provided, with his cooperation also for years he was president of the Board of Education. His son Dr. John M. Maury followed him in Memphis.

He died March 17, 1919, after a protracted pneumonia.

MAXWELL, George Troupe (1827-1879), of Jacksonville, Florida, the son of a planter, was born in Bryan County, Georgia, August 6, 1827. His maternal grandfather, Colonel John Baker, was an officer of the Revolutionary Army from Georgia. George was educated in the Chetham Academy, Savannah, and at the University of the City of New York, receiving an M. D. from the latter in 1848. Beginning practice at Tallahassee, Florida, in 1857, he was appointed surgeon to the Marine Hospital at Key West, and three years later professor of obstetrics and diseases of women and children at Oglethorpe Medical College, necessitating his removal to Savannah. On the breaking out of the Civil War in 1861, he enlisted in the Confederate Army as a private and served four years, attaining the rank of colonel, with a recommendation for brigadier-general, a position he was prevented from filling by the ending of the war. In 1865 Dr. Maxwell was a delegate to the convention held for the purpose of remodeling the constitution of the State of Florida and he served also as a member of the State legislature. He made Jacksonville his residence after 1866. In 1871 he removed to Newcastle, Delaware, where he became vice-president of the Delaware Medical Society in 1874 and secretary, 1875-76. During this period the doctor contributed many articles to medical literature, including "An Exposition of the Liability of the Negro Race to Yellow Fever," "A Demonstration of the Non-digestive Powers of the Large Intestines," and "A History of My Invention of the Laryngoscope," "Medical Record," New York, 1872. He perfected a laryngoscope in 1869 with which he could see the vocal chords in the living, showing originality, but making no claim to priority, as Manuel Garcia had published his account of the first laryngoscope in 1855. While in Delaware he conducted a daily paper in the interest of the democratic party. He was a prominent Mason and was made Worshipful Master of the State of Delaware. From thence he removed to Atlanta and entered upon the practice of medicine in that city. He afterwards returned to Florida and at one time held a professorship in the State Agricultural College. On the outbreak of yellow fever in 1888 he returned to Jacksonville and remained during the epidemic and afterward until his death from apoplexy, September 2, 1897. The Florida Medical Association, of which he had been president, passed resolutions on his death.

While in Jacksonville he published "Municipal Hygiene," 1894; and "Hygiene in Florida," 1895.

Dr. Maxwell was a man of brilliant conversational powers and social qualities, besides being a skilful physician.

MAY, Frederick (1773-1847), pioneer physician of Washington, D. C. was born November 16, 1773, in Boston, Massachusetts, and took an A. B. in 1792 and M. B. in 1795 from Harvard. His ancestry was of the early New England colonists and patriots of the Revolution. He went to Washington in 1795—five years before the transfer of the National government to the City, and he was a pioneer who prepared the way for others. The third president of the Medical Society of the District of Columbia, he was re-elected for fifteen successive years, 1833-1848, and then declined a re-election against the unanimous protests of his colleagues. No other

president served in that office for so long a period. When he came to the City it was a mere wilderness, and he was the only practitioner of medicine. He soon succeeded in securing the confidence of the residents, and, as the city increased in population so did he add to his popularity and professional usefulness. In the year 1823, upon the establishment of a medical school in this city, he was appointed to the chair of obstetrics in Columbia University. In this he distinguished himself as a lecturer, by the soundness of his doctrine and by the beautiful and classic style of his lectures. He was an incorporator of the Medical Society of the District of Columbia.

During the last year of his life he withdrew from active duty, and died January 23, 1847.

DANIEL SMITH LAMB.

MAY, Frederick John (1812-1891), surgeon of Washington, D. C., son of Dr. Frederick May (q. v.), was born in Washington, D. C., on May 19, 1812. He took an A. B. from Columbia College in 1831 and shortly after his graduation in medicine from the same college in 1834 he went to Europe and spent over a year in the leading hospitals of London and Paris, in this way familiarizing himself with all the latest in medicine and surgery. After an extended tour through Europe, the West Indies and the United States, he practiced in his native city and joined the Medical Society of the District of Columbia in 1838, his father then being president. In 1839 he was elected to the chair of anatomy and physiology in Columbia College, District of Columbia, and in 1841 was transferred to that of principles and practice of surgery, a position he filled most acceptably until his resignation, in 1858. He was honored about the same time with the professorship of surgery in the University of Maryland, which he filled for two years. He became also a member of the section of physiology and medicine of the National Institute, Washington. In 1858 he was elected to the chair of surgery in the Shelby Medical College, Nashville, Tennessee. He was one of the first surgeons in America to amputate at the hipjoint with success, and the first in Washington to perform ovariotomy. His skill was widely recognized, so that for years most of the major surgery in Washington fell to his care. Shortly after the Civil War he removed to New York, continuing, however, to spend much time in Washington attending to his real estate and other interests; the whole family returned to live in Washington about 1880. In 1884 he was elected surgeon on the consulting staff of Garfield Memorial Hospital, serving there faithfully and as president of the medical staff for five years, until the necessity for lessening his duties owing to advancing age induced him to resign. He died on May 2, 1891.

DANIEL SMITH LAMB.

May, James (1798-1873), and Benjamin May, pioneer physicians of Petersburg, Virginia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920 page 771.

MAYO, Robert (1784-1864), of Virginia and Washington, D. C., physician, editor, political writer and author of educational works, came of the distinguished Virginia family whose first representative was William Mayo (1685?-1744), civil engineer, who, born in England, went to the Island of Barbados in 1716 where between 1717 and 1721 he made a survey, the map of which was deposited in the Library of King's College, Oxford. He went to Virginia in 1723, did important surveying there and laid out the city of Richmond in 1737. His grandson, the subject of our sketch, was born in Powhatan County, Virginia, April 25, 1784. He was educated at William and Mary College, when Bishop Madison was president, and studied medicine at the University of Pennsylvania, graduating in 1808 with a thesis entitled "On the Sensorium." Mayo became editor of the "Jackson Democrat" in Richmond, Virginia, and in 1830 moved to Washington, where he entered into government service. He compiled an "Epitome of Ancient Geography" (1814); "A New System of Mythology" (1819); "The Pension Laws of the United States . . . by desire of the Secretary of War for the Use of the Pension Office" (1832)—a second edition was edited with Ferdinand Moulton (1852), the fourth edition was published in 1861; "Synopsis of the Commercial and Revenue System of the United States" (1847). He left an uncompleted genealogical history of the Mayo family. His work, "Political Sketches of Eight Years in Washington" (1839), prints in an introduction letters of commendation from distinguished persons of the time, including Dr. John Syng Dorsey, Dr. Nathaniel Chapman, Dr. Charles Caldwell, the Rev. Dr. Frederick Beasley, John Adams, James Madison, John Marshall and Winfield Scott; in the

same book the author bewails the "sacrifice" made "in pursuing the phantom of Jacksonian democracy."

Mayo died in Washington, October 31, 1864.

HOWARD A. KELLY.

MAYO, William Worrell (1819-1911), pioneer surgeon of Rochester, Minnesota, was born May 31, 1819, near Manchester, England, being a descendant of an old English family, which settled in the vicinity of Manchester in the year 1527, and of whom many have won marked distinction in the learned profession. He received his general education in Manchester, England, where he was a pupil and protege of the famous physicist, John Dalton, under whose direction he was trained as a physicist and chemist. In 1845 he came to the United States and practiced his profession as a chemist in New York City. In 1847 he removed to Lafayette, Indiana, where he engaged in the study of medicine with Dr. Eleazar Deming. After serving an apprenticeship of two years, he went to St. Louis and completed his medical studies in the University of Missouri. There he acted as assistant to Professor John T. Hogen, (q. v.), and graduated in 1854. After obtaining his medical degree he removed to Minnesota with his family, a wife and child. In Minnesota he practiced medicine first in St. Paul, and later in Duluth and finally settled in Le Sueur, Minnesota, where he resided at the outbreak of the Civil War. In 1862 occurred the massacre of the settlers in Minnesota by the Sioux Indians. Dr. Mayo was surgeon with the band of settlers who checked the advance of the Sioux at New Ulm, and shortly after this he was appointed provost surgeon for Southern Minnesota in charge of the recruiting stations for the Civil War. In 1863 he removed his residence to Rochester, Minnesota, where he continued to reside until his death on March 6, 1911. In 1871 Dr. Mayo took a postgraduate course at the Bellevue Hospital Medical College, New York, and received an "ad eundem" degree. Always greatly interested in surgery and one of the pioneers in abdominal surgery in America, he successfully performed his first laparotomy for ovarian tumor in 1871, and during the next thirteen years made thirty-six similar operations. He was one of the first physicians in the West to adopt the aid of the microscope in medicine and he became expert in its use.

Dr. Mayo was one of the founders of the Minnesota State Medical Society in 1868 and its president in 1873. In 1882 he organized the Olmsted County Medical Society, of which he was a member during the remainder of his life. For nearly fifty years he was a member also of the American Medical Association. He made numerous contributions to medical literature on various medical and surgical topics. Politically he was a staunch democrat. He served as mayor of the City of Rochester several terms, and was state senator for his district for two terms. Dr. Mayo was a lifelong advocate of those political reforms which lead to equal opportunity for all men, and he lived long enough to see many of his ideals realized. He was most charitable to the poor, giving of both his time and money freely. He was not in active practice during the last fifteen years of his life, but he continued to be greatly interested in his profession and paid daily visits to the hospital. When he was 85 years of age he made a trip around the world alone, and when 88 years of age he spent several months in Japan and the Orient. His death occurred March 6, 1911, as the result of an injury to his left hand and arm a year previously.

In 1851 he married Louise A. Wright. He was survived by three children: Mrs. D. M. Berkman, Dr. William J. Mayo and Dr. Charles H. Mayo, all residing and the sons practicing surgery in Rochester, Minnesota.

BURNSIDE FOSTER.

MAYS, Thomas Jef (1846-1918), Philadelphia specialist in diseases of the heart and lungs, was born in Lebanon County, Pa., January 10, 1846. He was graduated from the Jefferson Medical College in 1868, and spent nine months in 1882 and 1883 in medical work under the tuition of Kronecker, Grawitz, Fränkel and Baumann in Berlin, and also at the Brompton Hospital for Women in London. His principal object in going abroad was to familiarize himself with the latest methods of pharmacological, therapeutical and pathological investigations, and to study especially diseases of the lungs and heart. Returning in 1885, he resumed practice and three years later was appointed professor of diseases of the chest at the Philadelphia Polyclinic Hospital, holding this position until 1902. In 1890 he assisted in organizing the Rush Hospital for Consumptives and was visiting physician there until he resigned in 1905. In 1908 he organized the Philadelphia Clinic for the home treatment of consumption and was made medical director of the institution, a position he filled

until his death. He was also visiting physician to St. Mary's Home for Aged Women and consulting physician to the Institution for the Feeble-Minded at Vineland, N. J. He was a member of the American Climatological Association, the American Neurological Association, the Philadelphia College of Physicians, and the state and county medical societies. He was a voluminous writer and contributed about five hundred articles to medical periodicals and was the author of "Pulmonary Consumption, a Nervous Disease;" "Therapeutic Forces and Consumption, Pneumonia and Their Allies."

Dr. Mays died of apoplexy, February 14, 1918, at his home in Philadelphia.

MEACHAM, Frank Adams (1862-1902), known chiefly for his heroic efforts in fighting unsanitary conditions in the Philippines, was born near Cumberland Gap, Kentucky, October 28, 1862, the son of an army surgeon. He was graduated from Yale in 1887 and took his M. D. at the University of Virginia in 1889, settling to practice in Salt Lake City, but his bent was towards bacteriology and in 1894 he earnestly studied this and surgical pathology at Johns Hopkins University, publishing a number of articles, and on return was made chief surgeon of the Holy Cross Hospital, Salt Lake City, Utah. In April, 1900 (?) he went to Manila and was assigned chief of the health department and afterwards chief medical inspector. He instituted the campaign against bubonic plague, the extermination of rats, the fungus treatment for the extermination of locusts and the virus inoculation for plague prevention. In the report of the Secretary of the Interior for 1902, in connection with the epidemic of bubonic plague in Manila, it was stated: "Especial credit is due to Chief Health Inspector Meacham for the ingenuity which he displayed in devising means for the destruction of rats and for the tireless energy with which he devoted himself to securing the adoption of such means." On March 20, 1902, Asiatic cholera appeared in Manila and Maj. Meacham's efforts from this time up to the time of his death were largely expended in its suppression. He was taken to the hospital, sick, some time in April, although he had been ailing for several weeks before. He was supposed at the hospital to be suffering from gastritis. "I did not see Maj. Meacham when he was sick. It is stated that he had been in bed at the hospital for several days, had got out of bed to walk across the floor and had dropped back dead. This was on April 14. I performed the autopsy and found advanced fatty degeneration of the heart muscle and coronary artery disease. His heart is now preserved in the Pathological Museum of our Laboratory. "He had borne the brunt of the fight against bubonic plague, and from the beginning of cholera had displayed tireless energy in his efforts to combat the new epidemic. Although suffering from a high fever, he had for several days continued to expose himself to the intense heat of the sun by day and had worked in his office until late at night, keeping his colleagues in ignorance as to his true condition. He gave up only when unable to rise from his bed, and died three days later of heart failure, the result of utter exhaustion from long continued overwork. Dr. Meacham was an able administrator, and was endowed with the faculty, as valuable as it was unusual, of discharging disagreeable duties in such a way as to win not only the respect but the regard of those most injuriously affected. He sacrificed his life in the discharge of duty, and his death was an irreparable loss. I quote from the ministerial report."

Dr. Meacham was married, but his wife was not in the Philippines at the time of his death. She was on her way to the Islands at the time he died, and arrived in Manila a few days after, only to learn she was too late.

He was buried in the National Cemetery, Arlington, Virginia, and the class of '87 (Yale) erected a tablet to his memory in the Memorial Vestibule of the University.

RICHARD P. STRONG.

MEACHEM, John Goldsborough (1823-1896), early physician and writer of Racine, Wisconsin, the son of the Rev. Thomas and Elizabeth Meachem of Axbridge, Somerset, England, was born there May 27, 1823. In 1831 his parents came to the United States and the boy was educated at Richmond Academy, New York. In 1840 he began to study under Dr. Harvey Jewett at Richmond, New York, and attended lectures at Geneva Medical College one year, and the following year at Castleton Medical College, from which he was graduated in 1843, and began to practice the same year at Weathersfield Springs, New York, subsequently at Linden, and at Warsaw, New York, until 1862, when he came to Racine, Wisconsin, where the remainder of his life was spent. His profes-

sional standing was recognized by the Bellevue Hospital Medical College, whose diploma he received in 1862. In 1861 he was appointed enrollment surgeon by Gov. Hunt of New York, and in 1862-63 had charge of the regimental hospital at Camp Utley, at Racine. He was one of the founders of and for more than twenty years a physician to St. Luke's Hospital at Racine. In 1881 he was president of the Wisconsin State Medical Society. A general practice of over fifty years embraced many dangerous and difficult cases in surgery. His numerous cases of amputations, trephining, and liberal practice in lithotomy, ovariotomy, and other lines of his profession attest both skill and knowledge.

His contributions to medical literature included: "Removal of Two Stones weighing two ounces, from Bladder of Female"; "Ligature of Carotid Artery for Occipital Aneurism"; "Medical Education"; "Stromasyphilis"; "Fifteen Cases of Puerperal Eclampsia, with one death, Bleeding the Remedy"; "Insanity due to Uterine Disease"; "Pneumonia and its Treatment"; "Lung Diseases as They Occur on the Shore of Lake Michigan"; "Passage of a Needle through the Heart, with Recovery," and an address before the Wisconsin State Medical Society on "Honor to Professional Men," may properly be mentioned as showing both professional skill and professional spirit. These papers were published in the "Transactions of the Wisconsin State Medical Society."

Meachem married in June, 1884, Myraette, daughter of Reuben Doolittle. Two daughters, Myraette and Elizabeth, died in their girlhood. One son, John Goldsborough Meachem, Jr., became a physician.

The father died February 1, 1896, from heart disease after an illness of nearly one year; leaving a stainless character as a heritage for his kindred.

JOHN G. MEACHEM, JR.

MEAD, Edward (1819-1883). Among the teachers in the early medical schools of Illinois, Edward Mead stands as the pioneer student of psychiatry in this region and as the first to offer institutional care for the insane in Illinois. He was born in Leeds, Yorkshire County, England, March 21, 1819. When 12 years of age, his parents brought him to America. Little is known of his early years. About 1838, he began the study of medicine with Dr. Robert Thompson of Columbus, Ohio. In 1841, he graduated from the Medical College of Ohio, and then journeyed to Europe to complete his education. On his return, he settled in Cincinnati, and in 1842, moved to St. Charles, Illinois. Here he carried on an extensive practice among the settlers. Almost at once he began agitation for the establishment of a state hospital for the insane, and after years of persistent endeavor, backed by his colleagues in Illinois College, the Illinois State Hospital at Jacksonville was established in 1847. When a medical school was organized at St. Charles, Ill., in 1843, he was one of the teachers. In 1844, he wrote a report on medical education for an Illinois school convention, and he made a report on medical education at the Illinois State Medical Convention at Springfield, Dec. 16, 1846. In 1845-1846 he was professor of materia medica and therapeutics in the Medical Department of Illinois College. As a delegate from this school, he attended the National Medical Convention in New York, being the only representative from Illinois. Here he was appointed a member of a committee to prepare a report on the preliminary education of students in medicine, and he contributed to the report of the committee which was presented in Philadelphia the following year when the American Medical Association was organized. In 1847, Mead opened a private hospital for the insane in Chicago, at the time being the only hospital for the mentally afflicted west of Columbus, Ohio. The institution was situated on 20 acres of land 2¼ miles northwest of the business part of the city. The institution came to an end in 1851, when the buildings were destroyed by fire. During its existence, treatment was given to 139 patients, nearly half of whom were discharged cured. After the loss of his institution he accepted the chair of obstetrics in the Cincinnati College of Medicine and Surgery, lecturing also on his favorite topics, mental diseases and medical jurisprudence. In 1853, he founded the "American Psychological Journal," which was published for one year. Unable to subscribe to the methods followed in conducting the medical school, he resigned after two years. He then founded the Cincinnati Retreat for the Insane, which he conducted until 1869, when he moved to Boston. From 1872 until his death, he conducted private hospitals for the insane in Winchester and Roxbury, Mass., near Boston.

In 1883, while on a trip for his health, the vessel in which he sailed was wrecked on the coast of Pico in the Azores, and he was drowned.

GEORGE H. WEAVER.

MEARNS, Edgar Alexander (1856-1916), field naturalist and military surgeon, was born September 11, 1856, the son of Alexander and Nancy Reliance Carswell Mearns. His grandfather came over from Scotland in 1805 and settled at Highland Falls, New York, where Alexander, one of seven children was born; his mother was of New England stock. An interest in birds fostered by his mother was evident before he was three years old; later, trapping and hunting specimens of all sorts often interfered with punctuality at school. At the age of ten he began to write up his observations of birds and at sixteen, began a report on the vertebrate fauna of his region, collecting seriously, labelling with care, and appending notes. Of birds alone, it is estimated that over 60,000 measurements are recorded in his field catalogues. He was also interested in mammals, botany, shells, and anthropology, and collected wherever he journeyed. His first published paper was "The Capture of Several Rare Birds near West Point, New York," 1878; here under the first species named he acknowledged information received from Theodore Roosevelt under whom he did some of his latest field work. Between 1879 and 1881, he published "A List of the Birds of the Hudson Highlands, with Annotations" in the "Bulletin of the Essex Institute." In 1898, he issued "A Study of the Vertebrate Fauna of the Hudson Highlands, with Observations on the Mollusca, Crustacea, Lepidoptera, and the Flora of the Region." In 1881, he received an M. D. from the College of Physicians and Surgeons of New York. The same year he married Ella Wittich of Circleville, Ohio, who shared his love for natural history, especially botany. They had two children, Louis di Zerega and Lillian Hathaway. The following year, Mearns entered the medical department of the United States Army; before receiving his commission, he worked in the American Museum of Natural History labelling the large collection of European birds, cataloguing the birds and their eggs, and establishing a cabinet collection for the use of students. He was a founder of the American Ornithologist's Union in September, 1883. On December third, he received his commission as assistant surgeon in the army, ranking as first lieutenant, and selected Fort Verde, Arizona as a good collecting ground. There he investigated the cliff dwellings and wrote on "Ancient Dwellings of the Rio Verde Valley," 1890. During 1889-1890, he visited the Museum in New York and described several new mammals and birds. While at Fort Snelling he investigated the sparrow hawks and wrote "A Study of the Sparrow Hawks of America," 1892. In 1892-94, he headed the biological survey of the Mexican—United States Boundary Commission along the line from El Paso to the Pacific, acquiring for the United States National Museum some 30,000 specimens carefully arranged and annotated for the study of variations. He planned an elaborate report on biology, geology, etc., based on the boundary collections, but a dull-witted Congress withheld appropriation for printing and illustrations; the part on mammals appeared in 1907 with many plates and text figures. During the Spanish War, he served with the rank of major. At Fort Yellowstone in 1902, he was particularly active in botanical work and here noted the destruction of animal life by the accumulation of a heavy gas in certain depressions. In the Philippines in 1903-04 and again in 1905-07, he was largely responsible for the formation of the Philippine Scientific Association. In five papers issued after a study of his Philippine material, he described 6 new genera and 25 new species of mammals, one new genus and 19 new species of birds, and added 8 species not previously known to live in the Islands. Stopping at Guam in July, 1905, for a few hours, he collected as usual and secured 23 birds and other material. On a Malindano exploration in western Mindinao he discovered a new genus of birds, Malindangia. In 1908, he went with Roosevelt on his hunting and scientific expedition through Africa; of the nearly 4,000 birds collected, over 3,000 were secured by Mearns. After his return to Washington, Mr. Childs Frick persuaded him to undertake an African journey into Abyssinia and little known parts of East Africa. Though physically unfit, he could not resist and spent about a year (1911-12) in Djibouti, French Somaliland, traveling inland to Dire Daoua and to Addis Abeba, the Abyssinian capital, then working south and skirting Lake Rudolf and finally reaching Nairobi. While away, his son and devoted companion died in Baltimore. On this trip, he added over 5,000 birds to the available material. Again at home, he settled down with relief to museum research, to study his vast collections, but he grew increasingly infirm in spite of efforts to build up sundry brief changes and unable to complete his task passed away in the Walter Reed Hospital, in Washington, November 1, 1916. His collect-

ions were distributed among the American Museum of Natural History, the United States National Museum, and the Army Medical Museum.

Mearns was perhaps the most remarkable, universal, and insatiable collector this country has ever known. He had a catholicity of interests, reminding one of the versatile older naturalists. His published writings number some 125 titles; fifty or more species of animals and plants are named for him as well as three genera. Like so many of earth's mighty men, he was little of stature. He was serene, cheerful, generous, and loyal, and had an indomitable spirit. Indeed, he, himself, belonged to a rare genus.

HOWARD A. KELLY.

MEARS, James Ewing (1838-1919), surgeon and teacher of Philadelphia, was born in Indianapolis, Indiana, and educated at Trinity College, Hartford, Connecticut. He entered Jefferson Medical College, Philadelphia, in the autumn of 1863, and came under the direct notice of S. D. Gross (q. v.) and was afterwards much associated with him. The medical education of the Civil War period was pitifully meagre, but Mears more than made up for its defects by life-long study. He taught at Jefferson, and was noted for his preparation of medical men for the United States Naval service; it is said that no pupil of his failed to pass. In 1871 we find him associated with Washington Atlee (q. v.) and reporting his cases of ovariotomy. He was a pioneer in Listerian methods, instance: a case of lacerated wound of the elbow joint so treated in 1876 (Trans. Col. Phys., Phila.) His notable achievement was the surgery of tightly closed jaws (1883 and 1897). His "Practical Surgery" appeared in 1878 and 1885. In 1882 he reported twenty-five cases of abdominal surgery, followed in 1888 by "Surgery of the Abdomen". He was a charter member of the American Surgical Association, had much to do with its organization and was its president in 1894. After retirement he returned to Harvard for a summer course, and wrote an article entitled; "From the Rostrum to the Benches" pleasingly portraying his experiences. Like Nicholas Senn, (q. v.) he visited many remote parts of the world with keen relish. A novel idea was a scholarship in Trinity College, Hartford, granted to an "academic son", as well as the sending of a "medical son" to Harvard, whose course he followed with some paternal solicitude, but not always with entire satisfaction. A keen interest in later life was eugenics; see his "Problem of Race Betterment" 1910. He was also a sturdy advocate of the sterilization of criminals. Among his bequests were a scholarship at Jefferson College, and a gift to the Harvard Cancer Commission of $10,000, Harvard also becoming a residuary legatee with a fund to found courses of instruction in eugenics. He died in May, 1919. He never married.

MEASE, James (1771-1846), philanthropist, antiquarian, and a notable figure in the scientific and intellectual life of Philadelphia in the first half of the nineteenth century, was born in Philadelphia, August 11, 1771, the son of John and Esther Miller Mease. He entered the University of Pennsylvania in 1784, graduating from the collegiate department in 1787, and receiving the degree of master of arts in course in 1790. His medical degree was conferred in 1792, at the first commencement after the union of the medical schools of the College of Philadelphia and the University of Pennsylvania. Among his college classmates were Benjamin F. Bache, grandson of Benjamin Franklin, and father of Franklin Bache (q. v.); George Duffield, Comptroller-General of the State of Pennsylvania, and judge of the United States Court for the Territory of Orleans; Samuel H. Smith, member of the Continental Congress, founder and member of the first board of trustees of the University of the State of Pennsylvania; and James Woodhouse, (q. v.) who went on to the medical department and graduated with Mease in 1792.

Mease began to practice in Philadelphia, and gradually his interests broadened, until he was associated with many of the intellectual and humanitarian efforts of his time. Twice he had yellow fever while combatting epidemics of that disease during his early practice and was bled profusely, according to the practice of the time. In his first illness (1793) he lost 72 ounces of blood, according to Matthew Cary, and when attacked again in the epidemic of 1798, 162 ounces. In the last illness Dr. Benjamin Rush was his physician. He was a member of the American Philosophical Society, 1802; secretary of the Philadelphia Agricultural Society, 1813; and first vice-president of the Philadelphia Athenæum, founded in 1813 to "collect books of references on politics, literature and science, maps and dictionaries, to be accessible at all hours of the day." It was the

foundation of a large and useful public library. The Athenæum today possesses a collection of periodical literature said to be unsurpassed. In 1802 the "Company for the Improvement of the Vine" was organized. Benjamin Say was president; Mease was one of the managers, and had a vineyard with 3,000 plants.

The increasing demand for competent apothecaries led Mease to take the initiative in the effort to give systematic instruction in compounding prescriptions. In 1816, under the auspices of the University of Pennsylvania, he gave in the college building the introductory to a course of private lectures on pharmacy. This was the first attempt to improve pharmacy by private lectures. "Hydrophobia" was the title of his thesis at graduation, and his interest in this subject never waned, for in 1808 he wrote, in the "Philadelphia Medical Museum," "On Snake Stones and other Remedies for the Cure of Diseases produced by the Bites of Snakes and Mad Dogs," a logical paper, exposing the quackery of persons using such stones, and reciting his efforts to prevent the purchase of a stone owned by a Mr. Micow, of Virginia, who offered it for $2,000. Mease's efforts were fruitless and the stone was purchased at ten dollars a share. It was deposited with a Dr. Brockenbrough, of Tappahannock, "as a central spot whence it might be readily obtained" when desired. Dr. Mease adds with sarcasm, "Mr. Micow, no doubt, feels very snug at the receipt of $2,000; and the worthy stockholders are quite secure from even the apprehension of danger from all the attacks of rattlesnakes or mad dogs in their counties!"

Mease has been called the "first American antiquarian" because of his interest in preserving old landmarks and identifying historical points. He wrote to Thomas Jefferson regarding the house in which the Declaration of Independence had been written, and received a reply dated September 16, 1825, fixing the locality. His book "Picture of Philadelphia in 1811" is a valued contribution to local history. His versatility may be seen from the following titles: "Medical Lectures and Essays"; "A Geological Account of the United States"; "Observations on the Penitentiary System of the United States"; "On William Penn's Treaty with the Indians"; "Utility of Public Loan Offices"; "Description of Some of the Medals Struck in the National Academy"; "Letters on the Raising of Silk Worms."

Mease defended Dr. Andrew Turnbull (q. v.) from the aspersions of Bernard Romans in the Bulletin de la société de Géographie, 1827. vii.

With all these interests Mease carried on his practice; he was the friend and one of the attending physicians to Benjamin Rush in his last illness, which he called "a pleurisy."

Mease married Sarah, daughter of Pierce Butler, patriot of the Revolution and Senator from South Carolina. His two sons had their name changed to Butler by act of legislature. His son, Pierce Mease Butler, married Fanny Kemble, the actress, in 1834; a daughter married George Cadwalader.

Mease died May 14, 1846.

HOWARD A. KELLY.

MEEKER, Daniel (1806-1876), was the originator of the LaPorte, Indiana, medical school and later in the faculty. He was born in Schoharie Co., New York., Dec. 17, 1806; attended his first course of lectures at Fairfield, N. Y.; graduated at the close of his second year at Willoughby, Ohio, and settled at LaPorte in 1835. "He was a man of iron will, great physical endurance, and withal a firm believer in the resurrection of the dead, just the man to start successfully a medical college in a small town. 'Old Death,' as the students familiarly called him, never failed to keep the dissecting room abundantly supplied with fresh subjects."

In 1844, he was a candidate for a professorship in Rush Medical College, but failed to receive it. About this time, he published a very good description of epidemic erysipelas as it occurred in LaPorte. Dr. Meeker was president of the Indiana State Medical society in 1857. To the Transactions in 1857, 1858 and 1859 he contributed three articles on "Fractures and False Joints." In the Civil War, he was surgeon of the Ninth Indiana Volunteers (3 months), and later, for a short time, was surgeon of the same in the 3 years' service. After the LaPorte school was discontinued, he gave a course on anatomy at Indianapolis and 5 courses at Keokuk, Iowa. He was a thorough anatomist and a bold, successful operator in surgery.

GEORGE H. WEAVER.

MEIGS, Arthur Vincent (1850-1912), of Philadelphia, pioneer investigator of the chemistry of milk, was born in that city November 1, 1850, and lived there throughout his life. He was of the eighth generation, in direct

descent, from Vincent Meigs, who came to this country from England about 1647; both his father, J. Forsyth (q. v.), and his paternal grandfather, Charles Delucena (q. v.), were physicians. As a boy he attended the Classical Institute of John W. Faires and entered the academic department of the University of Pennsylvania in 1866, but his father was impatient to have him begin his medical course and took him out of college at the end of two years. He began his medical studies at the University of Pennsylvania immediately and finished in the spring of 1871, but did not get his degree until some months later, on account of the rule that degrees were not given to students under the age of twenty-one. Parts of the years 1871 and 1872 were spent abroad, largely in studying medicine at Vienna. From 1872 to 1874 he was a resident at the Pennsylvania Hospital, and immediately afterward began the practice of medicine, which he continued until his death, January 1, 1912. During this period he published a number of scientific articles, a monograph on milk analysis, and two books dealing with diseases of the bloodvessels.

In 1878 he married Mary Roberts Browning, by whom he had three sons who survived him. One son, Edward Browning Meigs, M. D., was attached to the Dairy Division of the U. S. Department of Agriculture. Arthur Meigs was attending physician at the Children's Hospital, at the Sheltering Arms, and at the Pennsylvania Hospital; at one time a trustee of the University of Pennsylvania and of the Wistar Institute; an active member of the College of Physicians, and its president from 1904 to 1907. He was also, at one time, president of the Pathological Society, consulting physician at the Penitentiary and at the Pennsylvania Institution for the Instruction of the Blind. In 1899 he was elected a member of the American Philosophical Society. Such is, in very brief form, the outline of his life.

Of his scientific work, that on the chemistry of milk is, perhaps, the most important. His first article on this subject is entitled "Milk Analysis" and was published in the "Philadelphia Medical Times" in 1882. From 1882 to 1886, most of the time which he could spare from his practice was devoted to the milk question; the fruit of this labor was a number of other smaller articles and a monograph entitled "Milk Analysis and Infant Feeding." For a period of twenty-two years Dr. Meigs devoted himself chiefly to other scientific questions, but in 1908 he again took up the chemistry of milk and worked at it until his death. The work of this latter period was carried out in the Hare Chemical Laboratory of the University of Pennsylvania, largely upon the supervision of Dr. John Marshall (q.v.) and with the help of several trained chemists. The results of the earlier work were, to a large extent, confirmed and a number of interesting new points were brought out. A brief account of some of the aspects of this later work appeared in an article published on December 30, 1911. A satisfactory proof that his work was appreciated is given by Dr. Winters, professor of Diseases of Children in Cornell University Medical College. Dr. Winters based his little book on the Feeding of Infants practically entirely on Dr. Meigs' work, and ended it by saying: "Meigs' discovery, when fully appreciated by physicians and mothers, will be the means of saving more lives than any other discovery made by medical science during the nineteenth century, as it will affect more or less, the life and health of every child born into the world." In the long interval between the publication of Dr. Meigs' work on milk analysis in the early eighties and his return to the subject in 1908, he published a number of articles on scientific subjects, as well as his two books, "The Origin of Disease," and "Human Bloodvessels in Health and Disease." During this period he was particularly interested in the histology and pathology of the arteries and capillaries, and he made the interesting discovery that the capillaries of the heart actually enter the heart muscle fibres. His son and biographer, Edward B. Meigs, says: "I well remember his intense interest in the preparation of the illustrations for his books, which he always considered the most important part of them. He did most if not all the histological work himself and his patience and success with technical matters of this sort always aroused my greatest admiration. When it came to the question of making pictures of his specimens for publication, he went into the matter in the most thorough way—would spend many hours with Mr. Hermann Faber and his son, who made the drawings, and acquired a detailed knowledge of the different methods of reproduction."

He was very fond of nature and of outdoor life and had a remarkable knowledge of trees and plants. It was seldom that he missed an opportunity to drive in the afternoon, or to go out in a boat when he was by the sea.

He was very fond of nature and of outdoor character, and there is reason to believe that this quality gave him a large, though quiet, influence in the selection of men to fill responsible positions in the many institutions to which he belonged.

MEIGS, Charles Delucena (1792-1869), of Philadelphia, was the fifth of the ten children of Josiah Meigs, sixth in descent from Vincent Meigs who came from Dorset, England, and settled in Connecticut about 1647. He got his middle name from his mother's brother, Charles Delucena Benjamin, who had been named for a Spanish gentleman, a friend of his father, Col. John Benjamin of Stratford, Conn. Charles was born February 19, 1792, on the island of St. George, Bermuda, where his father, a Yale graduate, had gone to practice as a proctor in the courts of admiralty. The father soon tired of his work, returned to New Haven and was elected professor of mathematics and natural philosophy at Yale. In 1801 his father had to superintend the erection of the buildings of the University of Georgia and the whole family finally settled in Athens, where Charles went to the grammer school and learned French from Petit de Clairvière, a cultivated emigré. He graduated at the University of Georgia in 1809 and began that same year to study medicine under Dr. Thomas Fendall, serving as apothecary boy and being sent out to cup and leech by his master. He took his M. D. degree from the University of Pennsylvania in 1817. After his marriage to the daughter of William Montgomery, a cotton merchant in Philadelphia, he settled to practice first in Augusta, but afterwards in Philadelphia, quickly obtaining, not practice, but the intimacy and esteem of men like La Roche, Hodge, Bond, Bache, Wood and Bell. He was one of the first editors of "The North American Medical and Surgical Journal" (in 1826), and found time to translate and publish Velpeau's "Elementary Treatise on Midwifery," and seven years later he issued his "Philadelphia Practice of Midwifery," a work showing the bent of his mind to be towards obstetrics. In 1837 with Dr. Gerhard, Dr. Houston and Dr. Ryan, he was appointed by the College of Physicians to act with a committee of the trustees of the estate of Dr. Jonas Preston to found the "Preston Retreat."

Meigs drew special attention to cardiac thrombosis as a cause of those sudden deaths which occur in childbed and previously generally attributed to syncope. In this connection T. Gaillard Thomas says: "It has been remarked that Meigs just escaped the honor which is now and will be hereafter given to Virchow for a great pathological discovery," and Meigs himself said, "I have a just right to claim the merit of being the first writer to call the attention of the medical profession to these sudden concretions of those concresible elements of the blood in the heart and great vessels." It may be said he did not follow his discovery into detail as regards secondary deposits of emboli, nor did he assert such a claim. As professor of obstetrics at Jefferson Medical College (1841-1861) he worked hard in everything connected with his branch, studying German until he was able to read with ease the most important German obstetricians.

His appointments numbered among others: fellowship of the College of Physicians, Philadelphia, and presidency from 1845-1855; and professor of obstetrics and diseases of women and children in Jefferson Medical College, 1841.

Consistent with his idea that men ought to retire before losing the power of judging their own fitness for duty, he sent in his resignation when he was sixty-seven, a resignation unwillingly accepted by the dean, faculty and students. He had a dramatic style of lecturing that held the attention of his hearers. The doctor's robe cast off, he donned that of the bibliophile, and joyfully spent his newly acquired leisure at his country house, Hamanassett, among his old books. Blacksmithing, carpentry and drawing and painting engaged part of the attention of this versatile man. His son says that he was a good amateur at both painting and modeling in clay and wax. Gradually failing health with gastrodynia made him a not unwilling traveller, when, one night, the twenty-second of June, 1869, he set out, without waking, on his last journey.

His books, all written in the midst of most fatiguing obstetrical and general medical practice and lecturing, were a remarkable example of what the human machine can accomplish.

His best known publications are: "Woman, Her Diseases and Remedies," 1847; "Obstetrics, the Science and Art," 1849; "Treatise on Acute and Chronic Diseases of the Neck of the Uterus," 1850; and "On the Nature and Treatment of Childbed Fevers," 1854. In 1851 he wrote a forty-eight page memoir of Samuel George Morton (q. v.) and in

1853 a biographical notice of thirty-eight pages, of Daniel Drake.

MEIGS, James Aitken (1829-1879), is chiefly remembered for his work during nearly a quarter of a century as one of the leading men of the Academy of Natural Science, Philadelphia. He was born in Philadelphia, July 31, 1829, of English and Scotch ancestry and after schoolboy life at Mt. Vernon Grammar School and the Central High School he began to study medicine under Dr. F. G. Smith and Dr. J. M. Allen. He was graduated from Jefferson Medical College in 1851 and settled in Philadelphia, practiced there until his death. He was assistant to the chair of physiology in the Pennsylvania Medical College, then lecturer on climatology and physiology at the Franklin Institute (1854-1862), and finally in 1868 he entered the faculty of the Jefferson Medical College as professor of physiology, being one of the first to teach this subject experimentally by vivisection. "A ripe scholar, with a command of language the offspring of a tenacious memory and a well disciplined mind, he stood before his class the peer of any member of the faculty, wisely confining himself in his teaching, as Dunglison had done, to physiology. If he had one fault it was a love of detail which made him take two sessions to complete the work of the ordinary course, but can this be called a fault?" "I often urged him," says S. D. Gross, "to write an elaborate treatise on philosophy, as no man in America could better grapple with its great problems. He always said he would, but died without doing it"

Much of his leisure was spent among his beloved books and with his old parents. Mutual love could not have been stronger and he seldom spent an evening away from home except for a play, of which he was very fond. His unexpected death came on November 9, 1879, from embolism, after two or three days invalidism. His fortune of some $200,000 gained chiefly among middle class patients went to his father, who was very proud of his son and frequently went to the class room to hear him lecture. His friends had often urged him to take more time for recreation and literary pursuits, but without avail. He seldom absented himself from the city even in the heat of summer; in fact, he led what might be called a suicidal life.

Dr. Meigs' papers on Anthropology are among his best; they include: "Relation of Atomic Heat to Crystalline Form;" "Cranial Characteristics of the Races of Men;" "Hints to Craniographers . . . on the Exchange of Duplicate Crania;" "Observations on the Form of the Occiput in the Various Races of Men;" "On the Mensuration of the Human Skull;" "Observations on the Cranial Forms of the American Aborigines" also his "Correlation of the Vital and Physical Forces," and contributions to Nott and Glidden's Types of Mankind. In 1856 he prepared the first American Edition of Carpenter on the microscope and the following year edited Kirk's manual of physiology.

He held many appointments besides those mentioned, notably: physician to the Howard Hospital; professor of the institutes of medicine in the Philadelphia College of Medicine; consulting physician to the Philadelphia Hospital at Blockley; member of the biological section of the Academy of Natural Sciences; of the Medico-Legal Society of New York; Société d'Anthropologie, Paris; and the Anthropological and Ethnological Societies of London.

MEIGS, John Forsyth (1818-1882), pioneer Philadelphia pediatrician was born in that city October 3, 1818, the son of Charles D. Meigs (q. v.) and Mary, daughter of William Montgomery, of Philadelphia. His early education was obtained at Dr. Crawford's school, and when sixteen he entered the medical department of the University of Pennsylvania; he looked a mere boy, but wore a grave and absorbed expression while listening to the great teachers whom he sat under, 1834-1838. He gave himself to work and kept aloof from the other students. Graduating in 1838, he was immediately elected resident physician in the Pennsylvania Hospital and served for two years. In 1840 he went to Europe and in Paris heard Velpeau and Louis. In 1841 he returned to Philadelphia and began practice with his father. His chief work was among children; he kept voluminous notes, which in a few years made a mass of material forming the basis of his work, "A Practical Treatise on the Diseases of Children" (1848). The first three editions were published under his name alone, the fourth and subsequent editions in collaboration with William Pepper (q. v.). In 1843 he lectured on obstetrics in the Philadelphia Association for Medical Instruction, later lecturing also on practice of medicine and on diseases of children. He was on the staff of the Pennsylvania Hospital from 1859 until his resignation in 1881. At the request

of the managers he wrote "A History of the First Quarter of the Second Century of the Pennsylvania Hospital" (1877). Among his writings was a "Life of Dr. Charles D. Meigs," prepared for the College of Physicians.

In 1844 he married Ann Wilcocks Ingersoll; a son, Arthur Vincent Meigs (q. v.), became a physician.

An attack of pneumonia was the cause of his death on December 16, 1882. A colleague writing of him said: "He has fallen a victim to that peculiarly American habit of life in which a maximum of labor is associated with a minimum of recreation."

Biographical sketches have been written by his son, A. V. Meigs, and by William Pepper.

MELLICHAMP, Joseph Hinson (1829-1903), physician and botanist, of South Carolina, was born in St. Luke's Parish, South Carolina, May 9, 1829. His father, preceptor of Beaufort College, later rector of St. James Church, on James Island, Charleston County, South Carolina, was a lover of nature, and was a strong factor in influencing the son's tastes. The younger Mellichamp was graduated at South Carolina College in 1849 and received an M. D. from the Medical College of the State of South Carolina in 1852. He studied in Dublin and Paris and returned to settle as a physician in Bluffton, in his native state. His practice was chiefly among the planters and their dependents, but in the midst of his busy life he found time for botanical research and collecting, and specimens of the rarer species described by Walter, Michaux, and Elliott were largely and freely distributed to his correspondents. His familiarity with the interesting region in which he lived brought him into intimate touch with contemporary botanists. Engelmann says of him: "Dr. J. H. Mellichamp, who does not even claim to be a botanist, but is imbued with arduous zeal and keen sagacity and who lives right among the Yuccas, has wonderfully improved his opportunities, and has greatly aided me in my investigation by specimens as well as by observations;" and again: " 'P. Elliottii' was imperfectly known . . . till Dr. J. H. Mellichamp, of Bluffton, S. C., rediscovered . . . and directed my attention to it. Without his diligent investigations, ample information and copious specimens, this paper could not have been written. . . . I am particularly indebted to . . . Messrs. Canby, Gilman, Ravenel and Mellichamp for those of the Northern and Eastern Pines." ("Botanical Works of the Late George Engelmann," edited by Wm. Trelease and Asa Gray, 1887.) Sargent says of Dr. Mellichamp: "He rendered substantial service to science . . . and I am glad to take this opportunity to acknowledge my indebtedness to him for the assistance he has rendered me by studying the trees, and especially the oaks of the Carolina Coast Region" (Silva of North America). W. H. Canby says that Mellichamp "Practically discovered 'Pinus Elliottii;' " he records also of him that "Very acute observations on the insectivorous habits of 'Sarracenia variolaris' were published in the Proceedings of the American Association for the Advancement of Science. . . . Dr. Gray so esteemed his assistance that he named a Mexican Asclepiad in his honor, 'Mellichampia.' "

He died at James Island, October 2, 1903.

MELTZER, Samuel James (1851-1920), who after a protracted mental struggle abandoned the honorable career of rabbi to which he had been chosen by his parents, to become eminent as an American physiologist and pharmacologist, was born of poor but intellectual parents on March 22, 1851, in Curland, northwestern Russia. After an early schooling under his father, he was sent to rabbis in a nearby town until paternal religious restrictions placed on his studies became so irksome that he ran away from home. When only sixteen, learned men of the community sought his explanation of obscure passages in the Talmud.

On June 6, 1870, he married Olga S. Levitt and with her dowry started a soap factory in Königsberg, Prussia, at the same time attending the Real Gymnasium. Business failure after a year fostered his determination to study medicine. With the remainder of his wife's dowry, he matriculated at th University of Berlin in 1876; here he struggled for an education under conditions of extreme poverty, suffering often from cold and hunger. Through an intense interest in philosophy, he became a life-long friend of Professor Steinthal. In 1882 he received his medical degree; the LL. D. of the University of Maryland followed in 1906, that of St. Andrews University, Scotland, in 1912, and that of Washington University, St. Louis, in 1914. After graduation he was offered several lucrative positions on terms of baptism which he refused. Preferring a democracy, he emigrated to America in 1883, working his passage across as ship's surgeon. Letters of in-

troduction to scientific, medical, and musical circles in this country brought nothing but advice. Practice in New York soon enabled him to send for his family. At a financial sacrifice, he shortly turned his face resolutely toward scientific work and entered William H. Welch's pathological laboratory at the Bellevue Hospital. Later he became attached to Curtis' physiological laboratory at Columbia University and then to Prudden's Pathological Institute. In 1904 he abandoned all practice to become an associate of The Rockefeller Institute, and, in 1907, was made head of its department of physiology and pharmacology.

Meltzer began his scientific career in 1880 under Hugo Kronecker, investigating the process of swallowing and interpreting its mechanism anew; the joint conclusion is known as the Kronecker-Meltzer theory of deglutition. His life-long interest in the mutual play of excitation and inhibition in physiological processes dates from this work. In 1883, he published a companion paper, "Die Irradiationen des Schluckcentrums und ihre Bedeutung," and set forth certain views upon the importance of the inhibitory processes which formed the basis of his theory of inhibition, that with the reflex excitation of the inspiratory muscles goes the reflex inhibition of the expiratory muscles and vice versa. This suggested a similar relationship in the case of all antagonistic muscles such as the extensors and flexors of the limbs. Some years later, Sherrington termed the relationship a "reciprocal or antagonistic innervation," but believing that "reciprocal innervation" failed to describe all the phenomena, Meltzer later suggested "crossed innervation," borrowed from Basch, and then adopted "contrary innervation" as more applicable to the entire series. He was in advance of his earlier contemporaries in emphasizing the significance of inhibition in the general activities of the body. His theory of shock was that "the various injuries which are capable of bringing on shock do so by favoring the development of the inhibitory side of all the functions of the body." His important later contributions deal with the action of adrenalin on blood vessels and pupillary muscles, mostly in collaboration with his daughter, Clara. They describe the pharmacological properties and clinical use of salts of magnesium—leading to the use of magnesium sulphate in the treatment of tetanus, also of calcium, strontium, and sodium; and they report the development of his method of artificial respiration by pharyngeal and intracheal insufflation which won him a place on two national commissions on resuscitation and the chairmanship of a third. He devised a simple portable apparatus for pharyngeal insufflation which made possible much of the detailed work on experimental thoracic surgery of his last years. He kept in touch with nearly all branches of experimental medicine: shock, cardiac arrhythmias, therapeutics of self-repair, hemolysis, thyroid therapy, and edema, and made numerous studies on the peripheral circulation, the vasomotor effects of epinephrin, and the relation of the pancreas to hyperglycemia and glycosuria, with reference to diabetes. In his Harvey Lecture of 1906, "The Factors of Safety in Animal Structure and Animal Economy," he was influenced by the work of Chittenden upon minimum protein diet; he accepted the fact of the possibility of maintenance on a low protein diet, but he did not believe that a minimum diet is also an optimum diet in relation to the various metabolic stresses to which the body is subject. Increasing years failed to lesson Dr. Meltzer's zeal. In his last paper, he announced the conclusion that the superior cervical ganglia contain a principle which is essential to the maintenance of life.

He was president of the Association of American Physicians, The American Physiologic Society, The Association for the Advancement of Clinical Research and Harvey Society, The American Gastro-enterological Society, The Society for Experimental Medicine and Biology, and The American Association for Thoracic Surgery; a founder of the last two associations as well as of The Medical Brotherhood for the Furtherance of International Morality established during the War, also a keenly interested member of The National Academy of Sciences. In 1917, he represented the Section of the Practice of Medicine in the House of Delegates of the American Medical Association. In that same year, he was appointed major in the Medical Reserve Corps, U. S. A.

Dr. Meltzer had the spirit and ideals of the scientist and the personal realization of the difficulties and necessities of the practitioner; no one was more zealous in promoting understanding between the scientist and the physician. He was always frank and direct in his stand on points at issue. Under the Federation of American Societies for Experimental Biology he organized a bureau of communication between persons seeking posi-

tions for teaching or research and the institutions which are seeking to fill their vacancies.

His long series of deglutition experiments on himself induced an irritable larynx. In his forties, he developed diabetes which finally caused a complete breakdown of sugar tolerance and for fifteen years he lived on an almost carbohydrate-free diet. Death came November 7, 1920, from pulmonary edema following an attack of angina pectoris. It was his wife's steadfast devotion alone which made possible his life's work.

HOWARD A. KELLY.

MENDENHALL, George (1814-1874), obstetrician of Cincinnati, was the son of Aaron and Lydia Richardson Mendenhall and was born at Sharon, Pennsylvania, May 5, 1814. In 1844 he went to Cincinnati, Ohio, where he practiced until his death. While he enjoyed a large general practice, his reputation was made in obstetrics, in which he was an authority.

Mendenhall was of Quaker ancestry. The family came to America in 1682, and formed a part of the William Penn's colony at Philadelphia, one of his aunts, Mary Mendenhall, married Benjamin West, the artist. Dr. Mendenhall had his primary education in a country school; Latin he studied at odd times behind the counter of a country store. In 1835 he was graduated from the University of Pennsylvania and to help in obtaining this coveted education he sold the horse he had ridden over the mountains from his country home.

When the Miami Medical College was founded, 1852, Dr. Mendenhall was elected professor of obstetrics and diseases of women and children, a position he held until 1857, when the school was united with the Medical College of Ohio, where he became professor of obstetrics and diseases of women and children and professor of obstetrics in 1859. When the Miami Medical College was re-established, in 1865, he was again professor of obstetrics and diseases of women and children there until 1873. He was dean of the Miami Medical College from 1853 to 1857; and again from 1865 to 1873.

He was a member of several state and national societies. The only vacations he took were at the times of attendance on the sessions of the American Medical Association. In 1870 he was its president, when it met in Washington. In 1873 his health began to fail, and he went to Europe to recuperate. During his stay in Wiesbaden the honor of membership in the Royal Obstetrical Society of London was given him. During the Civil War he was prominent in the Sanitary Commission, both in the field and at home.

Dr. Mendenhall was on the staff of the Cincinnati Hospital from 1858 to 1872.

He was not well known as an author, but his "Students Vade Mecum" (1852) passed through eighteen editions and was for a long time much consulted by students. A paper on "Vaccination" by Dr. Mendenhall will be found in the Transactions of the Ohio State Medical Convention of 1848; another on "Nitric Acid as an Antiperiodic" in the same Transactions for 1854, and a report on "The Epidemics of Ohio, Indiana and Michigan" made to the American Medical Association in 1852.

October 7, 1838, he married Elizabeth S. Maule, of Philadelphia, and had seven children.

Upon his return from Europe in 1873 he was stricken with paralysis, from the effects of which he never recovered, and died in Cincinnati, June 4, 1874.

ALEXANDER G. DRURY.

MERCER, Alfred (1820-1914), professor in the University of Syracuse medical department, was born on the Ballard Farm, High Halden, Kent, England, November 14, 1820 ("at 4 A. M. in a snow storm"), the seventh and last child of William and Mary Dobell Mercer, both natives of England. Alfred died in Syracuse, New York, August 5, 1914, in his ninety-fourth year. Of the Mercer ancestry little is known. The Dobells descended from a Sussex family of whom some were cavaliers in the days of King Charles. Of the same stock were the Dobell brothers, Sidney, the poet, and Doctor Horace, originator of Dobell's Solution; and their nephew, Clive Riviere, now a London physician and author. In later childhood Alfred lived in the centuries-old stucco, timbered and thatched roofed Ransley (or "Ramley") farm house, near High Halden, which in earlier days was the home of the Ramleys figuring in G. P. R. James' "Smuggler," and in later years the summer residence of the actress, Ellen Terry. While living there the boy attended schools in High Halden, Lydd and Woodchurch. In 1832, when twelve years old, Alfred, with his parents, came to America and settled at New York Mills, New York, where some of his brothers had previously found homes. The old people were not happy there and within a year returned to Eng-

land. To give Alfred new-world opportunities, he was left in the care of his next older brother, George, a tailor, to whom he was apprenticed for seven years. The two brothers were nearly shipwrecked on the Erie Canal during a journey to Lima, New York, where in May, 1833, a tailoring business was started. Those were days of homespun and tallow candles. With small earnings Alfred bought books which he read or studied both on the tailor's bench and by candle light after long working hours. Evening work stopped at nine and he was up at six in the morning.

After completing his apprenticeship, a visit to England, in 1840, and a short experience in business for himself, he had saved sufficient money to enable him to carry out a resolution he had long previously made to some day be a graduate from the Genesee Wesleyan Seminary in Lima. He was graduated in the class of 1843. He then began the study of medicine with Doctor John P. Whitbeck, of Lima, and later of Rochester, New York, as his preceptor, and was in 1845 graduated from the then well-known Geneva Medical College. In 1846 and 1847 he again visited his parents, and attended clinics in the hospitals of London and Paris, conducted, as his notes show, by such men as Quain, Liston, Fobes, Cooper, Lawrence, Addison, Ricord, Roux and Velpeau. On his return he began to practice in Milwaukee, Wisconsin. In 1848 he practiced in Rush, New York; in 1849 in Lima, New York; in 1851 and 1852 in Geneseo, New York; and June 14, 1853, settled permanently in Syracuse, New York. Doctor Mercer from time to time served in official positions, in local, state and national medical societies. He appreciated their value and attended meetings as often as he could, always ready to contribute to discussions the results of his experience and somewhat broad acquaintance with medical literature. His library was unusually large, not confined to medical books and periodicals, and contained many an old volume which originally belonged to the first and venerable Doctor Edward Augustus Holyoke (q. v.), of Salem, Massachusetts. Doctor Mercer was the first physician in Central New York, beginning in about 1862, to commonly use the microscope for clinical purposes. The objectives made by the remarkable optician, Charles A. Spencer, then of nearby Canastota, New York, were still, in 1919, beautifully crisp in definition.

At the time the removal of the Geneva Medical College to Syracuse took place, in order to become a part of the University of Syracuse, in 1872, Doctor Mercer became a member of the faculty and its treasurer. He was an early pleader for higher standards in medical education, for graded courses to extend over a period of from three to five years. He served as treasurer for many years. He was professor of minor and clinical surgery from 1872 to 1884. From 1884 to 1895 he was professor of state medicine, and after 1895 until his death was emeritus professor of the same subject. For nearly a quarter of a century he was surgeon to the hospital of the House of the Good Shepherd; and, later, consulting surgeon to that hospital and also to the Syracuse Free Dispensary.

He was a member of the American Public Health Association; was for six years health officer of Syracuse; and, later, for seven years president of the local board of health; and for five years he served under Grover Cleveland on the New York State Board of Health.

His non-professional interests were many and diversified. He made numerous trips to Europe and traveled considerably on this side of the Atlantic, at first by stage, boat and walking through the middle west; later, by rail and steamer, he saw something of the great west and Alaska. He kept himself informed on the issues of the passing periods of an unusually long life. He was habitually one of the earliest voters on election days. He was fond of outdoor games, playing some of them in a moderate way in early years and attending with much interest baseball and football games in later years. In conversation his face lighted up with a kindly warmth of attention, interest and sympathy—with everybody.

He was a Unitarian and a parishioner of Rev. Samuel J. May, the abolitionist. On first coming to Syracuse, Doctor Mercer became the partner of Doctor Hyram J. Hoyt, in whose office a few years before was planned by Mr. May, Garrett Smith and others the rescue of a fugitive slave. The plan succeeded and went into history as the "Jerry Rescue." During the last years of his life, groups of professional brethren called on him in honor of each recurring anniversary of his birth. The Onondaga Medical Society honored him with a banquet at the end of his fiftieth year in practice and another in celebration of his ninetieth birthday.

He published "Letters from London,"

"Buffalo Medical Journal," 1846; "Partial Dislocations and Consective and Muscular Affections of the Shoulder Joint," "Ibid.," 1859; "The Relations of General (scientific medicine) to Special and Specific Modes of Medication," "Ibid.," 1873; "Claims of the Medical Department of the Syracuse University," an address read before a council in the interest of Syracuse University, "Boston Medical and Surgical Journal," 1879; "Alumni Address delivered before the Alumni Association of the College of Medicine, Syracuse University, June 14, 1883," pamphlet, 1883, and other papers and addresses published in the "New York Medical Journal," New York Medical Times," "New York Medical Record," and "Transactions of the New York State Medical Society."

Doctor Mercer's first wife, Delia Lamphier of Lima, New York, was truly a helpmate in every way, particularly during all the early life struggle, from the date of her marriage in November, 1848, until her death, February 14, 1887. She had six children. Much of the happiness of his later years was due to his second wife, Mrs. Esther A. Esty of Ithaca, New York, whom he married July 25, 1888. She survived him.

A. Clifford Mercer.

MERCER, Hugh (1725-1777), eminent physician of Mercersburg, Pa. and Fredericksburg, Va., captain in Braddock's war and general in the Revolution, was born in Aberdeen in Scotland, son of a minister of the Church of Scotland. He studied at the University of Aberdeen and entered the Medical School of Marschall College in 1740, graduating in 1744. He espoused the cause of Prince Charles Edward the Pretender and was with his army at Culloden, but escaping the fate of so many of his comrades, he sailed from Leith in the fall of 1746 for America. Landing at Philadelphia, he soon set out for the western border of Pennsylvania and settled near Mercersburg, then known as Greencastle. Dr. J. M. Toner (q. v.) says that he founded Mercersburg. Here, until the beginning of the French and Indian war, he practiced, living the life of a country doctor in a wild, sparsely settled region. Possessing the natural instincts of a soldier, he joined Braddock's army as captain of a company and took part in the ill-fated expedition against Fort Du Quesne. In the assault he was wounded and left behind, but after a perilous journey through the wilderness, he succeeded in joining his comrades. In 1756 he was commissioned captain of one of the companies raised to protect the residents against the Indians and their French allies, his company being stationed at McDowell's Fort, now Bridgeport. Here he also acted as surgeon to the garrison and practiced among the people. In one of the numerous fights with the Indians he was again wounded and abandoned, and again made his way over one hundred miles through the forest and joined his command at Fort Cumberland. On this weary tramp he was forced to live on roots and herbs, and the carcass of a rattlesnake, and so closely was he pursued by his foes that he once had to take refuge in the hollow trunk of a tree, around which the Indians rested. Mercer was again wounded while commanding one of the companies which captured an Indian settlement at Kittanning in 1756. For his services in these Indian wars he received from the Corporation of Philadelphia a note of thanks and a memorial medal. The summer of 1757 saw him in command of the garrison at Shippenburg; December, promoted to the rank of major and placed in command of the forces of the province of Pennsylvania west of the Susquehanna. The next year he commanded part of the forces under Gen. Forbes in the expedition against Fort Du Quesne, and during this war Mercer made the acquaintance of Washington and a friendship sprung up between them which led to Virginia becoming the home of the former on the advice of the latter.

Dr. Mercer some time after the end of the French and Indian wars removed to Virginia and settled in Fredericksburg. Here he lived and practiced until the beginning of the Revolution. The reputation he gained as a physician and citizen is attested by an English traveller who visited Fredericksburg during the Revolution, an account of which visit was published in 1784. He wrote "In Fredericksburg I called upon a worthy and intimate friend, Dr. Hugh Mercer, a physician of great eminence and merit, and, as a man, possessed of almost every virtue and accomplishment." The building where the doctor had his consulting room and apothecary's shop was still standing in 1908 and situated on a corner of Princess Ann and Amelia streets. The beginning of the Revolution found him actively engaged in raising and drilling troops, for, abandoning his large and lucrative practice he entered the service of the colonies as colonel of the third Virginia continentals. In appreciation of his distin-

guished services he was soon promoted to be a brigadier-general, the date of his appointment being June 5, 1776. Gen. Mercer participated with great distinction in the campaigns of Washington, until refusing to surrender, he was clubbed and bayonetted, and left for dead on the field of Princeton. Despite, however, his seven bayonet wounds of the body and many of the head from the butts of muskets, he was not yet dead, and after the battle was removed to a farmhouse, where he was tenderly cared for by Mrs. Clark and her daughter, the wife and child of the owner of the house, and by Maj. Lewis, whom Gen. Washington sent for the purpose. The surgeons who attended him were Dr. Benjamin Rush (q. v.) and Dr. Archibald Alexander, of Virginia. In spite of every care and attention that could be given him, he succumbed to his wounds, passing away on January 12, 1777. He was buried in Christ Church yard, Philadelphia. Many years later his remains were removed to Laurel Hill Cemetery and a monument erected to his memory by the St. Andrew's Society, of which he had become a member in 1757. This monument was dedicated on November 26, 1840, and bears as part of its inscription these words: "Gen. Mercer, a physician of Fredericksburg, in Virginia, was distinguished for his skill and learning, his gentleness and decision, his refinement and humanity, his elevated honor and his devotion to the cause of civil and religious liberty." Soon after his death it was recommended that a monument be erected at Fredericksburg and on June 28, 1902, an act was passed by Congress directing that the resolution of 1777 be carried into effect. Mercer married, not long after coming to Fredericksburg, Isabella Gordon of that town and had a daughter and four sons. A portrait of Mercer is in possession of the Mercersburg (Pa.) Academy, and in the historical paintings of the battle of Princeton by Peale, at Princeton, and by Trumbull at New York, he is given a prominent position.

ROBERT M. SLAUGHTER.

MERCIER, Alfred (1816-1894), of New Orleans, better known as a writer than a physician, was born at McDonough, Louisiana, June 3, 1816. In his fourteenth year he was sent to France to be educated. In 1842 he published at Paris a volume of poems, the principal of which were "La Rose de Smyrne" and "L'Ermite de Niagara" which were highly praised in the "Révue de Paris." He travelled extensively through Europe and made a philosophic study of men and manners. In 1848 he wrote a romance for "La Réforme," a prominent literary journal of the day, but on the morning that the first feuilleton was to appear, the commune broke into the office and "pied" the forms. Originally intended for the bar, his taste led him into literature; but republican France making small account of letters, he suddenly resolved to study medicine. After he had graduated in that profession he practiced for three years in New Orleans. In 1859 he returned to France, remaining there until the close of the Civil War, when he finally returned to New Orleans, practicing until the end of his life. His works of fiction include "Le Fou de Palerme" (1873), "La Fille du Prêtre" (1877), "L'Habitation de St. Ybars" (1881), and "Johnelle" (1891). His style was virile and picturesque, tinged with delicate fancy and indicated true genius and profound scholarship. An ardent lover and complete master of Latin prosody, he solaced his last moments with recitations from his favorite Virgil.

Dr. Mercier died in New Orleans on May 12, 1894.

JANE GRAY ROGERS.

MERGLER, Marie J. (1851-1901), Chicago gynecologist, was born in Main Stockheim, Bavaria, May 18, 1851, and was descended from the old German family, von Rittenhausen. Her father was Francis R. Mergler, a graduate of the University of Würzburg, who in 1853 came with his family to Illinois. Marie was graduated from Cook County, Illinois, Normal School, and in 1871 from the classical course, State Normal School, Oswego, New York. She entered the Woman's Medical College, Chicago, in 1876, and obtained her degree in 1879, being valedictorian of the class. There were several of the faculty who although consenting to teach the women did everything to discourage them. When Marie was a senior her class found a notice on the bulletin board inviting them to take the examinations for interne at Cook County Hospital. Although sure of defeat, the ill-taught girls resolved to face contempt at the competitive examination in order to preserve the "open door" to public office for their successors. They were received by the students in the amphitheatre with shouts and hisses. The chairman of the staff looked inquiringly at the secretary; the secretary responded, "You instructed me to

notify the regular colleges, the Woman's College is a regular College." No appointment was received, but the members of the faculty, ashamed of their work, reformed their ways, and when again Marie competed for the position of interne in the Cook County Hospital, she was told that she had passed the examination successfully but was not appointed because she was a woman—however, a year later a woman did receive the appointment. After graduating, Marie Mergler became surgical assistant to Dr. William H. Byford (q. v.). The year 1880 was spent pursuing her medical studies in Zürich. Upon her return she held various positions in her alma mater and after Dr. Byford's death in 1890 was appointed his successor to the chair of gynecology. In 1882 Dr. Mergler was appointed to the staff of the Cook County General Hospital, in 1886, one of the attending surgeons to the Woman's Hospital in Chicago and in 1890 gynecologist to Wesley Hospital. She held the last two positions till the time of her death. In 1895 she was appointed head physician and surgeon of the Mary Thompson Hospital. In this appointment Dr. Mergler received the unanimous support of the Chicago Gynecological Society and a large majority of the members of the medical profession of Chicago. In 1897 she was elected dean of the Northwestern Woman's Medical School, having previously served as its secretary for many years. For several years she was professor of gynecology in the Post-Graduate Medical School of Chicago, Dr. Mergler was a member of the state medical society and Chicago Medical Society. She gained great distinction as a diagnostician and surgeon. At the time of her death the "Gazette Médicale de Paris" referred to her as celebrated for her success in abdominal surgery and said that Europe had no such woman operators of this stamp.

She died of pernicious anemia in California on her fiftieth birthday, May 18, 1901.

Dr. Mergler had editorial connections with the "Woman's Medical Journal of Chicago." She wrote: "A Guide to the Study of Gynecology," 1892; "History of the Woman's Medical College of Chicago," 1893; and in collaboration with Charles W. Earle, "Diseases of the Newborn." ("American Textbook of Obstetrics.")

ALFREDA B. WITHINGTON.

MERRILL, James Cushing (1853-1902), army surgeon and ornithologist, was born at Cambridge, Massachusetts, March 26, 1853. The son of James Cushing and Jane H. Merrill, he was descended from Nathaniel Merrill who, with his brother John, were among the earliest settlers of Newbury, Massachusetts, and through his grandmother from the Leveretts and Saltonstalls of that state. His great grandmother was Lucy Cushing, daughter of Rev. James Cushing of Haverhill, who traced his descent from John Cushing who, in turn, came to America from Hingham, England, in 1638. James Cushing Merrill obtained his early education at Cambridge, Massachusetts, and completed it at Dresden and other German schools. In 1874 he took his medical degree at the University of Pennsylvania, the title of his graduating thesis being "Anomalies of Human Osteology." Soon after, he was appointed assistant surgeon in the U. S. Army, and during a long period of service on the western and southwestern frontiers, he made an extended study of the birds and fauna of Texas, Oregon, Idaho and what is now Oklahoma. He was a collector of birds, eggs, insects, mammals and fishes, sending most of his specimens to the National Museum. During his western experience, he became an ardent sportsman and hunter of big game, and concerning his intrepidity and resourcefulness in attacking the grisly bear, Colonel Roosevelt has said in his "Hunting the Grisly" (1900):—

"Dr. James C. Merrill, U. S. A., who has had about as much experience with bears as I have had, informs me that he has been charged with the utmost determination three times. In each case the attack was delivered before the bear was wounded or even shot at, the animal being roused by the approach of the hunters from his day bed, and charged headlong at them from a distance of twenty or thirty paces. All three bears were killed before they could do any damage."

On November 16, 1892, Dr. Merrill married Mary Pitt Chase of Maryland, and on March 13, 1894, he was promoted to be full surgeon with the rank of major. On April 1, 1897, he succeeded the late Colonel David L. Huntington (q. v.) as librarian of the Surgeon General's Office, at Washington, and here, during the last five years of his life, he worked with ardor and enthusiasm at medical bibliography, assisting Dr. Robert Fletcher (q. v.) in the redaction of the index catalogue, of which Merrill edited volumes iii-vii of the second series. For this task Major Merrill was singularly well fitted. He read thirteen languages, and was studying Russian at the time of his death. He stuck man-

fully to this confining office work, even after the breaking down of his health and up to a short time before his death. In the summer few weeks at White Sulphur Springs, Virginia, and died at his home at Washington, of 1902 he was prevailed upon to spend a D. C., October 27, 1902.

Major Merrill was an attractive, genial, kindly, modest gentleman who won the loyal affection of all his friends and associates. He was a member of the Dedlo Island Hunting Club and would occasionally go there on a duck shooting expedition with Dr. Horatio C. Wood (q. v.) and would divide the spoils of the chase among the men in the Surgeon General's Library. He was a trained naturalist, an active member of the American Ornithologists' Union at its first Congress (1883), and for twenty years he was known as one of the leading contributors to American ornithology. He gave full accounts of the birds of Southern Texas, and other localities, and made interesting popular contributions to "Forest and Stream" and the Boone and Crockett books. His ornithological papers include: "Notes on the Ornithology of Southern Texas, being a list of birds observed in the vicinity of Fort Brown, Texas from February, 1876 to June, 1878" (Proc. U. S. Nat. Mus., 1878, i, 118-173); "Notes on the birds of Fort Klamath, Oregon. With remarks on certain species by William Brewster" (Auk, 1888, vol. v, 139-146, 251-262, 357-366); and "Notes on the Birds of Fort Sherman, Idaho" (Auk, 1897, vol. xiv, 347-357; 1898, vol. xv, 14-22).

FIELDING H. GARRISON.

METCALF, W. G. (1847-1885), superintendent of Kingston, Ontario, Asylum, who was killed by a patient, was born in 1847 in the town of Uxbridge, Ontario. He began asylum life in Toronto on August 7, 1871, as clinical assistant to Dr. Workman (q. v.), and laid the foundation of his future success. In 1874 he left Toronto Asylum to engage in private practice, but shortly after returned to become assistant medical superintendent, a position he filled until June, 1877, when he was transferred to a similar post in the London Asylum. In April, 1878, he was placed in temporary charge of Kingston Asylum during the illness of Dr. Dickson, and when the latter retired from service, was appointed medical superintendent, a position he continued to occupy until he fell at his post of duty. On the morning of the 13th of August, 1885, while making his usual round in company with his assistant, he was fatally stabbed in the abdomen by a criminal lunatic; he never rallied from the shock, and passed away in peace on August 16, 1885.

As a practical administrator he had few equals and no superior. His creed was taught him by his well-loved preceptor, Dr. Workman, and its prominent characteristic was "my patients first." He was an enthusiastic worker and a believer in details, sparing no pains to master every point in connection with any labor he undertook, and his genius for mechanics rendered him particularly efficient as a practical manager of the asylum affairs. His prominent mental characteristics were earnestness, sincerity, and love of justice. At the time of his death he was a firm believer in non-restraint, although when he adopted this system on trial three years before he was convinced that non-restraint could not be carried out. He never forgot that insane patients are human beings and at all times had a pleasant smile and kind word for those under his care. As he lived, so he died, thoughtful of all but himself; as he felt the near approach of death, he summoned his officers to his bedside and bade each one an affectionate farewell, with almost his last breath saying, "Wish the attendants good-bye for me and tell them my hope is that they will all continue their work patiently and perseveringly." No murmur of reproach for his sad fate escaped his lips—the painful injury was borne with heroic fortitude and he died as most brave men wish to die, at the post of duty.

Metcalfe, Samuel L. (1798-1856), a pioneer writer of Indiana and Mississippi, on Indian warfare and the phenomena of Nature. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 785.

METTAUER, John Peter (1787-1875), of Virginia, gifted surgeon, teacher and writer, was the son of Francis Joseph Mettauer, one of two brothers, who came to this country with Lafayette, as regimental surgeons, their regiment being quartered after the battle of Yorktown in Prince Edward County, and when it returned to France the elder Mettauer was persuaded by prominent citizens to remain. He later married Elizabeth Gaulding, a resident of the county, and John Peter was born in 1787. He was educated at Hampden-Sidney College and graduated A. B. in 1806, later in life receiving his

A. M. and LL. D. After study at the University of Pennsylvania he received his M. D. in 1809, the subject of his thesis being "Disease." As a student, he was remarkable for his diligence and for being a great reader, ever availing himself of every opportunity of practice and of gaining experience. He, therefore, was a favorite with his teachers, among whom were such men as Rush, Shippen, Wistar and Physick. After graduation he returned home and built up a practice, the largest and most arduous, probably, ever had by a Virginia physician before. "Though doomed to labor in the country as a practitioner," he said, "I resolved to continue my studious habits and, if possible, not to fall behind the daily improvements of my profession."

He was a member of the old (antebellum) Medical Society of Virginia, and also of the present society. From 1848 to its discontinuance (about 1860), he was professor of medicine and surgery, clinical medicine and therapeutics, materia medica, midwifery and medical jurisprudence in the medical department of Randolph-Macon College. He also served for a short time as professor of surgery in the Washington University of Baltimore, Maryland.

Of the many able men that the Old Dominion has given to the medical profession, Dr. Mettauer was, unquestionably, the most remarkable. By nature a great surgeon, he was also an able physician, and a voluminous contributor to medical literature. His marvelous surgical skill and ingenuity soon obtained for him such a reputation that, despite the fact of his work lying in an obscure country village and before the day of numerous railroads, patients flocked to him from all around, some even from abroad. He performed almost, if not every, operation known in his day and it is certain he did 800 operations for cataract; some have put the number far above this. In operations for vesical calculus, his total exceeded by 175, Dudley's 225, making in all 400. His many contributions to surgery, which were freely given to the profession in his published articles, should have obtained for him the position he deserves among the world's greatest surgeons, but this has never been accorded him. In medical history he has received scant mention, and yet, to him, unquestionably, belongs the priority of the cure of vesico-vaginal fistula. His first successful operation was done in August, 1838. It preceded Dr. Hayward's by nearly a year, and Sims' by ten. In this operation he used a conoidal speculum, curved scissors and lead-wire sutures. He was a strong advocate of lead-wire as a suture material in all plastic work. He was the first surgeon in Virginia, and one of the first in the United States, to operate successfully for cleft palate, his first operation having been done in 1827.

In 1832 he operated successfully for an extensive, complete tear of the perineum into the rectum, six months after the injury, the patient "having resolved to waive all considerations of delicacy (a sacrifice indeed) if she could obtain only partial relief from her most loathsome and health destroying infirmity." Mettauer denuded broadly and used his twisted lead sutures, passed with curved needles and a silk carrier. The result was perfect. "Amer. Jour. Med. Sci." 1833, xiii. 113.

The most notable of his articles was one entitled "The Continued Fever of Middle Virginia from 1816 to 1829," which shows conclusively that he recognized typhoid fever as a distinct disease, and was familiar with its characteristic lesions. In other papers he advocates new methods of treatment and new uses of remedies, often showing that he was far ahead of his time in his views and practice. During the whole of his professional life he was a constant contributor to medical journals, though the period of his greatest literary activity was from 1825 to 1845. He contributed articles to almost every medical journal published in this country in his time. Beside his articles he left in addition a large number of manuscripts which were in the possession of Dr. George Ben Johnston (q. v.), of Richmond Virginia; among them was one work on surgery of 3,000 closely written legal-cap pages. Why he never published it was not known. "This work shows," says Dr. Johnston "an intimate and enormous knowledge of all the directions that surgery in his time took, and not a little of the choicest fruit of elegant acquaintance with the older literature is scattered here and there throughout the work."

Many young men who desired to study medicine became his private pupils, and the need of assistants and nurses in his enormous work led to the organization of these students into a medical school in 1837. From that date until 1848, the school was known as Mettauer's Medical Institute, and from 1848 to its discontinuance about 1860, it was a chartered institution, termed the Medical Department of Randolph-Macon College.

The sessions of this school were ten months in length, and on its rolls were usually from thirty to thirty-five students. Some of these students graduated, but it is improbable that any went immediately into practice, though the school was recognized by some of the best larger city colleges. In 1848 the faculty consisted of three doctors, John Peter Mettauer and his brother and son, both named Francis Joseph. There is ample authority for the statement that for forty years Dr. Mettauer had always from forty-five to sixty surgical cases under his care. Not only was his private hospital constantly filled, but also the hotels at Kingsville and Worsham, neighboring villages, and many private residences were often occupied by patients awaiting their turn for operation, or just recovering from one.

Dr. Mettauer was an ingenious mechanic, and under his direction many of his instruments were made by his students in the shop of old Peter Porter in Farmville. Some of these instruments are the property of Dr. George Benjamin Johnston. Some are made of iron and others of silver. Some were made by the doctor himself, and others by an old negro in the county who was a skilful artisan in gold and silver.

In appearance Mettauer was a man of striking personality, tall, well-formed and robust, his forehead was high and intellectual; his eyes piercing black and overshadowed by heavy brows. In his habits he was exclusive, admitting few to intimacy. In versatility, originality and skill he was unsurpassed, and practical common sense ever guided him in his work. In power of endurance and capacity for work he must have been as untirable as it was possible to be. In the latter part of his career, in order to operate, he sometimes undertook journeys requiring several weeks. On one occasion he went in his carriage as far as Georgia, and it is said that he received $1,000; in that day a stupendous fee. Much of his time was given to work from which he derived neither fame nor fortune and he seems to have placed no value upon money. He invariably wore a tall stovepipe hat which nothing would induce him to remove, and he wore it everywhere and on all occasions, even at meals, and it is said, also when in bed. He never attended service in any church, a fact attributed to his unwillingness to remove his headgear, but was more probably due to the fact that he would not take the time from his work. When called upon to testify in court, he always declined to remove his hat. He even left directions that he should be buried with it on, and that there should be placed in his coffin a number of instruments and the letters of his first wife.

He would never assist in an operation, as he had an insuperable objection to watching another's work. He was also remarkable for the care and detail of his preparation for an operation, being far ahead of his time in this. In the last week of his life though then in his eighty-eighth year, he did three successful operations, one for cataract, one for stone, and an excision of the breast. "Facile princeps of the medical and surgical profession of the world" was the opinion of him in 1845, expressed by Dr. Mutter (q. v.), a Philadelphia surgeon of note. He is accredited, said the "American Journal of the Medical Sciences" after his death, with more improvements in operations and inventions of instruments to date than any other man.

Dr. Mettauer was married four times; to a Miss Woodward of Norfolk; to Miss Carter of Prince Edward County; to Miss Mansfield, of a northern state, and to Miss Dyson, of Norfolk. He had six children, three sons and three daughters. His sons were all physicians, the last of whom was Dr. Archer Mettauer, of Macon, Georgia.

His long and laborious career came to an end in November, 1875. Having been called to a case of morphine poisoning a short distance from his house, he got his feet wet in a tramp through the snow and forgetting himself in his interest in the patient, neglected proper precautions, developed pneumonia, and in two days was dead, a truly heroic death crowning a long and useful life.

Volume ii (No. 1) of the "Virginia Medical Monthly" contains an article on the "Prophylaxis of Childbed Fever," which was probably his last published contribution, as it appeared in April, 1875. The only known likeness of Dr. Mettauer was a small photograph, in the possession of Dr. George Benjamin Johnston, of Richmond, Virginia.

ROBERT M. SLAUGHTER.

Metz, Abraham (1828-1876), ophthalmologist of Cleveland, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 787.

MICHEL, Charles Eugene (1832-1913), ophthalmologist of St. Louis, Missouri, was born May 9, 1832, at Charleston, South Carolina, son of John and Anna Faive Michel.

He received the degree of M. D. at the Medical College of the State of South Carolina, at Charleston, in 1857. A surgeon in the Confederate army throughout the Civil War, he was, at the close of the strife, a division medical inspector. From the end of the War until his death, Dr. Michel practiced as ophthmologist exclusively, at St. Louis, Missouri. Here he was for many years professor of ophthalmology in the Missouri Medical College, and surgeon at the St. Louis Eye, Ear, Nose and Throat Infirmary. He was also for a time ophthalmic surgeon to the Martha Parsons Hospital for Children. He was the first to employ electrolysis in ophthalmology, and invented a number of instruments and operations. He was a very skilful operator and was a clear and forceful writer and teacher.

Dr. Michel was a man of medium height, neither lean nor stout, who wore a mustache and French goatee, had a clear olive complexion and blue eyes, and, when the present writer knew him, hair that was absolutely white. His manner, as a rule, was very deliberate and quiet, but at times he was rapid in the extreme. He was, in his later years, a trifle deaf, but, in case his interlocutor should raise his voice a bit too high, the doctor would sharply rebuke him. "What; do you think I am hard of hearing? You need only speak distinctly."

His son, C. E. Michel, Jr., speaks of him as follows: "From my earliest recollection, I associated my father with books, books of all descriptions; in his reading room, he always had a pile of medical works filled with book markers, and as I studied by his side, he would read and refer to these by the hour. When tired, he usually did some light reading in French literature. He was an indefatigable worker with the microscope, up to about his seventieth year. His chief enjoyment was the preparation of specimen slides for his classes, and I have been informed by many doctors, that his collection of slides was very remarkable. There were hundreds of them, that I know from personal knowledge, took him several hours a day over a period of many years to prepare. His physical recreation during the summer months consisted of early morning rambles in the large rose garden, which he had on his summer place at Normandy, Missouri. Here he had a collection of roses and fruit trees gathered from all over the world, and before leaving for the city and his office each morning, he would spend from one to two hours collecting the choicest of the blooms and fruit. My father was a keen sportsman. A part of each fall he spent in the north woods shooting and fishing to a certain extent, but most of his hours were put in reading in some quiet spot; he loved and understood nature as but few do."

He married, in 1873, at St. Louis, Celeste Nidelet, and they had one son.

Dr. Michel passed from life at St. Louis, Missouri, September 29, 1913, and the writer will always remember the pang with which he learned of the everlasting departure of this gentle, dignified and skilful father in ophthalmology.

THOMAS HALL SHASTID.

MICHEL, William Middleton (1822-1894), founder of the Summer Medical Institute of Charleston, South Carolina, was born in that city, January 22, 1822. His father, William Michel, was a physician, of French descent, educated in France, and his mother was Eugenia Ash Fraser, of South Carolina, descended from Simon Fraser, Lord Lovat, of Scotland. After an early education in Paris, France and in Charleston, Middleton Michel, as he was called, studied at the Pension Labrousse, Paris (1835-1837), and in 1842 began the study of medicine in Paris under Richet, Cruveilhier, Coste and Longet; for two years he dissected for Cruveilhier in his laboratory, and afterward was a private pupil of Coste at the College de France; in 1844 he gave a course of lectures on anatomy, in French, for Richet, at the École Pratique. In 1845 he received a diploma from the École de Medicin, Paris, then returning to the United States he was graduated at the Medical College of the State of South Carolina in 1846. He practiced in Charleston, where he spent the rest of his life. In 1848 he founded the Summer Medical Institute of Charleston and lectured on anatomy, physiology and midwifery. During the Civil War he was consulting surgeon to the Confederate Army. From 1868 until his death he was professor of physiology and medical jurisprudence in the Medical College of the State of South Carolina, and from 1871 was visiting surgeon to the City Hospital (Roper). He was president of the Medical Society of South Carolina in 1880, and member of the Charleston Board of Health, 1880-1894.

He was editor of the "Confederate States Medical and Surgical Journal," 1863-1864, and of the "Charleston Medical Journal," 1875-1880. A large contributor to medical journals, his papers covered a somewhat wide field. One of the most interesting was the

"Monograph on the Pathology of the Pituitary Body" (1860). His "Development of the Opossum" was the subject of a debate with Agassiz before the American Association for the Advancement of Science.

In 1866 he married Cecelia S. Ingleby. There were ten children, four of whom survived him, Henry Middleton, Marion Sims, Herbert Fraser and Mary Hayne.

Michel died in Charleston June 4, 1894.

MICHENER, Ezra (1794-1887), Pennsylvania botanist, was born in London Grove Township, Chester County, Pennsylvania, November 24, 1794. His parents were Mordecai and Alice Dunn Michener. His early education consisted of nothing beyond the rudiments of reading, writing and arithmetic with a smattering of bookkeeping, but he had an innate fondness for plants, though at that time there had been no botanical book for beginners either written or printed in America. After working on the farm until he was twenty-one, he went to Philadelphia to study medicine, graduating from the University of Pennsylvania in 1818. In 1816 he attended the lectures of Dr. Wm. P. C. Barton (q. v.) on botany, but there was still no book for beginners. Shortly after graduation he began to practice near his birthplace, living in a log house, and several years later bought a small farm in New Garden Township, where he lived until his ninety-third year. The grounds about his house were planted with many rare trees, of which he was a great lover, and his coffin was made, by his wish, of boards from the trunk of a tree ("Paulownia Imperialis") which he had planted.

He wrote "Conchologia Cestrica" in collaboration with Dr. William D. Hortman and the preface seems to indicate that it was prepared at the suggestion of the Cabinet of Natural Science of Chester County. He also collected an extensive herbarium of "Hysterophyta" (Fungi), and his collection of the mammalia, birds and reptiles of Chester County form a part of the collection at Swarthmore College. Barton's "Flora Philadelphiæ" was the first botanical book Michener had for study, until Darlington published his "Florula Cestrica" in 1826, in which work Michener assisted. Darlington acknowledged his indebtedness to Michener in the collection and preparation of the "Shallophyta" for his "Flora Cestrica," referring to him as a naturalist of acumen, diligence and indomitable perseverance. He was greatly interested in cryptogams and did much good work in their collection and study. Fifteen books and twenty-three medical reprints stand to his credit, besides numerous articles. One of his books was "A Retrospect of Quakerism." He was an ardent member of New Garden Meeting (Hicksite Friends), and sat at the head of the meeting for many years. On the title page of "Conchologia Cestrica" is the quotation (written) "An undevout philosopher is mad," which was exactly Michener's idea. I knew him as a devout man, rich in knowledge and finding nothing trivial in nature but God in all.

His reputation as an accoucheur was great in his locality. He assisted at my birth and in some families had attended five generations. I called on him the day before his death, July 23, and found this old man of ninety-three ready to show interest in my recent graduation in medicine and desired I should examine him to see how completely all cartilage had ossified, calling my attention particularly to his floating ribs. He asked me to come again and then said, "No, thee need not, for I shall not be here." He also spoke a little about death and his wish to be through with life.

In 1819 he married Sarah Spencer and had seven children. After her death, he married, in 1844, Mary S. Walton.

Among his correspondents were many of the most eminent scientists of his time, including Darlington, Rothrock, Curtis, Lining, Ravenel and Tuckerman. Agassiz said of him "that he did not belong exclusively to Chester County, Pennsylvania, or America, but to the whole scientific world."

BLANCHE M. HAINES.

MIDDLETON, Peter (-1781), was born in Scotland, studied at St. Andrew's University and came to New York, where he was one of the most eminent medical men in the middle of the eighteenth century. In 1750 he assisted Dr. John Bard (q. v.) in making one of the first dissections for the purpose of anatomical instruction recorded in this country. In 1767 he aided in establishing the medical department of Kings College (Columbia University) in New York, in which he was the first professor of pathology and physiology, from 1767 to 1776, and of chemistry and materia medica from 1770 to 1776. Columbia conferred on him an Honorary M. D. in 1768. He was a governor of Kings College from 1770 to 1780. He published a letter on "Croup" in the "Medical Repository" (vol. ix) and "Historical Inquiries into the

Ancient and Present Systems of Medicine" (1769). He died of cancer of the pylorus in New York City in the year 1781.

MILES, Albert Baldwin (1852-1894), professor in the University of Louisiana, was born in Prattville, Alabama, on May 18, 1852. His father, a farmer, removed to Arkansas in 1857 and an uncle living in El Dorado educated the boy and sent him to the University of Virginia. In 1872 he entered the medical department of the University of Louisiana, in pursuance of a fixed intention to study medicine. He graduated from the University in 1875, being the valedictorian of his class. In April, 1877, he became assistant house surgeon of the Charity Hospital, holding this position until 1881, when he accepted the post of house surgeon to the Hôtel Dieu. On April 4, 1882, he was elected surgeon of the Charity Hospital and held this office until his death in 1894.

His executive ability was notable and during his régime at the Charity Hospital many improvements were instituted. The ambulance system was largely his plan, his suggestions assisted in the planning of the outdoor clinical buildings, and the new amphitheatre, which he never beheld completed. To his wisdom is greatly due the founding of the Charity Training School for Nurses, of whose faculty he was the first dean.

From 1875 to 1885 Dr. Miles was demonstrator of anatomy in the University of Louisiana and it is recorded that he never missed a single appointment with his classes. In 1886 he became professor of materia medica and therapeutics, and filled this position until the end of the session of 1892-3 when he was elected professor of surgery, succeeding Dr. Logan. His simple, direct style made him one of the best lecturers ever connected with the medical department, and his gentle yet strong personality won universal attachment and regard.

As a surgeon Miles possessed the clear mind and steady hand that overcame all emergencies. He had great success with gunshot wounds of the abdomen and wrote several papers on the subject. An easy writer, he, however, contributed comparatively little to medical literature. Among his papers which were published in the "New Orleans Medical and Surgical Journal" may be mentioned: "Tracheotomy in a case of bronchocele"; "Epithlioma and its treatment"; "Report of a case of remarkable control over muscular movements"; "A case of gunshot wound of abdomen with sixteen perforations of the ileum and three of the mesentery" ("Philadelphia Medical News"). In 1894 he read a paper on "Thirteen cases of gunshot wounds of the abdomen," before the American Surgical Association; this appeared subsequently in the "Annals of Surgery." His last paper was a "Life of Dr. Warren Stone." For several years he was co-editor of the "New Orleans Medical and Surgical Journal." He was a member of the American Surgical Association; vice-president of the Southern Surgical and Gynecological Association and president of the Louisiana State Medical Society.

JAMES G. BAIRD.

MILES, Francis Turquand (1827-1903), professor of anatomy in Washington University, Baltimore, was born near Charleston, South Carolina, in 1827. He received an A. B. from Charleston College, and M. D. from the Medical College of South Carolina, where he became an assistant demonstrator, and assistant professor of anatomy, and professor of physiological anatomy. He was a surgeon in the Confederate Army, and in 1865 resumed his place in the faculty.

In 1868 Miles moved to Baltimore and was professor of anatomy in the Washington University School of Medicine (1868-9). From 1869-80 he was professor of nervous diseases, University of Maryland; and from 1880, professor of physiology. He was president of the American Neurological Association, 1880-82. He wrote "Diseases of the Peripheral Nerves" in Pepper's System of Medicine; "Regional Diagnosis in Brain Disease," 1877; "Electricity in Medicine," 1878.

Dr. Miles married Jennie Wardlaw.

He died July 30, 1903.

MILES, Manly (1826-1896), naturalist and agriculturist of Michigan, was born at Homer, Cortland County, New York, July 20, 1826; the son of Manly Miles, a soldier of the Revolution, and Mary Cushman, a lineal descendant of Miles Standish. In 1837 his family moved to Flint, Michigan, where he worked on the farm, to his common school education adding reading and study during spare moments. He was widely known as the "boy with a book," and the boy who never failed to accomplish anything he undertook. In 1850 he received an M. D. from Rush Medical College, Chicago, and practiced in Flint till 1859, when he was appointed by Gov. Wisner assistant state geologist in the department of zoology. In 1860 he was appointed

professor of animal physiology and zoology in the Michigan State Agricultural College at Lansing. While in the zoological department of the Geological State Survey he was in constant correspondence with the leading naturalists of the period, as Agassiz, Cope, Lea. He discovered two new shells, two others being named after him by Lea. His catalogue was by far the most complete of any then compiled. In 1864 the duties of "acting superintendent of the farm" were added to his chair while in 1865 he became professor of animal physiology and practical agriculture and also farm superintendent. In 1869 he ceased to teach physiology, devoting his entire time to practical agriculture, being far ahead of his time. In 1875 he resigned to accept the professorship of agriculture in the Illinois State University. Later he moved to Houghton Farm, near Mountainville, New York, and devoted himself entirely to scientific experiments, though afterwards he accepted the professorship of agriculture in the Massachusetts Agricultural College at Amherst, Massachusetts. In 1886 he returned to Lansing to investigate, study and write till his death.

Among his appointments and memberships were: membership in the Michigan State Medical Society; member of the Buffalo Society of Natural Science; of the Entomological Society of Philadelphia, Pennsylvania; fellow of the Royal Microscopical Society, and of the American Association for the Advancement of Science. Dr. R. C. Kedzie, who entered the Agricultural College two years later than Dr. Miles, said that he found "Dr. Miles an authority among both professors and students, on birds, beasts, reptiles, stones of the fields and insects of the air." In teaching agriculture Dr. Miles created such enthusiasm among the students that each regarded it a favor to work with him in the fields or ditches—he worked with the boys and filled the work with intellectual enjoyment. He was especially fond of boys who tried to learn something; he liked pets and little children. To his death he retained his habits of investigation and study, though his great deafness rendered his public work difficult. Dr. Miles was the first professor of practical agriculture in the United States.

He was a constant writer and advisor of the "American Agriculturalist" and wrote many books on practical agriculture, as "Stock Breeding," "Experiments with Indian Corn," "Silos and Ensilage," "Land Drainage."

On February 15, 1851, he married Mary E. Dodge, of Lansing, Michigan, who survived him.

Dr. Manly Miles died at Lansing, Michigan, February 15, 1898, from fatty degeneration of the heart.

LEARTUS CONNOR.

MILLARD, Perry H. (1848-1897), who established a board of medical examiners for the state of Minnesota, was born May 14, 1848, in Ogdensburg, New York. He was principal of the High School, but at the end of a year he went to the Rush Medical College at Chicago, where after a three years' course he took his M. D. in 1871 and began to practice in Chicago, but losing everything in the great fire that year, he came to Stillwater, Minnesota. In September, 1880, he spent nine months at Guy's Hospital, London, also two months in Vienna. He was mainly instrumental in getting through the first Medical Practice Act of Minnesota in 1883, and was the "vis a tergo" in establishing the Medical Department of the Minnesota State University, being dean of the department at the time of his death. He was best known for his work in establishing the State Board of Medical Examiners. The law of 1887 was made up entirely by Dr. Millard and an attorney of Stillwater, Fayette Marsh. Dr. Millard was chiefly instrumental in getting this law passed by the State Legislature. He was president of the Minnesota State Medical Association and vice-president of the American Medical Association and was one of the most active organizers and promoters of the Association of American Medical Colleges. He labored earnestly and persistently for the good of the medical profession. He died at the Johns Hopkins Hospital, Baltimore, after a lingering illness, February 1, 1897.

Dr. Millard married, in 1874, Caroline, daughter of John R. Swain.

BURNSIDE FOSTER.

MILLER, Edward (1760-1812), pioneer clinician of New York City, was born in Dover, Delaware, May 9, 1760, the son of the Rev. John Miller, of that town. His early education was excellent and after completing an academic course he took up the study of medicine with Dr. Charles Ridgely, of Dover, soon coming to believe, however, that he must not depend on books alone for a knowledge of medicine which ought to be obtained chiefly at the bedside of the sick; so a little more

than two years later he became surgeon's mate in the United States Military Hospitals, serving for a year, principally in the hospital at Baskingridge, New Jersey. In 1781 he was appointed surgeon on board an armed ship bound for France. He returned in 1782, and for the two following years attended lectures at the University of Pennsylvania, hearing Shippen, Morgan and Kuhn. In 1783, peace being declared between the United States and Great Britian, Miller's connection with the army and navy ended, and he began practicing medicine at Frederica, Delaware, but in a few weeks moved to Somerset County, Maryland; during his residence there he visited Philadelphia each year to keep in touch with medical progress. In 1785 he received his M. D. from the University of Pennsylvania. His inaugural dissertation entitled "De Physconia Splenica," was published in Philadelphia in 1789.

Following the yellow fever epidemic in Philadelphia, "the city of the dead," in 1793, he addressed a letter to Rush, widely circulated in the newspapers, in which he asserted that the disease was of domestic origin. He wrote, also, a "Report on the Malignant Disease Which Prevailed in the City of New York in the Autumn of 1805." He declared that his experience in 1805 proved that it was in no sense contagious. He wrote elaborately on the true nature of fever, and said that it consisted in "some pulmonary local affection"; accepting the doctrine of Broussais in asserting the "leading agency of the stomach in the establishment and extension of the morbid actions called febrile."

In 1796 Miller had moved to New York City, and in 1797 joined Samuel L. Mitchill (q. v.) and Elihu H. Smith in conducting our first medical journal, the "Medical Repository," the first number of which appeared in August, 1797 and its last in 1824 when it went into the "New York Medical and Physical Journal."

In 1803 Miller was appointed resident physician for the port of New York, the duties of whom were "to watch and give notice of the progress of malignant epidemics, and promptly to adopt such measures as exigencies may require." "A charter having been obtained for associating the physicians of New York into a college," he was elected professor of the practice of physic in 1807; in 1809 he was appointed one of the physicians to the New York Hospital, and soon after clinical lecturer there. He was among the earliest to note the advantages of clinical instruction and the importance of the study of pathological anatomy for the medical student; he also advocated a prolonged term of study. He introduced the plan of treating "cholera or bilious diarrhoea of infants" with minute doses of calomel. He considered the "enlargement and induration of the spleen to be almost invariably the consequence of intermittent fevers."

In 1812 he had an attack of "pulmonary disease," and died on March 17.

At the desire of Benjamin Rush, between whom and Miller a strong friendship existed, his medical works were collected by his brother, Samuel Miller, D. D., and published (1814) in 392 pages after his death. The volume is reviewed at length in the "North American Medical and Surgical Journal," 1828, v, 127-148, and the review is the chief source of information for this sketch.

HOWARD A. KELLY.

MILLER, Henry (1800-1874), pioneer obstetrician of Kentucky. In the latter part of the eighteenth century there emigrated from Maryland to Kentucky the parents of Henry Miller. Of German descent, and therefore of that sturdy character which has contributed so much to the best citizenship of this country, they became one of the three original families of the town of Glasgow, in the county of Barren, where on November 1, 1800, Henry Miller was born. His early years were spent in his native village, his companions and associates the descendants of these bold pioneers. Such associations, together with the strong German blood in his veins, gave him the rugged physique and traits of character for which he was noted. He attended the schools of his native village where he acquired a good knowledge of English and subsequently of Greek, Latin and mathematics. He began to study medicine when seventeen under Dr. Bainbridge and Dr. Gist, two Glasgow practitioners. In those days there were few drug stores, and pharmacy and dentistry were departments of medicine the physician always keeping a supply of drugs in his "shop," also extracting teeth and practicing venesection. After two years Miller entered the medical department of Transylvania University at Lexington, Kentucky, and attended his first course of lectures, at the end forming a partnership with his preceptor, Dr. Bainbridge, and practicing until the fall of 1821 when he returned to Lexington and attended his second course, graduating with honors. His inaugural thesis

bore such distinct marks of genius and so highly was it esteemed by his brethren that it was published at the time, no ordinary compliment in those days. He returned afterwards to practice in Glasgow and the following year was elected demonstrator of anatomy in his alma mater without even being consulted. He gave up this position at once and went to Philadelphia, making the trip on horseback, in order that he might better equip himself for the place to which he had been elected. On account of some dissensions in the faculty, he soon resigned his position and again returned to Glasgow until 1827, when he removed to Harrodsburg, Kentucky, and practiced for nine years. In 1837 the Medical Institute of Louisville was founded with Dr. Miller as professor of obstetrics and diseases of women and children, a chair he retained until 1858. In 1867, nine years after retirement from the University, he was recalled by the creation of a special chair for his occupancy, that of medical and surgical diseases of women. He soon resigned this position, but two years later accepted a similar chair in the Louisville Medical College which he retained until his death, February 8, 1874.

Dr. Miller was widely known abroad as well as at home as an author. In 1844 he published his chief work, "Theoretical and Practical Treatise on Human Parturition," which was revised and republished under the title "Principles and Practice of Obstetrics" (1858), a work recognized for years as an authority. He was a clear forceful logical writer; his article opposing Thomas's plan of opening the abdomen to aid in reducing the inverted uterus, is an admirable marshalling of facts, shows a perfect knowledge of the literature, and is as cogent a piece of reasoning as can be found in surgical literature. (Rich. and Louisv. Med. Jour. Mch. 1870). In 1859 he was elected president of the American Medical Association at its annual meeting in Louisville. He was the first in Louisville and one of the first in the United States to employ the vaginal speculum, or to employ anesthesia in obstetric practice in Louisville.

June 24, 1824, Dr. Miller married Clarissa Robertson, and had seven children, one of whom, Edward, became an eminent surgeon.

A partial list of his writings is given in the "Surgeon-general's Catalogue," Washington, District of Columbia.

BENJAMIN F. ZIMMERMAN.

MILLER, John (1774-1862), pioneer physician of New York State, was born in the town of Armenia, County of Dutchess, New York, on November 10, 1774. His advantages for early education were very limited; he attended the district school about one year and a classical school in Connecticut about the same length of time, his boyhood being spent in laboring on the farm. He began the study of medicine with Dr. Miller, an uncle, in Dutchess County, in the year 1793. At the expiration of little more than a year he went to Washington County, New York, and entered the office of Dr. Moshier, of Easton, in that county. While living with Dr. Moshier, young Miller received a severe injury by being thrown from a horse and was unable to pursue his studies for more than two years. During this period he returned to his home in Dutchess County. After several months at home he was induced by the advice of Dr. Baird, of New York, to seek an appointment in the then small Navy of the United States. For this purpose, though much against the wishes of his family, he went to New York, where he was presented by Dr. Baird and others, with letters of recommendation to Dr. Benjamin Rush (q. v.), of Philadelphia. At that time Miller was in poor health. He was tall, more than six feet in height, and thin in body, Dr. Rush was somewhat amused that so ghostly looking a young man should think of going into the navy, and said to him: "Young man, you look better fitted for a skeleton in my office than for a post in the navy." However, he went with him to visit the President of the United States, and through the influence of Dr. Rush he obtained the place he sought, and was directed to report himself to the surgeon of the United States brig "New York," then soon to sail for Tripoli. Upon further acquaintance Dr. Rush advised Miller to resign his post in the navy and proffered him a position in his family and office as a private pupil. This offer was readily accepted and Miller remained for nearly two years, accompanying the doctor on his rides into the country, and attending the lectures of Dr. Rush and Dr. Shippen at the University of Pennsylvania. From Pennsylvania he returned to Washington County, New York, in 1798, and entered into co-partnership with Dr. Moshier, his former instructor, where he remained until 1801. He was licensed to practice medicine by the Vermont State Medical Society in 1800. The law regulating the practice of medicine in New York was not

enacted until 1806. On leaving Washington County in 1801, he came into the then town of Fabius, Onondaga County, now Truxton, Cortland County, New York, and practiced there twenty-five years. From his early physical training on the farm he was well prepared for laborious duties in a new country. Where the roads were poor, many times almost impossible, yet he performed an amount of labor almost incredible, frequently riding on horseback thirty, and even forty miles a day, through storm and sunshine, with an energy that no obstacle could overcome. He found time to cultivate his mind by reading much of the current professional literature of the day, and his well-balanced mind and retentive memory enabled him to make the best use of what he read. He was elected an honorary member of the New York State Medical Society in 1808. He was the last of that band of physicians, who, in August, 1808, organized the Cortland County Medical Society, and its first vice-president and the oldest living member by ten years.

Dr. Miller while yet in the vigor of his days, left his profession and turned his attention to agriculture, and became prominent in public life. His first public office was that of coroner, an appointment he received from Gov. George Clinton, in 1802. He was a justice of the peace from 1812 until 1821, and one of the judges of the county courts from 1817 to 1820.

Dr. and Mrs. Miller had eight children—five sons and three daughters. Mrs. Miller died in 1834, aged 59 years. Of the family only one of the sons and two daughters survived, all of them arriving at mature age, and most of them falling a victim to that destroyer of our race—consumption.

In the temperance cause Dr. Miller took an early and active part. During his days of pupilage he once saw a beautiful child sacrificed in consequence of the intoxication of the physician called to its relief in an hour of suffering. This made a deep and lasting impression on his mind, and led him at the commencement of his labors as practicing physican firmly to resolve to abstain entirely from all intoxicating drinks.

He retained his wonted faculties almost to the last hour of his long life which ended quietly on the thirtieth day of March, 1862, in the eighty-eighth year of his age.

MILLER, Thomas (1806-1873), founder of the Washington (D. C.) Medical Institute, was born February 18, 1806, at Port Royal and received his early education under the care of the Jesuits at the old Washington Seminary, afterwards known as Gonzaga College. His medical studies were begun with Dr. Henry Huntt. After graduating M. D., in 1829, at the University of Pennsylvania, he practiced in Washington, his office being in one of the famous buildings known as "Newspaper Row." In 1830 he united with six others to form the Washington Medical Institute, for the purpose of giving instruction to students, and in 1832 began a course of teaching in practical anatomy. The same year, also, he was one of the physicians to the Central Cholera Hospital during the epidemic, and in 1833 was one of the original founders of the Medical Association of the District. At the time of his death he was president. In 1833 he married the daughter of a lawyer, Gen. Walter Jones. One of the incorporators of the Medical Society of the District of Columbia in 1838, he was ever afterwards an active member in furthering its interests. In 1839 he became professor of anatomy in the National Medical College and for twenty years labored as a teacher with distinction and success, on retirement being made emeritus professor and president of the faculty. In 1841 the Pathological Society was organized, and Miller was its first president. He was, subsequently, one of the attending surgeons to the Washington Infirmary, and one of the consulting staff of Providence Hospital and the Children's Hospital. The people did not then appreciate his efforts to abate nuisances and eradicate local causes of disease. To him is due the credit of abolishing the primitive and unsanitary habits, practices, and customs of a village population, for his untiring zeal in the interests of sanitary reform drove the reluctant municipal authorities to enact ordinances which clothed the board of health with some measure of authority to declare a nuisance and with power to abate it. He died on September 20, 1873.

Dr. Miller was the author of "Introductory Lecture on Anatomy," Washington, 1840.

DANIEL SMITH LAMB.

MILLSPAUGH, Charles Frederick (1854-1923), curator of the department of botany of the Field Museum, Chicago, a nephew of Ezra Cornell, the founder of Cornell University, was born at Ithaca, New York, June 20, 1854. He was educated at Ithaca Academy and at Cornell but left college without completing his course. In 1881 he re-

ceived his medical degree from the New York Homeopathic Medical College. For the following ten years he practiced his profession at Binghamton, New York, and it was then that he published his important illustrated work on "American Medicinal Plants" (1884-1887). Soon after leaving Binghamton, he became professor of botany in West Virginia University and while there published his "Catalogue of the Flora of West Virginia" (1892). In 1893, he was appointed curator of the department of botany of the Field Museum, Chicago, and soon afterward became lecturer on economic botany in the University of Chicago and professor of medical botany in the Chicago Homeopathic Medical College. During his thirty years at the Field Museum, he was actively engaged in botanical exploration, study, and publication. He visited Mexico, the West Indies, and the Bahamas repeatedly and long devoted particular attention to the Antillean flora. Most of his results found their way into print in the publications of the Field Museum; he re-edited "One Thousand American Fungi" by McIlvaine and Macadam (1912) and was joint author with N. L. Britton of the "Bahama Flora" (1920). His death occurred at Chicago, September 15, 1923.

JOHN H. BARNHART.

MILTENBERGER, George Warner (1819-1905). Born in Baltimore, March 17, 1819, this obstetrician was the son of Gen. Anthony Felix Wybert Miltenberger, and was educated at the Boisseau Academy, Baltimore, and at the University of Virginia, taking his M. D. at Maryland University in 1840. Soon he was appointed demonstrator of anatomy in his alma mater. His talents as a lecturer led to the further honor of a lectureship on pathological anatomy in 1847. For several years he had a large quiz class and a surgical service in University Hospital. There he taught almost everything and laid broad and deep the foundations of solid attainments in the various branches of medicine. In 1852 he succeeded Prof. Samuel Chew (q. v.) in the chair of materia medica and therapeutics, in 1855 becoming dean of the faculty and in 1858 succeeding to the chair of obstetrics. His close application to his professional work was notorious; he did all his reading in his carriage, and enjoyed but little rest or recreation. At one time he had eighteen horses in his service. He gave up all amusements and social pleasures, church services and holidays; for many years he seemed to live only for the good of his patients. He was a ready and pleasing lecturer—never using notes—and impressed his hearers with his honesty, his sincerity, and his mastery of his subject. In 1891 he offered his resignation—for the second time—which was accepted and he became professor emeritus and honorary president of the faculty, having completed his half century in the service of the university from which he had graduated.

Dr. Miltenberger was president of the Baltimore Obstetrical and Gynecological Society in 1885-86; president of the Medical and Chirurgical Faculty of Maryland in 1886-87, and he was appointed consulting physician to the Johns Hopkins Hospital on its opening in 1889. On his accession to the chair of obstetrics, his attention was turned in that direction exclusively and all his later writings were on that subject, in the "Maryland Medical Journal" and in the "Transactions of the Medical and Chirurgical Faculty of Maryland." On April 30, 1906, a portrait of him was presented by his friends to the Medical and Chirurgical Faculty. His wife, nèe Neale, died in 1898, without issue. At his death, December 11, 1905, he left a large fortune to his nephews and nieces.

EUGENE F. CORDELL.

MINER, Julius Francis (1823-1886), surgeon, of Buffalo, New York, was born in Peru, Berkshire County, Massachusetts, on February 16, 1823. As a boy he went to two preparatory schools and as a medical student to the Berkshire Medical Institution, Pittsfield, Massachusetts, and to Albany Medical College, New York, taking his degree from the latter in 1847. While in New York he also took up special surgical and ophthalmological studies. First he practiced in New Braintree, Massachusetts, afterwards in Buffalo, being appointed in 1860 visiting surgeon to the Buffalo General Hospital. In 1867, he was made professor of surgical anatomy and ophthalmology; in 1870, professor of special and clinical surgery. His last course of lectures was delivered in 1881-82. When in 1861 he issued the first number of the "Buffalo Medical and Surgical Journal" his idea was to afford a means of communication between the practitioners of the vicinity and his editorship soon made the journal one worth reading.

He was best known as a surgeon. He performed most of the important operations of his day and in more than one instance instituted procedures which have been widely

adopted. Four times he successfully performed thyroidectomy, and ligated the external iliac artery for aneurysm, also the internal and external carotid and most of the other arteries that require ligation for injury or disease; he removed a spleen weighing over seven pounds, with fatal result; he exsected for traumatism and disease the hip, knee, ankle, shoulder and wrist-joints; in two cases he removed over four and a half inches of the femur, securing a useful limb. A similar operation was done on the humerus, removing large portions of the shaft for gunshot or other injuries; he removed the entire fibula successfully and the ulna with the elbowjoint, so saving an arm; twice he removed foreign bodies from the lumen of the left bronchus.

In an emergency he ligated the radial artery with a pocket knife and an aneurysm needle fashioned from a hairpin. His operation for ovarian tumor in 1869 will be regarded as his greatest addition to surgery ("Buffalo Medical and Surgical Journal," June 1869). He had previously (1866), for the first time in the history of ovariotomy, tied separately the vessels of the pedicle, cut the ligatures short and returned the pedicle to the abdominal cavity with success.

In 1867, while operating upon a charity patient, he pricked his thumb with a spicula of bone and received the infection which eventually ended his life. Iritis and other symptoms followed, but it was not until 1873 that serious results were observed. His lectures in 1881-82 were delivered sitting and at their close he resigned and became emeritus professor. His paper on "Ovariotomy by Enucleation without Clamp, Ligature or Cautery" appeared in the "American Journal of the Medical Sciences," 1872, vol. lxiv.

The end came early on the fifth of November, 1886. He sought in religion as he had sought in medicine, to know the truth, and had found it and faced death with the same cheerfulness with which he had met the weariness of protracted illness.

EDWARD N. BRUSH.

MINER, Thomas (1777-1841), of Middletown, Connecticut, an early investigator of epidemic cerebrospinal meningitis, one of the most learned physicians of his day, was born in Westfield, the northwest parish of Middletown, Connecticut, October 15, 1777. His father was the Congregational minister in that town and saw to it that he received a good elementary education. Finally Miner was fitted for college under Dr. Cyprian Strong, of Chatham, and graduated in 1796 from Yale, with the degree of A. B. The next three years were spent in teaching in Goshen, New York, the work, however, being sadly interrupted by two attacks of intermittent fever. Returning to Middletown in December, 1799, he began the study of law, only to discontinue it during 1810, on account of a serious attack of rheumatism. In the autumn of 1801 his health permitted him to take charge of an academy at Berlin, where he taught for two years, or until ill health again interfered with his plans. He was able, however, when twenty-five years of age, to study medicine under Dr. Osborne, of Middletown, and continue with Dr. Smith-Clark of Haddam. In the spring of 1807 he began to practice at his father's house, but, in the autumn, removed to Middletown, and finally settled at Lynn, only to remove, in two years, back to Middletown, where he practiced until an affection of the lungs and heart suddenly ended, for the great part, his professional career, and left him, at the premature age of forty-one, a confirmed valetudinarian. Subsequently he saw patients in consultation, and for two or three years did some literary work for the "Medical Recorder of Philadelphia," engaging himself in making selections, abridgments and translations from the French. In 1823, with Dr. Tully (q. v.), he published "Essays on Fevers and other Medical Subjects," which received much criticism on account of the doctrines it advanced. Two years later there appeared his admirable account of an epidemic of "Cerebrospinal Meningitis in Middletown," 1825. In it he called the affection typhus syncopatis.

He received the honorary degree of M. D. from Yale in 1819. He was a member of many important committees in the Connecticut State Medical Society, and in 1832 was made its vice-president. Two years later he was promoted to the presidency, an office which he held for three years. He married Phebe, daughter of Samuel Mather. She died February 5, 1811. His death at the home of his friend, Dr. S. B. Woodward (q. v.), in Worcester, on April 23, 1841, was due to complications resulting from an affection of the valves of the heart.

Woodward describes him as one of the most learned physicians in New England—not only in professional attainments, but in foreign languages and theology. He was acquainted

with the French, Italian, Spanish and German languages and was often employed by publishers in the country as translator.

WALTER R. STEINER.

MINOR, Thomas Chalmers (1846-1912), of Cincinnati, son of Thomas H. and Rebecca Baldridge Minor, was born in that city July 6, 1846. At the age of fourteen he entered Herron's Seminary, and was graduated when seventeen years of age and in 1867 took an M. D. at the Medical College of Ohio. After graduation he served as interne in the St. John's and Good Samaritan hospitals and at the end of his interneship went to Europe and attended the hospitals in London, Paris, and Würzburg, in the last hearing the lectures of Scanzoni. Dr. Minor was familiar with the Spanish, French and Italian languages. In 1868 he was appointed district physician in Cincinnati and served in this position for four years. In 1872 he was elected a member of the Board of Health and was health officer of the city in 1878-9, during the epidemic of Yellow Fever. He was a trustee of the University of Cincinnati for six years. From 1886 to 1890, and in 1901-2, he was police commissioner. In 1902 he was appointed examining surgeon of the fire and police department, a position he held until his death. For fifteen years he was examining surgeon for the Navy and Marine Service.

For many years Dr. Minor was a contributor to the "Lancet Clinic" of Cincinnati and was a prolific and most versatile writer. In 1878 he published a volume on "Yellow Fever in the Ohio Valley in 1878." Among his most notable works were "Erysipelas and Child-bed Fever"; "Scarlatinal Statistics"; "Epidemiology of Ohio"; "Cerebro-spinal Meningitis"; "Medicine in Ancient Rome"; "Medicine in the Middle Ages"; "The Medical School of Salerno," and "Prostitution in Antiquity." In lighter vein were: "Athothis," a satire on modern medicine; translations from the French—"Parisian Medical Chit-Chat," "The Evil that has been said of Doctors," "The Good that has been said of Doctors." His novel, "Her Ladyship," was dramatized. He copyrighted two opera librettos—"Don Juan" and "Frasquita."

Dr. Minor was married to Miss Alice Carneal, of Cincinnati, November 26, 1878. The widow and an only child, Lawrence C. Minor, survived him when he died February 18, 1912, after a brief illness.

Dr. Minor was about 5 feet 10 inches in height, and well proportioned. He was very active until a severe fall, late in life, injured a leg, after which he used a cane. He was a fluent and humorous speaker.

A. G. DRURY.

MINOT, Charles Sedgwick (1852-1914), Boston embryologist and biologist, was born in West Roxbury, now a part of Boston, Massachusetts, December 23, 1852, the son of William and Katherine Sedgwick Minot. On his parental estate and in the surrounding country, he laid the foundation for his future scientific work by becoming "a good amateur naturalist." His first scientific publication was a brief description of the male of "Hesperia metea," a small butterfly captured in Dorchester, of which species only the female had previously been recorded. This paper, presented to the Boston Society of Natural History on February 24, 1869, was quickly followed by other studies of insects, including descriptions of new species. Later, in 1875, we find him at the Collège de France studying the microscopic anatomy of the water-beetle, "Hydrophilus piceus," under the direction of Ranvier. Subsequently he described the histology of the locust and cricket (1880), together with the anatomy of the cotton-worm (1884), for the Entomological Commission at Washington. Finally, as a reminiscence of his early interest in insects, he published in 1901 certain notes on the larvae and pupae of Anopheles, made in 1879. At that time these mosquitoes were of no medical interest, but the curious habits of their larvae had attracted his attention, and he reared many of them to maturity.

After Minot had obtained the degree of Bachelor of Science from the Massachusetts Institute of Technology in 1872, and had made his early studies of insects, he undertook physiological investigations with Dr. Henry P. Bowditch (q. v.), then assistant professor of physiology at the Harvard Medical School. They published jointly in the "Boston Medical and Surgical Journal," May 21, 1874, a paper on the effects of anesthetics on the vasomotor centers. Influenced no doubt by Professor Bowditch, for whom he had always the warmest friendship and the highest regard, he visited the physiological institute at Leipzig; and under the direction of Carl Ludwig, who had been Bowditch's teacher, he studied the production of carbonic acid in resting and active muscle. After returning to America he conducted an extensive series of experiments on tetanus, published

in 1878, and in that year he received from Harvard University the degree of Doctor of Science for his work on the physiology of muscular contraction. This marked the end of his strictly physiological studies. Although well trained in chemistry and initiated in physiology by Bowditch and Ludwig, morphology appeared to him as even more attractive. While at Leipzig, Minot studied also in the zoölogical laboratory under Leuckhart, completing an investigation of the turbellarian worms begun at Würzburg under Semper. He had mastered the latest methods of microscopic technique and had caught the spirit of the German universities.

It was to the great task of raising the standards of higher education in America, particularly in his own field, that Dr. Minot had committed himself when, in 1880, he was appointed lecturer in embryology at the Harvard Medical School. In 1883 he was promoted to an instructorship in histology and embryology and took charge of a department which was then equipped with 18 Hartnack microscopes and supported by an annual appropriation of fifty dollars. It grew rapidly under his care, and in 1887 he was made assistant professor. In 1892, without limiting the scope of his work at the medical school, but in recognition of his preeminence in one branch of microscopic anatomy, he was appointed professor of human embryology. This was his title until 1905, when he became James Stillman Professor of Comparative Anatomy. He was the first to occupy this newly created position.

While professor of embryology, Dr. Minot developed his wonderful collection of over nineteen hundred embryos of various animals, cut into many thousands of sections, each of which was numbered and catalogued. He described this collection as "a sort of cyclopedia of vertebrate embryology to which one can turn at any time and get the desired information as to the principal features of development of any structure whatsoever." Only advanced students had access to this collection, but the instruction of beginners was facilitated by preparing for their use one hundred and fifty complete series of sections of pig embryos, at a stage most interesting to students of human anatomy. Such study of mammalian embryos, rather than those of chicks, was an innovation, and called for the preparation of a special "Laboratory Text-Book of Embryology." This was issued in 1903, many years after Minot had begun to use pig embryos, and being the first text-book of its kind, it led to a more general laboratory study of mammalian embryology both in colleges and medical schools.

A far more important book, which placed Minot at once in the front rank of embryologists, was his well-known "Human Embryology," published in 1892, the "result of ten years' labor." This was an ambitious attempt to present in one large volume a summary of all that was then known concerning human development, with exact bibliographical references to every paper cited (nearly a thousand). It included also numerous contributions based upon the author's personal observations, especially in the chapters on the placenta and embryonic membranes. When this work was issued in its German edition in 1894, Professor His described it as substantial throughout, with the facts everywhere in the foreground. "Minot's work," he wrote, "is at present the fullest embryology of man which we possess, and it will retain its value as a bibliographical treasure-house even after its contents in many parts have been superseded."

A series of studies in which Professor Minot took the greatest interest were concerned with the nature of growth. They began in 1879 with a paper on "growth as a function of cells," in which it is stated that during growth "two fundamentally different processes display themselves: the gradual 'senescence' which continually hinders and delays the multiplication of cells and their vital acts, at last suppressing them altogether at the moment of death; before senescence conquers, the sexual products are thrown off and effect the process of "rejuvenation." Senescence and rejuvenation were studied by tabulating the weights of guinea pigs from birth to old age, and of rabbit embryos up to the time of birth, using weight as a measure of growth. The conclusion was drawn that the fertilized ovum is endowed with an enormous power for growth, over ninety-eight per cent of which has been lost at the time of birth. The remaining two per cent is largely exhausted in infancy. Therefore he concluded that "senescence is at its maximum in the very young stages and the rate of senescence diminishes with age." He protests against "the medical conception that age is a kind of disease," chronic and incurable, of any such nature as intestinal intoxication or arteriosclerosis. On the contrary, he finds that it has a cytological cause, equally operative in the lower animals which have neither intestines nor arteries, and in

man; and he ascribes senescence to the increase and differentiation of cytoplasm as compared with nucleoplasm. In 1901 he proposed "the new term 'cytomorphosis' to designate comprehensively all the structural alterations which cells, or successive generations of cells, may undergo, from the earliest undifferentiated stage to their final destruction." His latest works on this subject, aptly characterized as "thoughtful and suggestive," refer to cytomorphosis as a most promising field for further study, and at the time of his death, plans had been made for careful investigations to test the validity of his cytomorphic hypothesis concerning age.

Altogether Professor Minot published no less than one hundred and eighty scientific notes and papers, including a considerable number of presidential and other addresses. A complete bibliography will be found in "The Anatomical Record," 1916, vol. x, 156-163. Appreciating the value of scientific societies in promoting research, he was deeply interested in the organization and development of those in America, and at different times was chosen president of the Naturalists, the Anatomists, and the American Association for the Advancement of Science. He was a member of many others, including the National and American Academies and learned societies in Belgium, England, France, Germany and Italy. Honorary degrees were conferred upon him by Yale in 1899, Oxford 1902), the University of Toronto (1904) and St. Andrew's University in Scotland (1911).

Every anatomist in America will find his work facilitated by what Minot has done in inventing microtomes, developing the means of publication, and encouraging research through societies and funds. It was altogether fitting that as exchange professor to Berlin and Jena in 1912-13, he should appear as the official representative of anatomy in America, presenting the results of American investigations made during the previous decade.

After returning from Europe, failing health prevented the energetic activities of earlier years, but we find the same interests as in boyhood. As president of the Boston Society of Natural History, where his first paper had been presented, he continued to direct the transformation of the old collections into those which are creditable to the city, showing how much may be accomplished with inadequate endowment, if wisely managed. He took great delight in this society and in all that it represents. He was interested also in horticulture, and in his gardens in Milton, Mass., he cultivated rare varieties of peonies with unusual success. These were all kindred interests—the natural diversions of a genuine biologist.

On June 1, 1889, Dr. Minot married Lucy Fosdick of Groton, Mass. They had no children.

His last days were spent in the seclusion of his suburban home, and he died at Milton on the nineteenth of November, 1914.

FREDERIC T. LEWIS.

MINOT, Francis (1821-1899), Hersey Professor of the Theory and Practice of Physic in the Harvard Medical School, was born in Boston, April 12, 1821, and died in Readville, Massachusetts, May 11, 1899. He was the son of William Minot, and was educated at the Boston Latin School and at Harvard College, where he was graduated in 1841 and from the Harvard Medical School in 1844. After graduation he studied medicine abroad. In 1860 Trinity College, Hartford, gave him her A. M. From 1859 to 1886 he was physician to the Massachusetts General Hospital and from 1886 to the time of his death one of the consulting physicians there. He was instructor in the theory and practice of medicine in the Harvard Medical School from 1869 to 1871, assistant professor from 1871 to 1874, and Hersey Professor from 1874 to 1891. He was the first clinical lecturer on the diseases of women and children to be mentioned in the announcements of the Harvard Medical School; this was in 1871. In 1878 he gave the annual discourse before the Massachusetts Medical Society, choosing for his subject, "Hints on Ethics and Hygiene." In 1889 he was president of the Association of American Physicians. He was treasurer of the Massachusetts Medical Society from 1863 to 1875 and was one of the founders of the Massachusetts Medical Benevolent Society. For many years he was a member of the Obstetrical Society of Boston.

Dr. Minot contributed papers on "The Treatment of Acute Pneumonia," "Cases of Pulmonary Consumption Followed by Recovery or Arrest of the Disease," and other topics, to the medical press. He was an excellent teacher and a man of most courteous bearing both in the classroom and at the bedside. His portrait is in the Boston Medical Library where he is also commemorated by a book fund.

MITCHELL, Ammi Ruhamah (1762-1824), pioneer practitioner of North Yarmouth, Maine, was the son of Judge David Mitchell, who was judge of the Court of Common Pleas for Cumberland County, Maine, and member of the General Court of the Commonwealth of Massachusetts, and was born May 8, 1762, and named after Dr. Ammi Ruhamah Cutter (q. v.). When young Mitchell was nineteen years old he went to Portsmouth and studied medicine with his namesake. While there, our government gave to France a new man-of war called the "America" in place of a French ship which had been lost off our coasts. The French government had sent Dr. Meaubec to Portsmouth, to be surgeon of the new ship on her return to France. This gentleman took a great fancy to young Mitchell, and persuaded him to go with him to France as surgeon's mate on the "America." This he did and visited all the places of interest under Dr. Meaubec's patronage, to say nothing of obtaining the best possible opportunities of studying medicine in Paris for a long period of time.

When Dr. Mitchell returned to North Yarmouth, he could hardly decide to spend his life in so small a place. It happened, however, that while considering whether to settle, one patient came, and before her case was finished, another wanted his services, so that ultimately Dr. Mitchell passed his life in that town, gaining an extensive practice.

In his practice, Dr. Mitchell had remarkable success, most of which, in those religious days, was regarded as due to the fact that he always asked God's blessing on his medicine chest and its contents as well as upon himself, looking heavenward for assistance to the efficacy of the drugs grown on God's earth and sacred soil. He was successful, also, owing to his intense humor. He had an enormous fund of anecdote, which made everybody laugh, and his wit went far to help his cures. He was most energetic in stamping out an epidemic of malignant fever brought in 1807 by a vessel from the West Indies.

At his funeral service, the Rev. Asa Cummings publicly regretted that at times Dr. Mitchell's mirth would run through an audience like contagion, when sobriety of mind would have been much more appropriate. He was much in request to deliver addresses, and we find that he delivered an eulogy of Washington in 1800, one on Rev. Tristram Gilman, and another on "Sacred Music" in Portland in 1812. Dr. Mitchell was distinctly a literary man, and not a few papers were written by him, and read before the public, or printed in the newspapers of the day.

Dr. Mitchell died, as it were, in harness, May 14, 1824. He and his horse and carriage were seen going down a hill and an hour later the horse and empty wagon appeared in Dr. Mitchell's yard. Search was made, and the good physician was found dead on the roadside, having probably been thrown by a bad place in the road.

People from miles around attended the funeral, and there was much lamentation for the sudden death of their genial, respected, and beloved medical man, who at sixty-four seemed well prepared for many years more of active practice.

He married when twenty-four, and was the father of twelve children.

JAMES A. SPALDING.

MITCHELL, Giles Sandy (1852-1904), gynecologist of Cincinnati, was born in Martinsville, Indiana, May 31, 1852, the son of Samuel M. and Ann Sandy Mitchell. Dr. Mitchell attended the public schools of his native place, and was graduated from Indiana University, Bloomington, Indiana, in 1873. In that year he went to Cincinnati, Ohio, and began to study medicine under Dr. Thaddeus A. Reamy, (q. v.) attending lectures at the Medical College of Ohio. In 1875 he took his M. D. from that school, and began practice with Dr. Reamy. From 1876 to 1878 Mitchell traveled abroad, visiting many countries in the interest of his medical education, and for his health, and returned in the autumn of 1878. From 1879 to 1884 he was adjunct professor of obstetrics in the Medical College of Ohio, but resigned this position to accept the professorship of obstetrics in the Cincinnati College of Medicine and Surgery, which he held many years. He was for several years professor of gynecology in the Woman's Medical College, and the same in St. Mary's Hospital from April, 1896, until his death. He was a member of the Academy of Medicine of Cincinnati from 1875 (its president in 1891); of the Cincinnati Obstetrical Society; of the Ohio State Medical Society, and of the National Association of Obstetricians and Gynecologists. His A. M. was conferred by the Indiana University. Rare skill as an operator placed him in the front rank as a gynecologist, and his genial manner won for him a very large clientèle. During the latter years of life he devoted himself to gynecology.

On May 11, 1875, he married Mary A. Reamy, daughter of his partner. She died on April 18, 1876, leaving a son who lived only three months, and on October 22, 1883, the doctor married Esther De Camp, of Cincinnati, who survived him. They had no children by this marriage. Dr. Mitchell died of angina pectoris, May 5, 1904. Though for two years a sufferer from the disease, he died in harness, visiting his patients on the very day of his death.

ALEXANDER G. DRURY.

MITCHELL, John (1680?-1768), pioneer botanist and writer of Virginia, the date of whose birth is uncertain, was born, educated and took his M. D. in England, but as there were several scholarly John Mitchells of that time it is difficult to identify his birth. He came over to America about 1700, and lived in Virginia, at Urbanna, on the Rappahannock. During his stay in Virginia he was interested in everything scientific, especially botany, and made long excursions to gather plants, and wrote on electricity, yellow fever, politics and probably published a map of the British and French dominions in America (1755), said to mark an era in the geography of North America. Like most doctors and scientists of that time, he kept his interests wide by corresponding with European confrères, especially with Linnaeus, who named the partridge vine or squawberry after him, "Mitchella repens." Every fresh plant seems to have been sent by the American botanist to their acknowledged head in Sweden, and the great man always most courteously thanked these friends and ofttimes pupils for remembering him. Mitchell's "Dissertatio Brevis de Principiis Botanicorum et Zoologorum" was dated Virginia, 1783, and "Nova Plantarum Genera," 1741. He returned to England about 1747 and became a fellow of the Royal Society, the fruits of his labors in America being given to the learned Society in several addresses, among them one on "The Preparation and Use of Various Kinds of Potash," 1748, and one on "The Force of Electrical Cohesion." Another paper was "Essay on the Causes of the Different Colours of People in Different Climates," read before the Royal Society, by Peter Collinson, 1744. The following have been credited to his authorship: "The Contest in America between Great Britian and France, by an Impartial Hand," anonymous, about 1757; "The Present State of Great Britain and North America," 1767.

Among his manuscript papers was "An Account of the Yellow Fever which Prevailed in Virginia in 1737 to 1741 and 1742, in letters to Cadwalader Colden and Benjamin Franklin," published by Rush in the "American Medical and Philosophical Register," vol. iv. He died in March, 1768.

HOWARD A. KELLY.

MITCHELL, John Kearsley (1793-1858), early American scientist and father of the eminent writer and investigator, S. Weir Mitchell (q. v.), was born in Shepherdstown, Virginia, May 12, 1793, and died in Philadelphia, April 4, 1858. His father, a physician of Scotch birth, sent him at the age of eight to be educated in Scotland at Ayr and Edinburgh. Returning in 1813, he began to study medicine with Dr. Kramer of Jefferson County, Virginia, entered the University of Pennsylvania Medical School under Dr. Nathaniel Chapman (q. v.), and graduated in 1819. After making three voyages to China and the East Indies on account of impaired health, acting as ship's surgeon, he settled in Philadelphia in 1822, and began to practice medicine and to teach physiology. In 1824 he lectured on the institutes of medicine and physiology in the Philadelphia Medical Institute; in 1826 he held the chair of chemistry in the same school, and in 1833 was selected to lecture on chemistry applied to the arts, in the Franklin Institute. In the spring of 1841 he was called to the chair of theory and practice in the Jefferson Medical College, Philadelphia, and at different times was visiting physician to the Pennsylvania hospital and to the city hospital. The city rewarded him for his services in times of pestilence on two occasions by gifts. He wrote on mesmerism, the osmosis and liquefaction of carbonic acid gas, and the ligature of limbs in spastic conditions, and was the first to describe the spinal arthropathies (1831). Besides a volume of poetry entitled "Indecision, and Other Poems," Philadelphia, 1839, and popular lectures on scientific subjects translated into other languages, he left an essay "On the Cryptogamous Origin of Malarious and Epidemical Fevers," 1849, which was the first brief for the parasitic etiology of disease on "à priori" grounds—a vigorous, logical argument which, as pure theory goes, ranks with Henle's essay on miasms and contagia (1820). A collection of essays, including a paper on animal magnetism, was published in Philadelphia in 1859, by his distinguished son.

MITCHELL, Silas Weir (1829-1914), noted neurologist, poet and novelist, of Philadelphia was born in that city, February 16, 1829, and died there of pneumonia January 4, 1914. His international reputation was based upon original contributions to medicine and physiology, and upon his productions as a poet and a novelist. While preeminent as a practitioner of medicine, he also held throughout his long life the highest rank as a medical writer and investigator; his novels and his poetry, mostly published after his fiftieth year, established his position in American literature. His ancestors on his father's side were Scotch; his mother's family came from central England. His father was Dr. John Kearsley Mitchell (q. v.), and Dr. John Kearsley (q. v.), a noted colonial physician was an ancestor. After a desultory preparatory education Mitchell was admitted to the college department of the University of Pennsylvania in the class which was graduated in 1848; he left because of ill health a year before graduation. In 1903 he was restored by Council to full membership in his class. He received his degree in medicine at the Jefferson Medical College in 1850, and spent one year (1851-52) in Paris, where he came in contact with Claude Bernard, the physiologist, who greatly influenced his future course. He was neither an ardent, nor a methodical student, but worked as he felt inclined.

While Mitchell by his writings was a great teacher, he never held long any academic position; when elected professor in the medical department of the University of Pennsylvania, he immediately declined. At the Orthopedic Hospital and Infirmary for Nervous Diseases he gave for many years conversational clinics for the benefit of the hospital staff and for such undergraduates and physicians as might attend, and many availed themselves of the opportunity. A few years after the establishment of the Philadelphia Polyclinic and College for Graduates in Medicine he accepted a professorship in this institution, and opened to its students the opportunities afforded by his clinics at the Infirmary for Nervous Diseases. He was a trustee of the University of Pennsylvania for thirty-five years, and to him is largely due the school of biology, as well as important help in the building of the medical laboratories and in securing endowments for the school of hygiene, and for the hospital of the university. He held the following appointments at various times: a fellow and a president of the College of Physicians of Philadelphia; a member of the National Academy of Science; fellow of the Royal Society of Literature of the United Kingdom; honorary corresponding member of the French Academy of Medicine, of the Academy of Sciences of Bologna, and of the Gesellschaft Deutscher Nervenarzte; associate member of the Royal Medical Society of Norway, of the Academy of Sciences of Sweden, of the Royal Academy of Medicine of Rome, and honorary member of many other scientific societies in Europe and America.

Mitchell held honorary degrees from many learned institutions, both at home and abroad; he had a degree of Doctor of Medicine, "honoris causa," University of Bologna in 1888; LL. D. Harvard, 1886; Edinburgh, 1895; Princeton, 1896; Toronto, 1906; and Jefferson Medical College, 1910.

He took a continuous and enthusiastic interest in the College of Physicians of Philadelphia. To him more than to any other fellow of the college was due the influence which this institution exerted in medical circles and also its material advancement as a library and hall for medical assemblages. In November, 1909, the college moved from its old quarters at 13th and Locust Streets, to its present stately hall on 22nd Street, above Chestnut; the contributions which made this movement possible were largely obtained by his personal influence, and the new College today stands as a notable monument to his memory. Another monument is the Orthopedic Hospital and Infirmary for Nervous Diseases at 17th and Summer Streets, Philadelphia.

The first decades of his life were periods of arduous work as a general practitioner, although even at this period he turned his attention to research. He remained, however, to the last a practicing physician, the character of his professional work changing with the years. Before he reached middle life he was everywhere recognized as a great neurologist, while at the same time retaining his hold on the profession as an internist and a general consultant. The Civil War made a profound impression both on his life and work. At the outbreak he was a little over thirty, vigorous and eager to serve. He lived in the midst of the recruiting camps, and saw the multiplied thousands march through Philadelphia to the front. He held a place in the work of the Sanitary Commission and of the army hospitals; early in the war he was appointed acting assistant surgeon. In two of the large military hospitals of Philadelphia, wards were set apart for him, for the study

and treatment of injuries of the peripheral nerves and of the central nervous system. In 1863 a large hospital was established at Turners Lane, a Philadelphia suburb, where several hundred patients offered opportunities for study, embraced by him and his colleagues, Moorehouse and Keen.

Mitchell's publications, medical and scientific, from 1852 to 1910 include six books and many monographs and special articles; more than one hundred of these might be classed under the head, clinical neurology. A score is concerned with toxicology and chemistry, the study of snake venoms holding a predominant place; and another score deals with problems in neural physiology and neural anatomy. The above classification is not quite exact, for some of his papers largely clinical have anatomic and physiologic bearings of equal or greater importance than the observations on symptoms, diagnosis and treatment. I would cite as an instance, the discussion of the surface distribution of nerves in papers on neurotomy and allied subjects. He pointed out the remarkable variations in the median and other nerve supplies to the skin, challenging the correctness of the descriptions in anatomic treatises. Not a little of the more recent work of Head and his collaborators on nerve distribution was anticipated by Mitchell. His study of the psychic and other phenomena of those who had undergone amputations illustrates the blending of clinical, physiologic and psychologic observations. The list of the publications referred to does not include his numerous historical, biographical and introductory addresses, and many poems on medical occasions. His addresses on Harvey, on Instruments of Precision, and his poem on the "Death of Pain" are especially worthy of recall.

That the field of neurology early attracted his attention is evident from his bibliography. In a "Smithsonian Contribution" published in 1863 he recorded studies with Morehouse on the respiration of turtles. In this was recorded the discovery of a laryngeal chiasm, the first neural decussation observed after that of the optic nerves. This notable observation ranks among the earliest American contributions to neuro-physiology. Several citations are included in the portion of this sketch which follows from an article by me on the place of Mitchell in neurology, published shortly after his death, in the "Journal of Nervous and Mental Disease." I have referred to his researches on injuries and diseases of the nerves; new symptoms like causalgia or burning pain, observations of reflex paralysis, new data in diagnosis, and new therapeutic measures, medical and surgical, were the results of this war-time work. On the foundation of the material collected and published by him and his colleagues, there appeared in 1872 a volume by him on "Injuries to Nerves and Their Consequences," and many years later a work by his son, Dr. John K. Mitchell, on the remote consequences of nerve injuries, based upon a study of the conditions remaining in surviving patients described in the first volume. "Injuries to Nerves," translated into several languages, holds first rank in neurological literature.

Mitchell's researches on the physiology of the cerebellum marked him as a scientific experimentalist. These investigations were continued from 1863 to 1869. In the résumé of his work and results, in the "American Journal of the Medical Sciences" for April, 1869, he shows his thorough familiarity with the literature from the time of Rolando. The experiments, upon pigeons, rabbits and guinea pigs, were mainly of three sorts, namely, ablation, partial or nearly complete, freezing with rigoline spray, and injections of globules of mercury into selected portions of the cerebellum. He also produced irritation by applying cantharides to exposed parts, or by penetration with an awl-shaped instrument. He ablated the cerebellum eighty-seven times, and performed two hundred and sixty experiments on the influence of irritants.

He was a close observer of the effects of drugs and of non-medical measures of treatment. He introduced inhalations of nitrite of amyl to abort epileptic seizures, and studied its effects in congestive and other nervous states. Opium and its derivatives, atropine, and bromides, were investigated and new light was thrown on their discrimating use. He advocated and illustrated, by records of successful cases, the use of splints to bring about complete rest in the treatment of painful affections like sciatica, the employment of ice and freezing sprays for the relief of pain and local spasm, nerve section and nerve stretching, for the relief of intractable affections.

His fame as a therapeutist rests most firmly upon his origination of the different measures included under the designation "Rest Treatment." The first systematic exposition was in "Fat and Blood" (1877). The essentials were isolation, rest in bed, massage, general faradization, full feeding—usually with milk as its basis—general tonics, and other se-

lected remedies. At first received with skepticism, the treatment gradually came to be recognized as an important addition to the resources of the neurologist and internist.

In 1881 he published a small volume entitled "Lectures on the Diseases of the Nervous System, Especially in Women," and in 1895 another, "Clinical Lessons on Nervous Diseases." Both volumes are permeated with original observations and are of value to the student of functional and organic nervous diseases. Throughout these books, as well as his other works written on functional nervous diseases, his wonderful powers in psychoanalysis and psychotherapy are in evidence. His records are chiefly of personal observations, with few references to literature. Mitchell's gift for original clinical research and lucid exposition appears in his study of the seasonal relations of melancholia, of the phenomena of the period immediately preceding and following sleep, of pre- and post-hemiplegic pains, and of joint and nutritive affections occurring in cerebral, spinal and peripheral diseases. He had the faculty of seizing upon unusual and dramatic phases of disease, of describing them in detail, and of relating them to a probable etiology. Many references might be made to this tendency, as in his discussion of red neuralgia, the disorders of sleep, of subjective false sensations of cold, and the wrong reference of sensations of pain. As late as 1905 he published a paper on the psychic disorder to which he gave the name of ailurophobia or cat fear. He directed the attention of neurologists to a number of new clinical types, and among them post-paralytic chorea, in 1874. The rare vasomotor neurosis, erythromelalgia, was first fully described by him in 1878, although as early as 1872 he had called attention to its chief features. These studies of erythromelalgia show him at his best in descriptive detail. Every investigation opened up fruitful paths for further research, as seen in his studies on the effects of accidental or surgical nerve section, on the psychic phenomena shown in cases of amputation, on the influence of barometric and other weather conditions in nerve injury and disease, and in his elaborate study with Morris Lewis on knee jerk and muscle jerk. With William Thomson he called attention to the causative influence of errors of refaction in certain headaches.

Out of the Civil War period came also much that crystallized later in his novels, which deal with hospital incidents, with the march, the bivouac and battle. Some of his more important novels also drew their inspiration from the persons and incidents of the war; "Roland Blake" deals largely with espionage, and Grant's sledge-hammer campaign in the Wilderness. "Constance Trescott," which, with others, I regard as his best novel, deals with the reconstruction period, throwing light on conditions in the South after the war; "Westways" brings vividly to mind the antagonisms of the North and the South in the period preceding the war, and in this novel is th description of the Battle of Gettysburg. The militant spirit and the clash of arms are recalled in some of his poems, as in the lyrics of "The Sinking of the Cumberland," "Kearsarge," and "The Eve of Battle," and in his drama "Francis Drake." Some of his best literary efforts were character studies like "Doctor North and His Friends," and "Characteristics"; his longer novels are stronger in this than in plot. "Hugh Wynne" pictures Washington and the episodes of the Revolution.

At twenty years of age he sent a slender volume of poems to a Boston publisher, which were seen, it is said, by Oliver Wendell Holmes, who recommended the author to make his medical calling sure before launching into general literature. Mitchell followed this advice, and refrained from any literary publication under his own name until he was about fifty-one, although from time to time publishing anonymous poems and tales, especially in the "Atlantic Monthly." From 1880 until his death in January, 1914, we note an interesting collection of medical and literary contributions. Poetry furnishes seven volumes. "The Masque and other Poems" (1888), "The Cup of Youth and other Poems" (1889), "Psalm of Death" (1891), "Francis Drake," a drama in verse (1892), "The Mother and other Poems" (1892), "Collected Poems" (1896), and "The Wager and other Poems" (1902), whose value it is difficult as yet to measure. His best lyrical and narrative verses surely remain a permanent addition to our literature. He published no less than fifteen volumes of novels, three of the most popular, "Hugh Wynne," "Constance Trescott," and "Westways," appeared respectively in his sixty-eighth, seventy-sixth, and eighty-fourth years.

In 1914 a volume of minutes and memorial addresses appeared entitled "S. Weir Mitchell, M. D., LL. D., F. R. S., 1829-1914, Memorial Addresses and Resolutions." Among other biographical sketches are those by Dr. Edward Jackson in "Colorado Medicine," No-

vember, 1914; by Dr. Guy Hinsdale in "International Clinics," vol. i, 12th series, and by Dr. Charles K. Mills, in the "Journal of Nervous and Mental Disease," February, 1914.

He married, September 30, 1858, Mary Middleton Elwyn, only daughter of Dr. Alfred Elwyn; two children were born, Langdon Elwyn Mitchell, author and playwright, and Dr. John Kearsley Mitchell, second, of Philadelphia. Mitchell's first wife died in 1862, and June 23, 1875, he married Mary Cadwalader, who died January 15, 1914, surviving him less than two weeks; to her helpfulness and inspiration he owed much. One daughter born by this marriage died in early womanhood. Weir Mitchell was preeminently a family man who loved nothing better than to gather around him in his home a group of intellectual kindred spirits.

His son, John Kearsley Mitchell (1859-1914) was graduated in medicine at the University of Pennsylvania in 1883 and, after his internship in the Episcopal Hospital, assisted Osler as well as his father at the Orthopedic Hospital and Infirmary for Nervous Diseases, later becoming a visiting physician there. He wrote "The Remote Consequences of Injuries of Nerves," 1895, and "Mechanotherapy, Massage, and Physical Education," 1904. He died April 10, 1917.

CHARLES K. MILLS.

MITCHELL, Thomas Duché (1791-1865), author and editor, received his early education in the Quaker schools and after a year in the drug store and chemical laboratory of Dr. Edward (?) Parrish, attended three courses of medical lectures at the University of Pennsylvania, from which he was graduated in 1812. The honorary degree of A. M. was conferred on him by the trustees of Princeton College in 1830. In 1812 he was appointed professor of vegetable and animal physiology in St. John's Lutheran College, and in 1819 published a volume on medical chemistry. From 1822 to 1831 he was engaged in the practice of medicine at Frankford, near Philadelphia, while 1826 saw the Total Abstinence Society firmly established by him, he going so far as to deprecate the use of alcohol in the preparation of tinctures. When Drake organized the Medical Department of Miami University in 1831, Dr. Mitchell was appointed professor of chemistry and pharmacy, at a salary of $2,000. Before the opening the scheme was abandoned, and Dr. Mitchell was made professor of chemistry in the Medical College of Ohio. In 1835 he accepted the chair of materia medica in Transylvania University, Lexington, Ky., where he remained until 1847, filling the chairs of chemistry as well as that of materia medica. In the year 1847 he returned to Philadelphia and took the chair of practice of medicine in the Philadelphia College of Medicine, and this he held until 1857 when he became professor of materia medica in Jefferson Medical College.

In 1832 he published an octavo volume of 553 pages on "Chemical Philosophy" on the basis of "The Elements of Chemistry," by Dr. Reid, of Edinburgh, and about the same time his "Hints to Students" appeared, and he became also co-editor of the "Western Medical Gazette," with Prof. Eberle (q. v.) and Prof. Staughton, and editor of the "Journal of Medical and Associate Sciences." Another book came out in 1850, an octavo volume of 750 pages on "Materia Medica," also an edition of "Eberle on the Diseases of Children," to which he added notes and about 200 additional pages. His volume of 600 pages on the "Fevers of the United States" was never published. He was the biographer of John Eberle in "American Medical Biography," by Samuel D. Gross, M. D. As a writer and author he was indefatigable; as a lecturer, clear and impressive. A classical and scientific scholar, a rigidly upright and conscientious gentleman, he died in Philadelphia, May 13, 1865.

A list of his writings is in the Surgeon General's Catalogue, Washington, D. C.

AUGUST SCHACHNER.

MITCHILL, Samuel Latham (1764-1831), distinguished physician of New York City, was born in North Hempstead, formerly Plandome, Queen's County, Long Island, New York, on the twenty-ninth of August, 1764. In this village his father, Robert Mitchill, of English descent, and of the Society of Friends, was a farmer. Young Mitchill had his classical education under Dr. Leonard Cutting; his early medical studies with his uncle Latham; he completed them in New York, with the erudite Dr. Samuel Bard (q. v.), with whom he continued three years—a devoted pupil.

When first appointed professor in Columbia College, he advanced the scientific reputation of New York by his early promulgation of the Lavoisierian system of chemistry. His first scientific paper was an essay on "Evaporation"; his mineralogical survey of New York, in 1797, gave Volney many hints; his

analysis of the Saratoga waters enhanced the importance of these mineral springs. His ingenious theory of the doctrine of septon and septic acid gave origin to many papers, and lent impulse to Sir Humphry Davy's vast discoveries; his doctrines on pestilence awakened inquiry from every class of observers throughout the Union; and his expositions of a theory of the earth and solar system captivated minds of the highest qualities. Speculations on the phosphorescence of the waters of the ocean, on the fecundity of fish, on the decortication of fruit trees, on the anatomy and physiology of the shark, swelled the mystery of his diversified knowledge. He knew so much and wrote about so many things he was called a "chaos of knowledge." His correspondence with Priestly is an example of the delicious manner in which argument can be conducted in philosophical discussion. His elaborate account of the fishes of our fresh and salt waters adjacent to New York, comprising 166 species, afterwards enlarged, invoked the plaudits of Cuvier. Reflections on somnium—the case of Rachel Baker—evinced psychological views of original combination, while the numerous papers on natural history enriched the annals of the Lyceum, of which he was long president. Researches on the ethnological characteristics of the red man of America betrayed the benevolence of his nature and his generous spirit. The fanciful article, "Fredonia," intended for a new and more appropriate geographical designation for the United States, was at one period a topic which enlisted a voluminous correspondence, now printed in the proceedings of the New York Historical Society.

He increased our knowledge of the vegetable materia medica of the United States, and wrote largely on the subject to Barton of Philadelphia, Cutler of Massachusetts, Darlington of Pennsylvania, and Ramsay of South Carolina. He introduced into practice the "sessamum orientale." With Percival, of Manchester, and other philosophers in Europe, he corresponded lengthily on noxious agents, also seconded the views of Judge Peters on gypsum as a fertilizer. He cheered Fulton when he was dejected; encouraged Livingston; awakened new zeal in Wilson, when Tompkins, the governor of the state, had nigh paralyzed him by his frigid and unfeeling reception; and with John Pintard, Cadwalader D. Colden, and Thomas Eddy, was a zealous promoter of that system of internal improvement which has stamped immortality on the name of De Witt Clinton. Jonathan Williams had his co-operation in furtherance of the Military Academy at West Point; and, for a long series of years, Mitchell was an important professor of agriculture and chemistry in Columbia College, and of natural history, botany, and materia medica in the College of Physicians and Surgeons of New York. His letters to Tilloch, of London, on the progress of his mind in the investigation of septic acid—oxygenated azote—are curious as a physiological document. Many of his papers are in the "London Philosophical Magazine" and in the "New York Medical Repository," our first American medical periodical, a journal which he established with Miller and Smith and of which he was an editor from 1797 to 1824; yet he wrote in the "American Medical and Philosophical Register," the "New York Medical and Physical Journal," the "American Mineralogical Journal," of Bruce, the "Transactions of the Philosophical Society of Philadelphia," and supplied several other periodicals, both abroad and at home, with the results of his cogitations. He accompanied Fulton on his first voyage in a steamboat, in August, 1807; and, with Williamson and Hosack, he organized the Literary and Philosophical Society of New York in 1814. Griscom, Eddy, Colden, Gerhard, and Wood found him zealous in the establishment, with them, of the Institution for the Deaf and Dumb. Mitchill's translations of our Indian War Songs gave him increased celebrity; and I believe he was admitted, for this generous service, an associate of their tribes. The Mohawks had received him into their fraternity at the time when he was with the commission at the treaty of Fort Stanwix.

As a physician of the New York Hospital, he never omitted to employ the results of his investigations for clinical application. The simplicity of his prescriptions often provoked a smile on the part of his students, while he was acknowledged a sound physician at the bedside. His first course of lectures on natural history, including geology, mineralogy, zoology, ichthyology, and botany, was delivered, "in extenso," in the College of Physicians and Surgeons, in 1811, before a gratified audience, who recognized in the professor a teacher of rare attainments and of singular tact in unfolding complex knowledge with analytic power. In 1826 he wrote on two-headed snakes describing the progeny of a black snake among which were: "three monsters, one with two distinct heads, one with a double head and only three eyes, and

one with a double skull furnished with three eyes and a single lower jaw; this last had two bodies". See Blatchley. Reptilian Freaks from Indiana, 1906. He was the delight of a meeting of naturalists; the seed he sowed gave origin and growth to a mighty crop of those disciples of natural science. He was, emphatically, our greatest living ichthyologist. The fishermen and fishmongers were perpetually bringing him new specimens; they adopted his name for the streaked bass (perca Mitchilli). When he had circumnavigated Long Island, the lighthouse at Sands Point was called the Mitchill, and the topographers announced the highest elevation of the Neversink Hills as Mount Mitchill.

The records of state legislation and of Congress must be consulted to comprehend the extent and nature of his services as a public representative of the people. He manfully stood by Fulton in all his trials, when navigation by steam was the prolific subject of almost daily ridicule by our Solons at Albany; and when the purchase of the Elgin Botanic Garden, by the constituted authorities, was argued at the Capitol, he rose in his place, and won the attention of the members by a speech of several hours' length, in which he gave a history of gardens, and the necessity for them, from the primitive one of our first parents down to the last institution of that nature, established by Roscoe, at Liverpool. It is probable that no legislative body ever received more instruction in novel information than the eminent philosopher poured out on this occasion; and even the enlightened regents of the university imbibed wisdom from his exposition. With his botanical Latin occasionally interspersed, he probably appeared more learned than ever.

When Mitchill was quite a young man he would return from church service and write out the sermon nearly verbatim. There was little display in his habits or manners; his means of enjoyment corresponded with his desires, and his Franklinian principles enabled him to continue superior to want. With all his official honors and scientific testimonials, foreign and native, he was ever accessible to everybody—a counsellor of the young, a dictionary for the learned. Even the captious John Randolph called him the "Congressional Library."

His writings included: "Remarks on the Gaseous Oxyd of Azote or of Nitrogene, etc;" "Observations on the Canada Thistle;" "Catalogue of the Organic Remains," presented to the New York Lyceum of Natural History, 1826.

Dr. Mitchill died in New York, on September 7, 1831.

In the prime of his manhood, Dr. Mitchill was about five feet ten inches in height, of comely, rather slender and erect, form. He possessed an intelligent expression of countenance, an aquiline nose, a gray eye, and full features. His dress at the period he entered into public life was after the fashion of the day, the costume of the times of the Napoleonic consulate: blue coat, buff-colored vest, smalls, and shoes with buckles.

SAMUEL W. FRANCIS.

MIXTER, Samuel Jason (1855-1926), Boston surgeon, was born in Hardwick, Massachusetts, May 10, 1855. His father, William, and his mother, Mary Ruggles Mixter, came from a long line of New England ancestors. After his preliminary education in Hardwick and later in Amherst, Massachusetts, he entered the Massachusetts Institute of Technology, from which he was graduated with the degree of B. Sc. in 1875. Although he was not encouraged by his parents to study medicine, he decided to do so and in due course took an M. D. from the Harvard Medical School in 1879 and at the Massachusetts General Hospital completed a course as surgical intern in the same year. After his hospital service he spent a number of years abroad, especially in Vienna, where he worked on gross and microscopic anatomy and pathology.

Dr. Mixter returned to Boston and began the practice of surgery and a long association with the Harvard Medical School and the Boston hospitals. In 1882 he was appointed assistant demonstrator of anatomy and, in 1887, demonstrator of anatomy at Harvard Medical School. His corrosion specimens, preserved in the Warren Museum of the school, indicate his skill as an anatomist. He began his surgical service at the Carney Hospital in 1880, but resigned in 1897. In the meantime, he had taken up his work at the Massachusetts General Hospital, where he was appointed surgeon to the Out-Patient Department in 1886. He served successively as visiting surgeon (1893) and chief of the West Surgical Service from 1911 to the time of his resignation, at the age limit, in 1919. During these years he received many honors from scientific societies. He became the first president of the New England Surgical Society and in 1917 he served as president of the American Surgical Association. His striking address on

"Conservatism in Surgery" was delivered when he was president of the latter association. He was also a member of the American Academy of Arts and Sciences, the Southern Surgical Association, the Société Internationale de Chirurgie, and served as a member of the Corporation of the Massachusetts Institute of Technology, 1916 to 1921. In the early days of the World War he entered into active service in the Medical Corps and was stationed in Washington. His four sons, two of whom, William Jason and Charles Galloupe, became surgeons, all served in the United States Army during the War.

In 1879, before he went abroad, Dr. Mixter married Wilhelmina Galloupe. His family life was always delightful and he took a great interest in the education and training of his four sons. Many of his contemporaries speak in glowing terms of his hospitable home.

In addition to his chosen profession Dr. Mixter had many other interests. He managed a model dairy farm and in his late years superintended the breeding of an especially fine herd of Guernsey cattle at his farm in Hardwick. These cattle took many prizes throughout the country and in 1919, when they were sold at auction, brought record prices. Dr. Mixter was in the South, attending the national field championship trials for cattle, when he was taken sick at Grand Junction, Tennessee, and died after a few days' illness of pneumonia, January 19, 1926, aged seventy.

Samuel Jason Mixter was a brilliant surgeon, who advanced surgery by the perfection of surgical technique and by the invention of various instruments; his name is associated with the Mixter tube, the Mixter punch, the Mixter scissors, and the Mixter incision for colostomy. He was a mechanical genius and possessed a very large collection of surgical instruments. He was one of the first in this country to extirpate the Gasserian ganglion and he also did pioneer work on the surgery of the esophagus. As a member of the Massachusetts General Hospital staff he was not only considered as a leader in surgery, but also as a leader in the social life of the hospital. He had a great interest in his house officers and always followed their careers after they left the hospital. Many of his friends have testified to his charming personality and the quaintness and brilliance of his conversation. He was a sportsman in the best sense of the word and a beloved physician. Many other facts in his life are contained in an obituary by two of his confrères at the hospital, Dr. G. W. W. Brewster and Dr. E. P. Richardson, published in the "Boston Medical and Surgical Journal" for May 13, 1926.

HENRY R. VIETS.

MOHER, Thomas J. (-1914), medical superintendent of the Hospital for Insane at Cobourg, Ontario, was a son of William Moher, ex-Reeve of Douro, where he was born. He was educated at Lakefield, Peterborough and Toronto universities. After graduating in medicine he began practice in Peterborough. He afterwards moved to Trenton, where he carried on his profession very successfully. Returning to Peterborough he practiced in that city for several years, and was superintendent of St. Joseph's Hospital, coroner for the county, medical examiner for the C. M. B. A. and the Catholic Order of Foresters, and first president of St. Peter's Total Abstinence Society. In 1902 he was appointed assistant superintendent of the Orillia Hospital for feeble-minded. Two years later he was made medical superintendent of the Hospital for Insane at Brockville. He was transferred to the Cobourg Hospital for the Insane as superintendent in 1910, where he remained until his death, February 24, 1914.

He wrote many interesting papers for the bulletin of the Ontario Hospitals for the insane. In June, 1908, he read a paper entitled, "Insanity, the General Public and the General Practitioner," at the meeting of the Canadian Medical Association in Ottawa. In June, 1909, he read a paper on the "Employment of Women Nurses on the Men's Wards in a Hospital for the Insane," at a meeting of the American Medico-Psychological Association in Atlantic City. Dr. Moher possessed a peculiarly genial, friendly personality which endeared him to all with whom he came in contact, and he was popular wherever he went. His sympathy and tenderness towards his patients were unfailing and his death was keenly felt by them.

MONETTE, John Wesley (1803-1851), pioneer who wrote much concerning Mississippi, was born of Huguenot parentage at Staunton, Virginia, April 5, 1803. In his infancy his family settled at Chillicothe, Ohio, where he was educated. In his eighteenth year he completed the course of study prescribed in the Chillicothe Academy. In the year 1821 his father, Dr. Samuel Monette, removed to the then flourishing town of Washington, the early capitol of Mississippi, where

he practiced. He also directed the studies of his son, who had decided to become a physician. Four years later, March 21, 1825, John Wesley Monette received his diploma from Transylvania University, at Lexington, Kentucky. He immediately returned home and resumed practice, which he had engaged in some time before the completion of his medical course.

On December 10, 1828, he married Cornelia Jane Newman, daughter of George and Charlotte Newman, and had ten children, but only four survived childhood, George N., A. C., Anna, and Maria Louise.

Dr. John W. Monette was a student by nature, and, although he was actively and successfully engaged in an exacting profession, he never lost interest in literary work. He had a large and well selected library, composed principally of works on medicine, history, geography, geology, and theology. In 1823, shortly after he began the study of medicine, an epidemic of yellow fever broke out in Natchez and was soon conveyed to the town of Washington, which is only six miles distant. This afforded the young medical student an excellent opportunity to study the disease as it appeared in his father's practice. Two years later, soon after his graduation, a more fatal epidemic of yellow fever visited Natchez and Washington, both towns being well-nigh depopulated. This epidemic afforded to Dr. Monette and his life-long friend Dr. Cartwright, their first opportunity to acquire distinction in their profession. In referring to their essays on the subject of yellow fever which were written at that time and subsequently, a contributor to "DeBow's Review" says that they soon gained a reputation as being among the best contributors to the medical literature of the day. On December 2, 1837, Dr. Monette read before the Jefferson College and Washington Lyceum an interesting paper, entitled "The Epidemic Yellow Fevers of Natchez," in which he suggested the use of quarantines in restricting the disease. This contribution was published by the Lyceum in its official organ, the "Southwestern Journal." The return of the epidemic in 1839 gave Dr. Monette an opportunity to continue his investigations. He shortly afterwards published a small volume, entitled "Observations on the Epidemic Yellow Fevers of Natchez and the Southwest from 1817 to 1839." When the next yellow fever epidemic broke out in New Orleans in the summer of 1841, he had the pleasure of seeing his quarantine theory put to a test. It is claimed that this was the first time that an attempt was ever made to control the spread of yellow fever by means of quarantine, and that to Dr. Monette is due the credit of originating this method of restricting the disease. This successful result increased the demand for articles from his pen dealing with the subject of yellow fever. In the winter of 1842-43 he contributed a series of papers on this subject to the "Western Journal of Medicine and Surgery," published at Louisville, Kentucky. Dr. Monette's other contributions to the science of medicine are numerous and interesting. The "Western Medical Journal" of June, 1827, refers to his use of oil of turpentine as an external irritant, particularly in the treatment of typhus fever, in language that would lead the reader to suppose that he was a pioneer in the use of this now familiar remedy. His earlier literary efforts outside the field of professional contributions seem to have been directed principally to the subject of natural history. As early as 1824 he prepared a carefully written essay of 201 manuscript pages on the "Causes of the Variety of the Complexion and the Form of the Human Species." In this essay he attempts to show the primitive unity of the human race and to prove that racial differences can be accounted for by the influence of environmental conditions. It is clear that many principles published by Darwin in 1869, in the widely recognized literary prize of the last century, "The Origin of Species," were stated by Dr. Monette in a hypothetical way thirty-five years earlier. One of these writers based his conclusions on deductive and the other on inductive reasoning. Another paper belonging to the early period of Dr. Monette's literary activity bears the title "Essay on the Improbability of Spontaneous Production of Animals and Plants."

The results of his diligent efforts are pathetic. He seemed to be completely enamored of science, but his ideals were so exalted he could not give his consent to publish many of the treatises that he prepared with the greatest care from time to time. The only evidence that remains of his persistent efforts to penetrate the secret of nature is the large batch of manuscripts, now yellow with age, which are prized by his son as a most precious family heritage. Like his great predecessor, William Dunbar, the pioneer scientist of the Mississippi Valley, his name does not appear in the history of American science, yet his services entitle him to distinction in the state of his adoption.

As early as 1833 Dr. Monette entered upon his great literary undertaking—the writing of an elaborate work on the "Geography and History of the Mississippi Valley." The first volume of this work contains a history of the Mississippi Valley prior to the acquisition of Louisiana by the United States. The second volume, entitled "The United States in the Valley of the Mississippi," is the first comprehensive history of the Mississippi Valley as a whole during this period. There were few books of value then available upon the history of the Mississippi Valley which are not referred to in the footnotes of these volumes. Dr. Monette did not live to finish his work on the physical geography, a treatise he seemed to think would be his most important contribution to knowledge. Judging from his manuscripts, this work was well-nigh completed at the time of his death. He also wrote from time to time, anonymous articles, humorous or satirical. Among his miscellaneous writings may be mentioned a poem of 250 lines on "Friendship." It was first written in 1823, and, to use the language of the author, was "Inscribed to Hon. A. Covington, the humane, the generous, and the good." It was rewritten and enlarged for the "Natchez Gazette" in August, 1825. Among his other poetical efforts are an "Ode to July 4, 1820" and "A Satirical Poem." Among his anonymous writings are a number of articles on "Empiricism." These were directed principally against the pretensions and practices of the "steam doctors," the disciples of Samuel Thompson, Samuel Wilcox and Horton Howard. Dr. Monette says that the general tenor of the teachings of all these men is the same, viz., "that all diseases proceed from cold, and are curable by capsicum, lobelia, and steaming."

Dr. Monette died in the prime of his life, without reaping the full fruits of his years of unremitting toil. A marble slab in the family burying ground at his old home, "Sweet Auburn," in Washington, Mississippi, bears the simple inscription:

SACRED
TO THE MEMORY OF
JOHN WESLEY MONETTE, M. D.,
BORN APRIL 5, 1803.
DIED MARCH 1, 1851.

Monroe, Hollis (1789-1861), pioneer physician of Belfast, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 810.

MONROE, Nahum Parker (1808-1873), shone in the light of publicity and politics all his life. Born January 4, 1808, nineteen years after his brother, Hollis, he was the youngest and well beloved child of Philip Monroe. Nahum Parker studied medicine in Belfast with his brother, and was graduated at the Albany Medical School in 1839. Moving to Belfast, Maine, he was soon helped into abundance of medical work by his brother who had been twenty years in the same field and knew everybody. While Hollis was purely a medical practitioner, Nahum Parker devoted himself as much as he could to surgery, and soon became well known in that branch of medicine. He is said to have been able to do all the operations of the day. In 1848 he married Miss Ann Sarah Johnson, of Belfast, and had two children. From that time on to the breaking out of the Civil War he was held in high esteem by a large clientèle and by his associates in medicine. With the oncoming of the war he was made surgeon of the Twentieth Maine Regiment, and was present at many battles, including Fredericksburg. After a year of active service, during which he had a serious attack of erysipelas, he was compelled to resign. On returning home he was called to the capital where for a long time he was of the greatest service medically to the troops. He was made surgeon-general of Maine, and among other public offices was a representative in the Legislature, doing good service for medicine there. He was a very distinguished member of the Maine Medical Association.

Although naturally of great strength and physical endowment, Nahum Parker Monroe was too careless of his health. He gradually failed, moved to Baltimore in 1871, slowly developed scirrhus of the stomach and general tuberculosis and died April 23, 1873, aged only sixty-five.

It is unusual for two brothers living side by side to do so well together, and to become both men of so much mark, even if we cannot positively call either of them men of great ability. The medical skill, however, of Dr. Hollis, and the surgery of Dr. Nahum Parker, entitled the Monroes to excellent rank in the history of medicine in Maine.

The first Philip had a son Dr. Philip Monroe, of whom he was so fond that when old Philip died they had inscribed upon his tombstone after his days of birth and death "Father of Dr. Philip Monroe."

JAMES A. SPALDING.

MONTEZUMA, Carlos (1867-1923), a native Indian physician and writer, was born in 1867, in Arizona, of Apache Indian parents. His father was Co-lu-ye-vah. As a boy, he was captured by Pima Indians and sold for $30 to C. Gentile. Carlos was educated in the public schools of Chicago and Galesburg, Illinois, and Brooklyn, New York, and under private tutors in Urbana, Illinois. He obtained his S. B. from the University of Illinois at seventeen and was graduated in medicine from the Chicago Medical School in 1889. Dr. Montezuma was physician and surgeon in the Interior Department, 1889-1896, serving at various Indian agencies, also an associate of Dr. Fenton B. Turck in his clinic on stomach and intestinal diseases at the Post-Graduate Medical School, Chicago, 1896-1914; instructor in medicine at the College of Physicians and Surgeons, Chicago, 1904-06, and instructor in clinical medicine at his Alma Mater.

He was the author of "The Indian of Today and of Tomorrow," 1906, "Let my People Go," 1914, and "Abolish the Indian Bureau," 1919. He also edited the Indian magazine, "Wassaja." He died from pulmonary tuberculosis, January 31, 1923, on the McDowell Indian Reservation, Arizona.

MONTGOMERY, Frank Hugh (1862-1908), dermatologist of Chicago, was born at Fair Haven, Minnesota, January 6, 1862, and went as a boy to the St. Cloud (Minnesota) High School and the University of Minnesota. He received an M. D. from Rush Medical College, Chicago, in 1888, and went afterwards to the Johns Hopkins Medical School and the hospitals of London, Paris and Vienna. At the time of his death he was the associate professor of dermatology in the Rush Medical College, Chicago; dermatologist to the Presbyterian, St. Elizabeth, and St. Anthony de Padua Hospitals of Chicago. He was elected a member of the American Dermatological Association in 1897, and was one of the founders of the Chicago Dermatological Society.

Dr. Montgomery was a collaborator with Dr. J. Nevins Hyde (q. v.) in writing a "Practical Treatise on Diseases of the Skin" (1895). He made frequent contributions to medical journals on dermatology, perhaps the most important being those on blastomycosis, although all of his writings demonstrated that he was a master in this difficult and intricate specialty, for his knowledge was broad and all of his scientific discussions and articles bear the imprint of scholarly labor and a thorough acquaintance with dermatological literature. His death, which occurred at White Lake, Michigan, on July 14, 1908, was very tragic. He was drowned while trying to save a companion who had been thrown with him into the water by the capsizing of a sail boat.

J. McF. Winfield.

MOORE, Edward Mott (1814-1902), pioneer surgeon of Rochester, New York, was born at Rahway, New Jeresy, July 1, 1814, son of Lindley Murray and Abigail Mott Moore, descendants of Samuel and Mary Isley Moore, who removed from Newbury, Massachusetts, to New Jersey in 1666. His father was a prominent member of the Society of Friends. The son studied medicine in New York and Philadelphia and received his M. D. at the University of Pennsylvania in 1838. He served as resident physician at Blockley Hospital, and also at the Frankford Lunatic Asylum until he removed to Rochester New York in 1840, where he began practice. In 1842 he was called to the chair of surgery in the medical school of Woodstock, Vermont, and lectured there for eleven years. He held the same chair at Berkshire Medical Institution, Massachusetts, 1853-54, at Starling Medical College, Columbus, Ohio, 1854-55 and at the Buffalo Medical College, 1858-83. Dr. Moore was distinguished for research and experiments on the heart's action, undertaken in Philadelphia about 1838, with Dr. Pennock, continuing the experiments begun by Dr. Hope, and investigated the following year by a committee of the London Medical Society. With W. W. Reid (q. v.) he worked out the mechanism of reduction of dislocation of the hip joint. In his articles on medical and surgical topics he suggested many original methods of treatment. In one of these he controverted the asseverations of the physiologists as to the rationale of the production of the vowel sounds. He showed that epiphyseal fracture of the lower end of the humerus caused early ossification and consequent checking of the growth of the bone. He was the first also to note the frequency of these fractures of the upper end of the humerus and addressed the New York Surgical Society on this head just after the appearance of F. H. Hamilton's (q. v.) great treatise on fractures and dislocations. Hamilton commended Moore's treatment but stated that the condition was so rare he had never seen a case. A friend taught by Moore later discovered

five unrecognized cases in Hamilton's wards at Bellevue Hospital. Moore devised an apparatus for the transfusion of blood and another for the refracture of badly united bones as well as an instrument for drilling full of holes a stone in the bladder to facilitate crushing. He was one of the founders of the New York State Medical Society of which he was president in 1874, and of the American Surgical Association, succeeding Dr. Gross as president. In 1890 he was president of the American Medical Association and in 1894 a delegate to the International Medical Congress at Copenhagen. As a sanitarian he did much for his city. He assisted in organizing the State Board of Health of which he was president for many years. For a period of nearly fifty years Moore was the head of the staff of St. Mary's Hospital, Rochester's first public hospital and he was a promoter of the city parks system serving as president of its board of commissioners. Moore was the author of monographs on fractures and dislocations of the clavicle; on fractures of the radius, accompanied with dislocation of the ulna; on fractures, during adolescence, at the upper end of the humerus; and a treatise on transfusion of the blood based on original investigations.

Dr. Moore married at Windsor, Vt., November 11, 1847, Lucy R., daughter of Samuel Prescott, of Montreal, Canada, and died in Rochester, New York, March 4, 1902.

MOORE, James Edward (1852-1918), eminent surgeon of the Northwest, was born March 2, 1852, in Clarksville, Pennsylvania, and died November 2, 1918, at his home in Minneapolis of pernicious anemia. He was the son of the Rev. George W. and Margaret Ziegler Moore. As a boy he attended the public schools of Pennsylvania; going later to the Poland Union Seminary at Poland, Ohio; from there to the University of Michigan. He received his medical degree from Bellevue Hospital Medical College in 1873. The year after his graduation he practiced in Fort Wayne, Indiana, returning to New York for work in the hospitals. In 1876 he established himself in Emlenton, Pennsylvania; where for six years he performed the strenuous work of a country practitioner, making most of his calls on horseback and dispensing from his saddlebags. In 1882 he migrated to Minneapolis, Minnesota, where he practiced until 1885, when he went to Europe for study in London and Berlin. Returning to the same city in 1887 he announced that he would confine his practice exclusively to surgery. He was the first specialist in surgery to so announce himself west of New York. When the Medical School of the University of Minnesota was organized he became identified with the faculty of the institution, holding in succession the positions of professor of orthopedic surgery, professor of clinical surgery, professor of surgery, and in 1908 he was made chief of the department of surgery, and held this position until his death.

Dr. Moore was a born teacher, having the rare gift of imparting knowledge, presenting his theme in such a simple, terse, logical manner as to carry conviction and to clinch the facts in the memories of his auditors; his earnest enthusiasm won the respect and admiration of his associates and students; gifted with native eloquence, a quiet dignity, and a logical mind, his address carried conviction; he was forceful, yet temperate and restrained in his utterances and actions. Throughout the years, successive generations of students sat at the feet of this master teacher of surgery,—students who now all over the land mourn the loss of professor, comrade and friend. He was a virile, convincing writer, having presented over two hundred papers on surgical subjects. He was the author of sections in various American systems of surgery, and in 1898 published "Moore's Orthopedic Surgery." His writings and discussions won him recognition at home and abroad and he became identified early with the representative surgical societies, affiliating with the American Surgical Association—vice-president in 1905; the Western Surgical Association—president in 1902; chairman of the Surgical Section of the American Medical Association in 1903; member of the Southern Surgical Association, the Judicial Council of the A. M. A.; fellow of the American College of Surgeons and member of the board of Governors; member of the Société Internationale de Chirurgie, and of the Minnesota Academy of Medicine.

Dr. Moore was as much a victim of the Great War as though he had gone "over the top" and paid the supreme sacrifice "over there." His high sense of duty unquestionably shortened his life. When in 1918 the Great War drained the Medical School of many of its teachers, it threw an added burden upon those who were left,—a burden which was doubly difficult to bear when laid upon the shoulders of a man delicate and

along in years. Uncomplainingly he did the work of his "boys" over-seas, doing his bit and that of the absent ones. The strain, anxiety and overwork but hastened a breakdown made inevitable by his insidious disease. To many who were permitted to know Dr. Moore well and to the few who were privileged to be his intimates, the charm of his personality, his simple manly creed, his love of justice and fair play, his intolerance of incompetence and sham, his charity for human weakness and frailty, his keen appraisement of character, his fearless championship of right, and above all his great human sympathy for those in trouble or distress,—one and all were traits which appealed and bred love, respect and deference.

In 1887 he married Louise C. Irving, who survived him, with his daughter, Mrs. F. H. Forssell.

ARTHUR A. LAW.

MOORE, John (1826-1907), surgeon-general of the United States Army, was born in Bloomington, Indiana, in 1826, and received his collegiate education at the Indiana State University. In 1848-49 he attended lectures at the Medical School of Louisville, and was graduated from the medical department of New York University in 1850, in 1853 being commissioned assistant army surgeon and promoted to captain in 1858. Upon promotion to major, in 1862, he was detailed as medical director of the Central Grand Division of the Army of the Potomac; in the following year he was transferred to the Department of the Tennessee, and in 1864 received the brevet of lieutenant-colonel for gallant and meritorious service during the Atlantic Campaign. In 1865 he was appointed colonel and medical director of Volunteers, receiving during this service the brevet of colonel "for faithful and meritorious service during the war." After serving at various posts he was appointed surgeon-general of the army in 1886, by President Cleveland.

Under the administration of Gen. Moore great advances in army medical work were accomplished. Instruction in first aid was inaugurated in the service by direction of general order No. 86, from the headquarters of the army, November 20, 1886. In 1887, the act organizing a Hospital Corps in the United States Army became a law. The third medical volume of the medical and surgical history of the rebellion appeared during his administration, under the editorship of Maj. Smart. He retired in 1890, and continued to live in Washington up to the time of his death in 1907.

CHARLES A. PFENDER.

MOORE, Samuel Preston (1813-1889), surgeon, United States Army, surgeon-general, Confederate States Army, was the son of Stephen West and Eleanor Screven Gilbert Moore, and lineal descendant of Dr. Mordicai Moore who accompanied Lord Baltimore to America as his physician. He was educated at the schools of Charleston, South Carolina and graduated M. D. from the Medical College of the State of South Carolina in 1834, afterwards appointed assistant surgeon in the United States Army, 1835, serving at many frontier posts in Florida, and in Texas with high credit, during the Mexican War, and continued service after being created major at various stations in Missouri, Texas and New York. When South Carolina seceded from the Union, he resigned and settled in Little Rock, Arkansas, whence he was called in June, 1861, to the surgeon-generalcy of the Confederate Army. Under the stress of overwhelming difficulties he organized a medical department for the Confederate armies. In 1863, at Richmond, he organized the Association of Army and Navy Surgeons of the Confederate States and became its first president, and was also active as president in a similar association, established after the close of the war. The useful work was his of finding methods of providing the Confederate troops with medicines from the plants indigenous to the southern states. He inaugurated and directed the publication of "The Confederate States Medical Journal" from 1864 to 1865, and he adopted the one story hospital wards which became so popular in both northern and southern armies. At the close of the Civil War he remained in Richmond, not engaging in active medical practice, but interested in all public affairs, and died May 31, 1889.

JAMES EVELYN PILCHER.

MOREHOUSE, George Read (1829-1905), of Philadelphia, practitioner, research worker, was born at Mt. Holly, N. J., on March 25, 1829. The family history is interesting. Sometime before the war for independence Andrew Morehouse emigrated from the north of England to the colony of New York. He served later as a colonel during the Revolution. His son Abraham, apparently a man of means,

seems to have been led into the wild land speculation which during Washington's terms of office ruined so many. He bought vast tracts of coal lands in Virginia and Pennsylvania; and in Louisiana acquired an entire parish, the territorial equivalent of our county. It still bears his name. After his death these possessions were lost owing to non-payment of taxes. His only child, Doctor Morehouse's father, was finally left in comparative poverty. He became in time the rector of the Protestant Episcopal Church of St. Andrew's, Mount Holly, New Jersey, and retained this charge for forty-six years. Dr. Morehouse's mother was Martha Read, a granddaughter of Joseph Read, sometime attorney for the crown of the Province of New Jersey. Our Fellow entered "cum laude" as a junior at Princeton College and was graduated in July, 1848, with high honors. In September of that year he matriculated at the University of Pennsylvania. He left it at the close of one term for the Jefferson Medical College and there was graduated March, 1850, and in the following year became M. A. of Princeton. In 1875, desiring to compete for the chair of physiology in the University of Pennsylvania, he obtained from that institution the degree of M. D., but later withdrew from the canvass, fearing that want of laboratory training would unfit him for the position. In 1892 he received from Princeton the degree of Ph. D. "honoris causa". From his first settlement in practice in Philadelphia he had an unusually large and growing success as a general practitioner; and later as a valued consultant. It was well deserved. I have known few men by reason of natural endowments were as well fitted to succeed in our difficult profession. Except in mercantile life it is unusual to find a man capable of original thought and research who has no enjoyment in pursuits outside of his business; but such being the case with Dr. Morehouse, he gave all there was of a very able intellect to the practical work of life. He cared little for travel or art, was merely a general reader, and found no joy in sport, exercise, or the life of the woods. Thus limited in the range of his tastes he found his largest source of happiness in the exercise of his powers as a physician, and to this work he gave himself with undistracted attention.

In practice he was industrious, attentive, full of resources and capable of novel views. A sanguine temperament, and remarkable power of explaining cases to the satisfaction of the patient made him always acceptable; while his gracious manner and certain kindliness added to the sense of confidence his presence inspired, the charm of genial social companionship. While he was in social life a very gay and agreeable comrade, he had that form of shyness which made him avoid public speaking, and thus he was rarely heard in our debates or felt in the general life of the profession.

His medical papers, few and practical, were principally a case of laryngotracheotomy, and a case of use of atropia in prolapse of the iris. A paper on ether tests for true epilepsy I have been unable to find. All of Dr. Morehouse's more important work was done in conjunction with other physicians, and divides itself into two classes: laboratory and hospital researches. We had long been on terms of close friendship, when in 1860, having discovered certain facts of novel interest in reptilian physiology, I offered him the chance of working out with me the problems presented. It seemed to me a pity that a mind so well equipped for original research should not be thus used. He hesitated long, but when at last he committed himself to the work, I soon realized how right I had been. Together we completed my former researches. I may say in justice to my friend that this research on the anatomy and physiology of the respiratory organs of chelonia is now in some sense a classical essay. It corrected the erroneous views on the physiology of those reptiles, and set forth the discovery of the only nerve chiasm outside of the cranium. The work was most laborious and occupied during one long summer, the late afternoon and night hours of two busy physicians. I myself wrote the physiology and to Dr. Morehouse was assigned the respiratory anatomy of chelonia. At this time was first felt the difficulty which was in future to embarrass his co-workers. My own part of this long paper was rapidly completed. His part was in some ways more difficult, and the subject less familiar, as he had not been a student of comparative anatomy. Whether because of this, or that he found some singular obstacle in writing, he was eighteen months at work on his share of the essay. When completed it was a piece of original descriptive anatomy which was so admirable as to be praised very warmly by Leidy (q.v.), and by Jeffries Wyman (q.v.) as a faultless specimen of comparative anatomical statement. After reading it Professor Agassiz (q.v.) asked me who was this

remarkable young naturalist, and why had he never heard of him.

Early in the Civil War Dr. Morehouse served in the Filbert Street Hospital as assistant surgeon under contract. When the Hospital for Nervous Diseases was organized I asked to have him as my colleague. Then Dr. William W. Keen joined us and we remained in useful co-partnership of labor up to 1865. During our long service he operated often and had the skilful hand, the ready decision of the moment, and the courage which might have made him a surgeon of distinction. I recall two instances of his capacity. In one desperate case of paralysis he removed through the mouth a bullet which had lodged in the cervical vertebrae. The patient recovered. I saw him trephine the skull and open a cerebral abscess, the first case I believe on record unless one by Detmold preceded it.

Dr. Morehouse married Mary Ogden, relict of David C. Ogden, of Woodbury, New Jersey. He left no children. Dr. Morehouse became a fellow of the College of Physicians of Philadelphia in 1863. He was long on the consultant staff of the Orthopedic Hospital; at one time on the staff of St. Joseph's Hospital; a member of the Philosophical Society and the American Academy of Medicine, and of the Union League.

He died of renal disease on November 12, 1905.

S. Weir Mitchell.

Morgan, Charles Edward (1813-1867), student, writer, of New York.. See Cyclopedia American Medical Biography, H. A. Kelly, Phila., 1912, vol. ii. p. 187.

MORGAN, Ethelbert Carroll (1856-1891), laryngologist of Washington, D. C., was born in Washington, February 11, 1856, the son of Dr. James E. Morgan, one of the oldest physicians in the District. Gonzaga College gave him his preliminary education whence he was graduated A. B., June, 1874. Even during boyhood he gave evidence of a mechanical turn of mind, preferring to pass his time in building miniature derricks, railway cars, boats, houses and such things, rather than in sports and out-door play; fond also of chemistry, physics and general experimentation, spending most of his leisure in a very creditable pharmaceutical and chemical laboratory which he had fitted up at his home. He studied medicine in Georgetown University in 1874, 1875 and 1876. In 1876 he entered the medical department of the University of Pennsylvania, taking his M. D. there in the spring of 1877. In the same year he visited Europe for the purpose of attending lectures and clinics. He finally became a pupil of the French laryngologist Charles Fauvel and with him took courses in diseases of the upper air passages. In 1878 he left Paris for Vienna, pursuing a similar line of studies and for six months he was assistant to Prof. Schnitzler in the Vienna Polyclinic. In 1878 he returned to his native city and for the first two years practiced general medicine, but devoted most of his attention to affections of the air passages and ear to which class of diseases he finally limited his practice in 1881. In the same year he was elected surgeon in charge of diseases of the nose, throat and chest in Providence Hospital and professor of laryngology in the medical department of Georgetown University, positions which he held until death. His were the first lectures on laryngology ever delivered in the regular session of any medical school in Washington. In 1881 he was elected a member of the American Laryngological Association; his inaugural thesis "Diphthonia," a paper which together with his classical monograph on "Uvular Hemorrhage" gained for him a most enviable reputation among his fellow members. In 1888 he was elected president. He held a number of positions in the Medical Association and the Medical Society of the District of Columbia. In 1888 Georgetown University conferred upon him the degree of Ph. D.

A versatile and clear writer, his scientific work was thorough and of permanent value. He contributed to "Buck's Reference Hand Book" and "Keating's Encyclopedia of Diseases of Children," having prepared the article on "Ozena, Carcinoma, and Sarcoma of the Larynx" for the former and articles on "Epistaxis" in the latter. He was the inventor of a very efficient uvula hemostatic clamp, an atomizer and universal powder blower. Only thirty-five years old when he died, few men of his age attained greater distinction or a larger measure of success. His success was due to individual merit, scientific attainments, a thorough training, earnest and honest work coupled with unusual professional and business tact and unswerving loyalty to his patients, The writer, although six years his senior, profited by his philosophical mind on more than one occasion, especially when he informed him "If you want good advice go to friends, if you want to borrow money

go to strangers, if you want nothing go to your relatives."

He was unmarried and accumulated a fortune, a large part of which he left, with characteristic generosity, for the endowment of scholarships and research work in the literary and medical department of Georgetown University. He died at his home on the evening of May 5, 1891, from consumption, contracted some years before following an attack of typhoid fever.

GEORGE M. KOBER.

MORGAN, John (1735-1789), the founder of the first medical school in America, was of Welsh ancestry, his father, Evan Morgan, having emigrated from Wales to Pennsylvania, settling in Philadelphia, where he became a very successful merchant. John Morgan went to the Academy at Nottingham, in Maryland, kept by the Rev. Samuel Finley. Morgan received the degree of A. B. from the College of Philadelphia in 1757, with the first class that graduated. He then served as apprentice to Dr. John Redman (q. v.), thirteen months of the time being passed as resident apothecary to the Pennsylvania Hospital. Of this period he writes, "At the same time I had an opportunity of being acquainted with the practice of other eminent physicians in this place; particularly of all the physicians of the hospital, whose prescriptions I put up there above the space of one year." After his apprenticeship had expired he spent four years as surgeon to the Pennsylvania troops in the war between the French and English. Dr. Rush speaks of the excellence of his work in this capacity, stating, "I well remember to have heard it said that if it were possible for any man to merit heaven by his good works, Dr. Morgan would deserve it, for his faithful attendance upon his patients." In 1760 he went abroad, studying first in London, especially with the Hunters, and then going to Edinburgh. Norris quotes a letter of introduction which Benjamin Franklin, then living in London, gave him to Lord Kames, in which he states that he thinks Morgan "will one day make a good figure in the profession, and be of some credit to the school he studies in, if great industry and application, joined with natural genius and sagacity, afford any foundation for the presage." At Edinburgh he took his M. D. in 1763. His thesis was entitled "De Puopoiesis," and in it he first advanced the view that pus was a secretion formed by the blood-vessels in conditions of inflammation. From Edinburgh he went to Paris, where he particularly studied anatomy. He read a paper on "Suppuration" before the Royal Academy of Surgery in Paris, and demonstrated the methods employed by the Hunters to inject and preserve anatomical specimens, and subsequently a paper "On the Art of Making Anatomical Preparations by Corrosion" to the Academy, upon the strength of which he was elected a member. Continuing his travels into Italy, he met Morgagni. Rush, in his account of Morgan, states that Morgagni "was so pleased with the doctor that he claimed kindred with him, from the resemblance of their names, and on the blank leaf of a copy of his works, which he presented to him, he inscribed with his own hand the following words: "Affini suo, medico praeclarissimo, Johanni Morgan, donat Auctor." This anecdote has had its veracity impugned because the College of Physicians of Philadelphia contains the original books given by Morgagni to Morgan, and by the latter donated to the college, and there is no such inscription to be found on their fly leaves. Dr. George Dock has recently investigated the subject, and his conclusions would seem to warrant our belief in what has ever been regarded as one of the most pleasant legends of early medical history. The young American received many substantial honors during his sojourn abroad. He was made a member of Belles Lettres Society of Rome, and in England was honored by election to the Royal Society as well as by being made a licentiate of the Royal College of Physicians.

During his travels Morgan had thought much of the project of founding a medical school in his native city, and upon his return, in 1765, brought with him a letter from the proprietary, Thomas Penn, to the Board of Trustees of the College of Philadelphia, endorsing his scheme to establish a medical school in connection with the college. Dr. Morgan's project met with immediate approval, and on May 3, 1765, they elected him professor of the theory and practice of medicine in the college, thus establishing the school which still flourishes as the department of medicine of the University of Pennsylvania. On May 30, 1765, Morgan delivered his celebrated address, entitled "A Discourse upon the Institution of Medical Schools in America." He had written this when in Paris, and it had undergone careful scrutiny by Fothergill, William Hunter and Dr. Watson, of London. In it he recommend-

ed a very comprehensive preliminary education preparatory to the study of medicine. Dr. Morgan arrived at home in April, 1765, and in the following month proposed to the trustees of the college his plan for translating medical science into their seminary, boldly urging a full and enlarged scheme for teaching medicine in all its branches. Morgan retained his professorship until his death when Dr. Benjamin Rush (q. v.) succeeded. As a teacher he was held in the greatest respect and esteem by his pupils. Not only active in the medical school, in 1772 he actually made a trip to the West Indies and collected subscriptions aggregating over £2,000 for the advancement of the college. He was one of the founders and a very active member of the American Philosophical Society. Morgan founded a Medical Society in 1765, the "Philadelphia Medical Society" which later became the American Philosophical Society. It had an independent existence for three years. Upon settling in Philadelphia to practice he resolved that he would neither compound his remedies nor do any surgical work. He also endeavored to introduce the English custom of presenting the physician with his fee at the time of each visit. In the first two instances he was successful, although he encountered great opposition from the older physicians.

After Dr. Benjamin Church (q. v.), the first medical director of the Continental Army, had been found guilty of treason and dishonorably discharged, Congress, in October, 1775, appointed Morgan as his successor, and he at once joined the army, then in the vicinity of Boston. From the outset he set himself resolutely to bring order out of the chaos which existed in the army Medical Department. Morgan set to work at the root of the matter by instituting rigid examinations for those desiring to enter the medical service, and by exercising the most vigilant supervision over the work of the entire department. The greatest difficulty confronting Dr. Morgan, however, was that of obtaining hospital supplies. The finances of the Continental Army were never in a particularly good condition; but during Dr. Morgan's career as chief of the medical department they were at a very low ebb. It was the jealousy and insubordination of the regimental surgeons which finally played a large part in causing his dismissal from the post of director-general. On July 17, 1776, Congress passed a law, based on a memorial presented to it sometime previously by Dr. Morgan, settling definitely the discipline, pay, and other matters relating to the regulation of the medical service.

The direction of medical affairs in the northern part of New York State was under Dr. Samuel Stringer. Under his management, or mismanagement, things soon fell into a disgraceful state of confusion. Morgan appealed repeatedly to Congress to settle the disputes which were raised by the officiousness and insubordination of Dr. Stringer, and at length Congress appointed a committee to investigate, acting upon the report, with the result that Congress dismissed both Dr. Stringer and Dr. Morgan from their positions. Morgan, in righteous indignation, published one of the most interesting documents in the medical literature of this country, namely, his pamphlet entitled "A Vindication of His Public Career in the Station of Director-General of the Military Hospitals and Physician-in-chief to the American Army," Anno 1776, by John Morgan, M. D., F. R. S., Boston, 1777. What angered him more than any other of the injuries he felt he had received was the appointment, on October 9, 1776, of Dr. William Shippen, Jr. (q. v.), as director of the hospitals on the west side of the Hudson river. Dr. Shippen had been director of the hospital of the Flying Camp in the Jerseys, and subject to the authority of Dr. Morgan. Dr. Shippen was ordered to report directly to Congress, thus ignoring Dr. Morgan, through whom such reports had hitherto been made. It is sad to find Morgan blaming his quondam friend and colleague in the establishment of the medical department of the University of Pennsylvania, as the chief author of his overthrow, but he does so in unequivocal language. A tardy vindication of his conduct in this and another similar affair with Dr. William Shippen, Jr., although it must have afforded Morgan some satisfaction, yielded him no more substantial benefit. What added to his chagrin was the fact that on April 11, 1777, his rival Shippen was appointed to succeed him in the post of director-general and physician-in-chief of the army, and Morgan withdrew to a great extent from active contact with public affairs. He had been elected physician to the Pennsylvania Hospital in 1773, and he continued to serve on its staff until 1783, when he resigned under somewhat peculiar circumstances, though the minutes of the hospital stating his action add that it was "to the grief of the patients, and much against the will of the managers, who all

bore testimony to his abilities, and great usefulness to the institution."

Morgan possessed an ample fortune. He is said to have been the first man in Philadelphia who carried a silk umbrella. He had a collection of valuable works of art, but that, together with his fine library, was destroyed by the enemy, partly at Bordentown, New Jersey, and partly at Danbury, Connecticut, to which places they had been removed to secure them from the very fate they met.

In 1765 he married Mary, daughter of Thomas Hopkinson, who died in 1785. They had no children. Dr. Morgan died on October 15, 1789, and both he and his wife are buried in St. Peter's churchyard, Philadelphia.

In addition to his writings already referred to he published the following: "The Reciprocal Advantages of a Perpetual Union between Great Britain and her American Colonies" (1766), before the Revolution, and "A Recommendation of Inoculation According to Baron Dimsdale's Method" (1776). He also contributed to the "Transactions of the American Philosophical Society" the following: "An Account of a Pye Negro Girl and Mulatto Boy"; "On the Art of Making Anatomical Preparations by Corrosion"; and an article "On a Snake in a Horse's Eye, and of other Unnatural Productions of Animals."

FRANCIS R. PACKARD.

MORLAND, William Wallace (1818-1876), editor of the "Boston Medical and Surgical Journal," was born at Salem, Massachusetts, September 1, 1818, graduated from Dartmouth College in 1838, and received the degree of M. D. from the Harvard Medical School in 1841. After continuing his studies for a time in Europe he settled in Boston, where he practiced his profession with considerable success, but found time for collateral, scientific and literary pursuits. In 1855 Dr. Morland, in association with Dr. Francis Minot (q. v.), succeeded Dr. J. V. C. Smith (q. v.) as editor of the "Boston Medical and Surgical Journal" and continued successfully in this position until 1860. At the foundation of the Boston City Hospital in 1864 Dr. Morland was appointed visiting physician and held this post until 1870. For nearly twenty years he was medical examiner for the New England Mutual Life Insurance Company. He was a member of the Massachusetts Medical Society, and was its recording secretary in 1863-1864, and a member of the Boston Society for Medical Improvement. Dr. Morland was author of a book on "Diseases of the Urinary Organs," which appeared in 1858; and in 1866 he won the Fiske prize for an essay on Uremia. His paper on "Florida and South Carolina as Health Resorts," published in 1872, was the best and most widely known of his smaller writings. He was also a poet of delicacy and contemporary distinction, as is evidenced by some of his occasional verses, published or preserved in manuscript. His obituary notice in the "Boston Medical and Surgical Journal" says of him that "as a man and a physician, Dr. Morland was alike excellent, of much learning and ability, joined to the most charming and unpretentious manners." He died at Boston, November 25, 1876.

ROBERT M. GREEN.

MORRILL, David Lawrence (1772-1849), Governor and United States Senator from New Hampshire, was born in Epping, in that state, June 10, 1772. He was the eldest son of Rev. Samuel Morrill, a native of Wilmington, Massachusetts, who was born April 21, 1744 and was graduated from Harvard College in 1766, a grandson of Rev. Isaac Morrill of Wilmington, Massachusetts. His father was a licentiate preacher and had an invitation to settle at North Hampton, but in consequence of imperfect health, declined the proposal and never settled in the ministry. His mother was Anna Lawrence, only daughter of David Lawrence, Esq., of Epping. David Lawrence was kept in the common school until his father's death; being then thirteen years old, he was sent to study Latin with his grandfather at Wilmington, preparatory to the study of medicine. He continued there until the fall of 1786, when he returned to Epping, New Hampshire, and pursued the study of Latin until June, 1787. From that time he labored on the farm with his Grandfather Lawrence for two years or more, after which he entered Phillips Exeter Academy, under the instruction of Preceptor Abbott in the languages, and Dr. Daniel Dana, then assistant, in mathematics. After leaving the Academy he began the study of medicine with Dr. Timothy Johnson, his father-in-law, with whom he continued until the spring of 1792. He then went to Natick, Massachusetts, and read and practiced with his uncle, Dr. Isaac Morrill. While there, he went into a hospital, under the superintendence of Dr. I. Morrill, and had the principal care of it for some time. Returning to Epping and attending business with Doctor Johnson until

1793 he entered upon practice at Epsom, New Hampshire, where he continued, except for an absence of about one year, until the autumn of 1800. When at Epsom in 1797 he was appointed surgeon's mate of the 18th regiment of the militia, and was chosen town clerk and continued in office until he removed from the town.

In the summer of 1799 his mind experienced a material change in regard to religious subjects, in consequence of which he turned his attention almosr entirely to theological reading. In October, 1800, he began the study of systematic divinity under the direction of Rev. Jesse Remington, of Candia, New Hampshire. In June 1801, he was examined by the Deerfield Association, and received approbation to preach. March 2, 1802, he was ordained pastor of the Congregational church and society in Goffstown, New Hampshire. He united with the Hopkinston (N. H.) Association, and in 1804 was appointed on a mission by the New Hampshire Missionary Society to the northern part of the State. Finding more than ordinary exercise necessary for his health, he, in 1807. resumed the practice of physic, in which he continued, though irregularly until 1830. In July, 1811, he was dismissed from his pastoral relation with the church in Goffstown, New Hampshire, at his own request, on account of ill health.

In 1808 he was chosen to represent Goffstown in the General Court and was re-elected until 1817. He was commissioned a justice of the peace in 1808, and his commission was seven times renewed, and was signed by seven different governors: Langdon, Plummer, Woodbury, Bell, Dinsmoor, Hill, and Hubbard. In June, 1817, he was chosen speaker of the House of Representatives, and at the same session was elected by the two branches of the Legislature to represent New Hampshire in the Senate of the United States, six years from March, 1817. In March, 1823, he was elected to the Senate of the State of New Hampshire, and in June was chosen president of that body. He was elected Governor of New Hampshre in 1824. There being no choice by the people, he had a plurality in convention of the two branches of the Legislature, 146 to 63, and in March, 1825, was chosen by the people, having 30,167 votes out of 30,770, and was re-elected in 1826. In 1831 he retired to private life.

Governor Morrill received the honorary degree of Master of Arts and of Doctor of Medicine from Dartmouth Medical School in 1808, and the degree of Doctor of Laws from the University of Vermont in 1825. He was a member and counsellor of the New Hampshire Medical Society, and a delegate of that society to attend the examination of medical students at Dartmouth Medical School. He was president of the Hillsboro County Agricultural Society, of the New Hampshire Missionary Society, of the New Hampshire Colonization Society, of the American Doctrinal Tract and Book Society, and of the New Hampshire Branch of the American Educational Society. He was vice-president of the American Bible Society, of the American Sunday School Union, and of the American Home Mission Society.

The following are Dr. Morrill's publications: A Concise Letter on the Subject of Baptism, addressed to Rev. D. Morrill, 1806; two Funeral Sermons, 1811, 1819; Oration, July 4, 1815; A Discourse before the Grand Lodge of New Hampshire, 1819; a sermon on Divine Decrees, the Divine Glory, and Moral Agencies, Luke 22:22; Observations on Genesis 3:4, 13, Thoughts on Rev. 20:10, printed in the "Hopkinsian Magazine," published at Providence, Rhode Island, 1828. Dr. Morrill also edited the "New Hampshire Observer," a religious paper, for two years.

September 25, 1794, Governor Morrill married for his first wife, Jane Wallace, of Epsom, New Hampshire, who died December 14, 1823, aged 53 years, leaving one child; August 3, 1824, he married for his second wife, Lydia Poor of Goffstown, New Hampshire, by whom he had four sons.

He died at Concord, New Hampshire, January 28, 1849.

IRVING A. WATSON.

MORRIN, Joseph (1794-1861), one of Quebec's foremost physicians in the early part of the nineteenth century, was a partner of Dr. Douglas in the creation of the Quebec Lunatic Asylum, in 1845. He was born in Dumfriesshire, Scotland, in 1794 and was brought to Canada at an early age by his parents, attending school in Quebec under Dr. Wilkie. He studied medicine in Quebec and in the London and Edinburgh Universities and rose to high eminence in his profession, as well as taking a prominent part in public affairs, being twice elected mayor of Quebec.

He was one of the three original governors of the Quebec Marine and Emigrant Hospital, where the first medical lectures ever given in the province were delivered in 1837. The

first Canadian medical society, known as the Quebec Medical Society, was started in that city with Dr. Morrin as its first president and he was elected the first president of the medical board of the lower province. Morrin College was founded by him, and in 1831 he was elected honorary librarian to the Literary and Historical Society of Quebec, which was originated by His Excellency the Earl of Dalhousie in 1824. Dr. Morrin's connection with the Quebec (Beauport) Lunatic Asylum extended up to 1860, when he disposed of his interest in the establishment to Dr. Douglas and Dr. Fremont.

His death occurred in the city for which he had done so much on August 29, 1861, at the age of 67 years.

MORRIS, Caspar (1805-1884), physician, hospital administrator and poet, was born May 2, 1805, in Philadelphia, the fourth son of Israel W. Morris, broker and commission merchant, and Mary, daughter of Levi Hollingsworth, merchant and personal friend of Washington. An ancestor was Anthony Morris, a noted preacher in the Society of Friends, and one of the original settlers of Philadelphia; his great-grandfather was Caspar Wistar, ancestor, also, of Caspar Wistar (1761-1818) (q. v.). Morris had his early education at Pine Street Meeting-House, then with David Dulles, in Church Alley, and later, at the Penn Charter School. He entered the office of Joseph Parrish (q. v.) and studied at the University of Pennsylvania, graduating M. D. in 1826 with a thesis on "Medical Uses of Sulphur." In 1827 he went to India as ship's surgeon and assistant supercargo in the "Pacific," and on the voyage acquired a knowledge of Greek, studying the Greek Testament. On his return in 1828 he was appointed one of the physicians of the Philadelphia Dispensary. He intended to settle near Seventh and Arch Streets, but his sympathies were aroused by seeing a poor woman bringing her sick baby, from the neighborhood of the brickyard beyond Broad and Chestnut, to the Fifth Street Dispensary on a hot July day; he therefore determined to live near the poor in that district, and forthwith established himself on Broad Street near Chestnut. He later moved to Chestnut, afterwards to Spruce for the rest of his life. He helped to establish the House of Refuge, and was physician there, 1830-1834; he helped found the Pennsylvania Institution for the Instruction of the Blind, and was its physician and a manager. In 1838 he aided in founding the Philadelphia Medical Institute and lectured on practice until 1844; in 1852 he published a pamphlet, addressed to Bishop Potter, on the need of increased hospital facilities in Philadelphia; thus began the movement which resulted in the Protestant Episcopal Hospital in Philadelphia; he was one of the managers of that institution. From 1829 to 1838 he was an active member of the Academy of Natural Sciences; and from 1857 to 1860, of the American Philosophical Society. While abroad he studied hospital Administration and contributed "Hospital Construction and Organization" to a volume of "Hospital Plans, Johns Hopkins Hospital, Baltimore" (1875). Other medical writings include: "Lectures on Scarlet Fever" (1851; "Essays on the Pathology and Therapeutics of Scarlet Fever" (1858).

He was known as a writer of musical verse. Of this a small volume, printed for private circulation, bears the title "Heart Voices and Home Songs"; he wrote an abridged "Life of William Wilberforce." Living in a day when chains were stretched across the streets on Sunday to stop driving in front of churches during hours of service. Morris broke through the barrier, and was arrested, taken before Mayor Watson, and fined for breach of the city ordinances. His protest was so indignant that the Mayor fined him, also, for "disrespect to the court."

In 1829 he married Anne, daughter of James Cheston, of Baltimore; they had six children, one of whom was James Cheston Morris, M. D., University of Pennsylvania, 1854, father of Caspar Morris, M. D., University of Pennsylvania, 1876. Never of robust health, in 1868 he had an attack of "anthrax" (carbuncle). His strength was never the same afterward, and he died March 17, 1884, three years after the death of his wife. They had celebrated their golden wedding in 1879.

MORRIS, John (1824-1903), of Baltimore, medico-legal expert, was born in Leacock Township, Lancaster County, Pennsylvania, February 6, 1824, and received his early education at the Lancaster Academy. He began to study law as a profession at the age of fifteen, but an orphan with little means, he was forced to relinquish this, and in 1841 went to Baltimore, Maryland, and became a teacher in Baltimore County, at the same time beginning the study of medicine; he was a pupil of F. E. B. Hintze and S. Annan (q. v.), and had his first course of lectures

at Washington College (now the Church Home and Infirmary), Baltimore, 1845-1846). In 1848 he moved to Baltimore and entered the office of Dr. Hintze. He became interested in public affairs and served in the Maryland Legislature, 1852-1856; was a member of the Baltimore School Board, 1856-1857; postmaster of Baltimore, 1857-1861; member of the City Council, 1867. Dr. Morris was licentiate of the Medical and Chirurgical Faculty of Maryland, 1845; a Licentiate in Midwifery of Rotunda Hospital, Ireland, and an honorary M. D. (1868) of Bellevue, New York. From 1875 to 1877 he was president of the Maryland Inebriate Asylum, and of the Lunacy Commission of Maryland. In 1867 he was one of the two American delegates (David Dudley Field was the other) to the Social Science Congress held in Belfast; in 1875 he was delegate to the British Medical Association at Edinburgh, to the Industrial Medical Congress at Brussels and to the French Scientific Congress at Nantes.

During the yellow fever epidemic in Norfolk, in 1855, Dr. Morris volunteered his service and did such heroic work that the citizens presented him with a gold medal in commemoration. He contracted the fever and had a long illness. When the Sixth Massachusetts Regiment was attacked in Baltimore, April 19, 1861, he had the wounded carried to his office near and gave them medical aid. It was to Morris that Edward ("Bey") Warren (q. v.) addressed the letters that make up Warren's book "A Doctor's Experiences in Three Counties."

In 1871 Dr. Morris married Caroline Canfield, daughter of Wykoff Piatt, a lawyer of Cincinnati, Ohio; John Norfolk Morris, resident physician of Springfield Asylum for the Insane, was their son. After several months illness Morris died at the City (later Mercy) Hospital, Baltimore, January 29, 1903; he was buried at Lancaster.

MORRISON, Robert Brown (1851-1897), pioneer dermatologist of Maryland, was born in Baltimore, Maryland, on March 13, 1851. He went first to Phillips Academy, Exeter, New Hampshire, and entered Harvard University in 1869, but did not graduate. He continued his studies at the University of Göttengen, Germany, finally graduating M. D. from the University of Maryland in 1874. Soon after he became a member of the Clinical Society of Baltimore, and of the Medico-Chirurgical Faculty of Maryland, but in 1882 returned to Europe and studied dermatology at Prague under Pick and Chiari. While there he won distinction by his original investigations, the most important being his extensive and painstaking study of the histopathology of the prurigo papuel and the application of certain stains in syphilitic tissue. From Prague he went to Vienna and studied under Neumann and after this to the hospitals of Hamburg and Berlin. Upon his return in 1884, he was elected professor of dermatology in the Baltimore Polyclinic and Post-Graduate Medical School. He was also lecturer on dermatology in the Woman's Medical College, Baltimore. In 1887 he was elected clinical professor of dermatology in the University of Maryland, but two years later was appointed professor of dermatology at the Johns Hopkins University.

He was president of the American Dermatological Association 1893-4, and was regarded as the pioneer dermatologist of Maryland, his observations and contributions regarding skin diseases of the negro being, perhaps, the most valuable ever written. He was a gentleman of broad culture, charming personality, and his published writings bear the stamp of an astute student and of a painstaking clinician. In the last years of his life failing health compelled him to resign his professorships, and in other ways curtail his activities. His death occurred at Baltimore, September 30, 1897.

J. McF. WINFIELD.

MORROW, Prince Albert (1846-1913), syphilologist and dermalologist of New York, was born December 19, 1846 at Mount Vernon, Christian County, Kentucky. He was the son of William and Mary Ann Cox Morrow, his paternal ancestor having been a general in the army, a prominent politician, and a well-to-do planter. His maternal ancestor came from Virginia, and his parents were among the early settlers in that part of the state in which their son was born. Dr. Morrow was educated at Cumberland College in his native state, and also at Princeton College, Kentucky, from which he received the degree of A. B. in 1865. He subsequently received the degree of A. M. from the University of the City of New York in 1880, studied medicine at the University Medical College in New York City, and from this institution received his degree of M. D. in 1873. After graduation he went abroad and continued his medical studies at the École de Medicine de Paris, and also pursued his professional study

in the hospitals of London, Berlin, Vienna, and Paris, returning in 1874 to his native country to begin the practice of medicine in New York City. Dr. Morrow held these positions: Surgeon to the City Hospital on Blackwell's Island from 1884 to 1904, being president of the medical board in 1895, and later consulting physician to this hospital; surgeon to the out-door department of Bellevue Hospital, and also physician to the department of skin and venereal diseases; consulting dermatologist to St. Vincent's Hospital; attending physician in the department of skin and venereal diseases in the New York Hospital from 1890-1894; lecturer on dermatology in the University Medical College in 1882, and clinical professor of genito-urinary diseases in the same institution in 1884; clinical professor of genito-urinary diseases in the University-Bellevue Hospital Medical College in 1898, and professor emeritus in 1899. He held membership in the American Academy of Medicine, the American Association of Genito-Urinary Surgeons, the New York Dermatological Association, the American Dermatological Association, being its president in 1890-1891, the American Medical Association, being chairman of the section on hygiene and sanitary science in 1907, the New York Academy of Medicine, the New York County Medical Society, and many other local and national medical societies. He was corresponding member of la Academia de Medicina de Mexico, also of la Société Francaise de Dermatologie et de Syphilographie de Paris, La Societa Italiano di Dermatologia and Die Wiener Dermatologische Gessellschaft. He was secretary for America of the first and second International Congress of Dermatology and Syphilography at Paris in 1890 and at Vienna in 1893. He was also Vice-President of the Dermatological section of the Pan American Medical Congress.

Dr. Morrow was widely known as an author on medical subjects, especially in reference to his special department of medicine. He was the editor and translator of Fournier's book on syphilis and marriage, which he brought out in 1881, and was the author of venereal memoranda in 1885, and also the author of a work on drug eruptions in 1887. He was editor of the "Journal of Cutaneous and Venereal Diseases" from 1882-1892. He likewise was the author of an atlas on skin and venereal diseases, which appeared in the years of 1888-1889. He published a work in three volumes on a system of genito-urinary diseases in 1892-1894, and a book on social diseases and marriage in 1904. His essay on Leprosy in 1889, the material for which he gathered on a tour of observation in California, Mexico, and the Sandwich Islands, was a classic. In 1905 he began a movement in this country in the organization of a society for "Sanitary and Moral Prophylaxis," the object of which was to overcome "the evil of the ages and a curse to the human race," being president of this society from 1905 to 1913. This subject of sex hygiene was one in which he had to educate public opinion and seniment, and he so far succeeded in a crusade against the venereal evil that he enlisted the interest of the most distinguished and conservative members of the profession. The organization of this crusade was followed by the formation of similar societies in thirty states. These various societies were federated in 1910 under the name of the "American Federation of Sex Hygiene" with Dr. Morrow as its president.

The society has done an important work throughout America.

In 1874 Dr. Morrow was married to Lucy Bibb, daughter of Thos. J. and Mary Henry Slaughter of New York. There were six children, three of whom survived him at his death.

He was a man of great force, of wonderful executive ability, of undaunted courage, of highest character, and of splendid achievement.

FREDERIC S. DENNIS.

MORTON, Samuel George (1799-1851), distinguished physician of Philadelphia, was the son of George Morton, who came to this country from Ireland at the age of sixteen, and of Jane, daughter of John and Margaret Cummings, of Philadelphia. They had nine children, of whom Samuel was the youngest. He was born in Philadelphia, January 26, 1799. The father died when Samuel was but six months old, and Mrs. Morton with her three children moved to Westchester, New York, in order to be near his sister. When Samuel was of school age, he went to various boarding schools conducted near Westchester by members of the Society of Friends, and Morton's early education was derived entirely under their auspices. In 1812 Morton's mother married Thomas Rogers and returned to Philadelphia, and Morton soon afterwards was sent to another Quaker School in West Town, and from there to the private school of John Gummere at Burlington, New Jersey, to

study the higher mathematics. After studying under John Gummere, Morton was, in 1815, apprenticed to a mercantile house in Philadelphia. He did not take kindly to business life, and after the death of his mother, in 1816, he gave it up. According to Wood the friendship formed with several eminent physicians who were in attendance on his mother during her protracted illness helped to turn him toward the study of medicine. In 1817, at the age of nineteen, he began to study in the office of Dr. Joseph Parrish (q. v.), who was one of the most successful practitioners of his day. He had so many office pupils that in order to provide adequate tuition for them, he had associated with himself several young instructors in various branches. Among them was the naturalist, Richard Harlan, who exerted a marked influence in turning Morton's thought toward science. In his early school days, Morton is said to have shown a fondness for natural history, and this was fostered by his stepfather, who was an amateur mineralogist. He was thus prepared to be influenced by Harlan and other young physicians who took delight in the study of nature. While studying under Dr. Parrish, Morton also attended lectures at the medical department of the University of Pennsylvania, and in 1820 took his M. D. there. In the same year he became a member of the Academy of Natural Science, an institution subsequently much indebted to him for its development, and of which he was president at the time of his death.

In 1821 Samuel went to Clonmel, Ireland, to visit his uncle, James Morton. He was received with open arms by his relatives, but after a brief visit with them was persuaded to go to Edinburgh to continue his medical studies. American degrees were not at this time much esteemed in Europe, so that while at Edinburgh Morton was obliged to attend the full term of an undergraduate. In 1824 he returned to Philadelphia and began to practice, in 1827 marrying Rebecca Pearsall. Soon after his return he was made auditor and a little later recording secretary of the Academy. In this year he published an "Analysis of Tabular Spar from Bucks County," followed by numerous papers dealing with geology and paleontology. The most important of these were collected and published in 1834, in a volume entitled "Synopsis of the Organic Remains of the Cretaceous Group of the United States," a book which was the starting point of all paleontological and systematic study of American fossils, according to Marcon, and gave its author a deserved scientific reputation. In addition to his contributions to paleontology Morton at this period published various zoological papers, among them one on "A New Species of Hippopotamus," determined from a skull received from Dr. Goheen, of Liberia. Meanwhile Morton's interest in scientific medicine was likewise advancing. His first published essay was one on "Cornine," a new alkaloid, printed in 1825-1826. His "Illustrations of Pulmonary Consumption," published in 1834, was a credit to American science. He followed Dr. Parrish in recommending the open-air treatment of the disease and in 1835 he edited an American edition of Mackintosh's "Principles of Pathology and Physic." Morton's chief scientific contributions, however, came from still another direction. He was soon after his return selected by Dr. Parrish as one of his associates in teaching, and lectured upon anatomy in that connection from 1830 to 1835-6. His lectures were characterized by simplicity and clearness without any attempted display, and gave entire satisfaction both to his associates and pupils. In 1839 he was elected professor of anatomy in Pennsylvania College, from which his resignation was accepted with regret in 1843. In 1849 he published an elaborate and valuable work on "Human Anatomy," special, general and microscopic, completed with much labor and care. "Among the inducements to this work, not the least," as he states in the preface, "was the desire to be enrolled among the expositors of a science that had occupied many of the best years of my life." It was when he began his career as a teacher of anatomy that Morton received the stimulus which led to the work on which his lasting reputation rests.

Morton* states that "having had occasion in the summer of 1830, to deliver an introductory lecture to a course of anatomy, I chose for my subject 'the different forms of the skull as exhibited in the five races of men.' Strange to say I could neither buy nor borrow a cranium for each of these races, and I finished my discourse without showing either the Mongolian or the Malay. Forcibly impressed with this great deficiency in a most important branch of science, I at once

*Letter to J. R. Bartlett, Esq., "Transactions of the American Enthnological Society," vol. ii, New York, 1848, quoted by Patterson.

resolved to make a collection for myself." Although most of the skulls belonging to the collection were contributed by some hundred friends, the cost of collecting to Morton must have been between $10,000 and $15,000. Agassiz, on visiting Philadelphia soon after his arrival in America, wrote that "Dr. Morton's unique collection of human skulls is to be found in Philadelphia. Imagine a series of 600 skulls, mostly Indian, of all the tribes who now inhabit or formerly inhabited America. Nothing like it exists elsewhere. This collection alone is worth a journey to America."

The two most important works by Morton based on his splendid collection of skulls are his "Crania Americana" 1839 and his "Crania Aegyptica," 1844. He wrote to Gliddon: "You will observe by the annexed prospectus that I am engaged in a work of considerable novelty, and which, as regards the typography and illustrations at least, is designed to be equal to any publication hitherto issued in this country. You may be surprised that I should address you on the subject, but a moment's explanation may suffice to convey my views and wishes. The prefatory chapter will embrace a view of the varieties of the human race, embracing, among other topics, some remarks on the ancient Egyptians. The position I have always assumed is that the present Copts are not the remains of the ancient Egyptians, and in order more fully to make my comparisons, it is very important that I should get a few heads of Egyptian mummies from Thebes etc. I do not care to have them entirely perfect specimens of embalming, but perfect in the bony structure, and with the hair preserved, if possible. It has occurred to me that, as you will reside at Cairo, and with your perfect knowledge of affairs in Eygpt, you would have it in your power to employ a confidential and well-qualified person for this trust."

Morton's ethnological studies led him to the conclusion that the human races are of diverse origin. For this he was bitterly assailed by numerous people, including several clergymen, who claimed that he was denying the authority of the Scripture by conclusions of this character. Morton's life was made for a time unpleasant by the bitterness of the controversey, but his fine character was too well understood by those nearest him for those who attacked him to do him great injury. In an esay on "Hybridity," published in "Silliman's Journal" for 1847, Morton showed that there are many examples of fertile hybrids known, and that therefore the fertility of offspring from members of different human races cannot be considered an argument against the distinct specificity of these races. Since Darwin's influence has spread abroad the whole subject would now, of course be taken up from a different standpoint. Agassiz accepted, in the main, Morton's views. Acording to Marcon, Morton was second only to Cuvier in his influence on Agassiz's mind and scientific opinion.

Of the opponents of Morton the most bitter was the Rev. Dr. Bachman,, of Charleston, South Carolina, who published a book and several monographs attacking Morton. While they were of no value from the scientific standpoint, they served to stimulate Morton to get and publish new evidence. While in the midst of publishing such evidence in support of his own point of view, Morton was suddenly stricken with mortal illness, and died in Philadelphia, May 15, 1851. The end is thus described by H. S. Patterson: "Never had Morton been so busy as in that spring of 1851. His professional engagements had largely increased, and occupied most of his time. His carniological investigations were prosecuted with unabated zeal, and he had recently made important accessions to his collection. He was actively engaged in the study of archeology, Egyptian, Assyrian, and American, as collateral to his favorite subject. His researches upon hybridity cost him much labor, in his extended comparison of authorities, and his industrious search for facts bearing on the question. In addition to all this, he was occupied with the preparation of his contribution to the work of Mr. Schoolcraft, and of several minor papers. Most of these labors were left incomplete. The fragments published in this volume will show how his mind was engaged, and to what conclusions it tended at the close. For it was now, in the midst of toil and usefulness, that he was called away from us. Five days of illness—not considered alarming at first—had scarcely prepared his friends for the sad event, when it was announced on the fifteenth of May, that Morton was no more.

"Dr. Morton was considerably above the medium height, of a large frame, though somewhat stooping, with a fine oval face, prominent features, bluish-gray eyes, light hair, and a very fair complexion. His countenance usually wore a serious and thoughtful expression, but was often pleasingly lighted up with smiles during the relaxation of social and friendly intercourse. His manner was

composed and quiet, but always courteous, and his whole deportment that of a refined and cultivated gentleman." (G. B. Wood.)

Dr. Morton, according to Meigs, was a member of the following societies: The Academy of Natural Sciences of Philadelphia; Philadelphia Medical Society; College of Physicians of Philadelphia; Massachusetts Medical Society (honorary); American Ethnological Society, New York; Medical Society of Sweden; Academy of Sciences and Letters at Palermo; Royal Society of Northern Antiquaries at Copenhagen; Academy of Science, Letters, and Arts de Xelanti de Arcereale; Imperial Society of Naturalists of Moscow; Medical Society of Edinburgh.

A list of his principal papers and published works is given by C. D. Meigs in his memoir.

CHARLES R. BARDEEN.

MORTON, Thomas George (1835-1903), surgeon of Philadelphia, the son of Samuel G. (q. v.) and Rebecca Grellet Pearsall Morton, was born in Philadelphia, August 8, 1835. He studied first in the academic and then in the medical department of the University of Pennsylvania, receiving his M. D. in 1856, with a thesis on cataract. He was resident physician to the Pennsylvania Hospital in 1857 and pathologist and curator to its Museum from 1860 to 1864 when he was elected one of the surgeons of the staff; his connection with this hospital continued over forty years. A number of hospitals claimed him as surgeon or consultant. He was surgeon to the Wills Eye Hospital, 1859-74, and founder and surgeon to the Orthopedic Hospital—later the Philadelphia Orthopedic Hospital and Infirmary for Nervous Diseases—with Weir Mitchell (q. v.) cooperating to make it famous. During the Civil War, he served almost continuously as acting assistant surgeon. From May, 1862, to February, 1865, he was a colleague of D. H. Agnew (q. v.) at the Mowry Hospital, Chestnut Hill, Philadelphia, the largest army hospital in the United States, accomodating five thousand patients. He also organized the army hospital at Twelfth and Buttonwood Streets, Philadelphia. He was professor of clinical and operative surgery in the Philadelphia Polyclinic for Graduates, and his clinical lectures held at the Pennsylvania Hospital were attended by thousands of students. Morton devised a model hospital ward dressing carriage in 1866, which received a certificate of award by the United States Centennial Commission in 1876; a light truck for transferring patients in their beds from ward to clinical amphitheater, and an apparatus for measuring inequality in the length of legs.

He was of a quick, bright, mercurial temperament, impressing one as being exceedingly wide-awake, always kindly and responsive, and especially alive to his civic obligations and to the claims of the poor—his eleemosynary work was enormous. He was a notable figure in Philadelphia, seeming to the passer-by always to be bustling in or out of his office on some errand of mercy; his life was one of unusual activity and he performed successfully about all of the major operations which in that day established the claim to the title of great surgeon.

In 1864, he ligated the common carotid for orbital aneurysm; in 1866, he amputated at the hip joint; in 1867, he tied the subclavian between the scaleni and ligated the left internal iliac artery; in 1871, he cured a case of complete osseous anchylosis of the knee by excision; in 1877, he removed a dracunculus from the human eye; and excised the os calcis—all successfully. He will be remembered chiefly for three things: (1) he did the first successful laparotomy for appendicitis with the removal of the appendix, on April 27, 1886 (Trans. Coll. Phys., Phila., 1887), after losing a brother and then a son by this disease, on both of whom he had urged in vain the attending surgeons to operate; (2) he first described the affection known as metatarsalgia or Morton's toe (Am. Journ. Med. Sci., 1875) and devised the operation for its cure; and (3) assisted by Dr. Frank Woodbury, he published a notable "History of the Pennsylvania Hospital" in 1893. With his son, T. S. K. Morton, he early actively interested himself in the new antiseptic technic and introduced it into the Pennsylvania Hospital, this helping to inaugurate the new surgical era in Philadelphia.

In addition to reporting his surgical experiences, Dr. Morton wrote on transfusion of blood (1877), on the antiseptic treatment of wounds (1886), and on the care of the insane. With William Hunt, he wrote a "History of the Surgery of the Pennsylvania Hospital," in 1880. He served as Commissioner for Public Charities of Pennsylvania for eleven years, Chairman of the Lunacy Committee, and Commissioner for the selection of the site of the State Insane Hospital at Norristown, in 1876.

He married Ann Jenks, the daughter of Dr. Thomas Story Kirkbride, (q. v.) of Philadel-

phia, November 12, 1861. Five children survived the parents, one of whom is the surgeon, Thomas S. K. Morton, author of numerous articles. Dr. Morton died at Cape May of cholera morbus, May 20, 1903.

HOWARD A. KELLY.

MORTON, William James (1845-1920), son of William T. G. Morton (q. v.), was born July 3, 1845, in Boston, Massachusetts. His mother was Elizabeth Whitman, descendant of John Whitman, a freeman of Weymouth, Massachusetts, in 1638. After graduating in arts from Harvard, (1867) he was principal of the High School at Gardner, Massachusetts, leaving in 1868 to enter Harvard Medical School. In the same year he was attached to the Massachusetts General Hospital as house pupil; the next year he was resident student in the Discharged Soldiers' Home in Boston; he was also assistant to the surgeon of the out-door department of the Massachusetts General, becoming house surgeon there in 1871. He received his medical degree in 1872 when he won the Boylston prize with his essay on "Anesthetics." Dr. Morton practiced for a year in Bar Harbor, Maine, and in Boston, and in the autumn of 1873 went to Vienna to study. In 1874, he operated a claim in the diamond fields and practiced medicine in Kimberly, South Africa. Later, he traveled through France, England, and Germany. Returning to the United States in 1879, he settled in New York City and specialized in nervous and mental diseases. In 1880, he again went to France, to study with Charcot at the Salpetriere. He was assistant professor of diseases of the mind and nervous system in the New York Post-Graduate School and Hospital during 1882-85 and in 1890 held the same chair with the added title of electro-therapeutics; from 1881 to 1885 he was also professor of nervous diseases at the University of Vermont. He came into prominence in 1881 as the inventor of a mechanism by which static electricity could be administered in the form of an interrupted current—the so-called Franklinic Interrupted Current or Morton's Current; by its aid the X-ray is easily produced. It is claimed that he was the first American physician to make X-ray pictures and that the "Tesla effects" were produced through the experiments of others with Morton's current and mechanism. In 1894, he discovered an "electro-chemical method of staining tissues preparatory to microscopic examination," and the next year, an "electrical use of guiacol in combination with cocaine"—a means of local anesthesia in surgery and dentistry.

Morton wrote extensively on the X-ray, medical electricity, and radiotherapy. Among his writings other than medical are: "South African Diamond Fields," "To South Africa for Diamonds," and "A Flying Visit to Mexico." He was editor of the "Journal of Nervous and Mental Diseases" (1879-1885) and associate editor of "Neurological Contributions" (1880-1884).

In 1880, he married Elizabeth, daughter of Colonel Washington Lee Campbell of Wilkes-Barre, Pennsylvania.

Dr. Morton died of heart disease at Miami, Florida, March 26, 1920.

MORTON, William Thomas Green (1819-1868), the first to demonstrate the use of ether as an anesthetic in surgery, was born in Charlton, Massachusetts, August 9, 1819, and died of apoplexy in New York City, July 15, 1868, at the age of forty-nine. Leaving his father's farm when seventeen, he went to Boston, but, not succeeding in business, studied dentistry in Baltimore in 1840 in the College of Dental Surgery. In 1842 he settled at Farmington, Connecticut, in the practice of dentistry, and there he met Horace Wells (q. v.), who had already employed laughing gas successfully in the extraction of teeth. In 1844 Morton opened an office in Boston and gave especial attention to the manufacture of artificial teeth. In order to render his work complete it was necessary that the roots of old teeth should be removed; as this was a painful operation few would submit to it, and Morton set about devising means to lessen the pain. He tried stimulants, even to intoxication, opium, and mesmerism, but in vain. Feeling the need of more medical knowledge, he entered his name as a medical student with Dr. Charles Thomas Jackson of Boston (q. v.). Jackson previously experimented with some perfectly pure sulphuric ether, inhaling it mixed with air, to the extent of losing consciousness. He showed some to his pupils, and demonstrated how to inhale it. Morton took some himself and then administered ether on a folded cloth to a man named Eben H. Frost, September 30, 1846, producing unconsciousness, during which a firmly rooted bicuspid tooth was extracted. Communicating the result of this and other successful experiments to Dr. John Collins Warren (q. v.) he persuaded Warren to let him administer ether at the Massachusetts

General Hospital to a young man named Gilbert Abbot, having a superficial vascular tumor of the left side of the neck, just below the jaw, and accordingly the first operation was performed there by Dr. Warren with Morton as anesthetist, October 16, 1846, the tumor being removed successfully while the patient remained unconscious. On the following day, Dr. George Hayward (q. v.) removed a fatty tumor of considerable size from the shoulder of a woman while she was etherized. The operation occupied seven minutes.

This most important discovery revolutionized surgery and conferred one of the great-
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est possible blessings on the human race. Like all other great discoveries, it met with the bitterest opposition from the profession and Morton suffered almost unparalleled persecution. He made the mistake of patenting his discovery in the United States as "Letheon" in November, 1846, and the following month in England, offering, however, free rights to all charitable institutions, hoping by his patent to protect himself and secure a fair compensation. Morton's shrewdness, his attempts to keep the nature of the anesthetic a secret and to give no credit to Jackson brought upon him poverty and unending trouble. The government appropriated his discovery to its own use without compensation, disregarding the patent. Other claimants for the credit of the discovery of anesthesia, C. T. Jackson and Horace Wells, Morton's partner in dentistry, who had used nitrous-oxide for teeth extraction in 1844, came forward, and the Paris Academy of Medicine divided the Monthyon prize of 5,000 francs equally between Jackson and Morton, the latter refusing to take a share, claiming that all the credit was his.

Washington University, Baltimore, conferred the degree of M. D. on Morton in 1849; Congress investigated his claims and a committee, composed of physicians, reported, after hearing the evidence on both sides, that he was entitled to the merit of the discovery. Separate bills, appropriating $100,000 for the discovery of practical anesthesia, were introduced into Congress during three sessions of that body, but always failed of passage. His business was broken up and he was reduced to the direst poverty. In 1852 he received the large gold medal, the Monthyon Prize in medicine and surgery. Encouraged by the prominent physicians and citizens of Boston, where ether was first used, a plan for a national testimonial was instituted in 1856-1857, and Morton was given full credit for the discovery. In 1858 a similar appeal was made in New York, and in 1860 the medical profession of Philadelphia signed a testimonial to the same effect, but with no other result than to give him honor without money emoluments. To save his home from a sheriff's sale in 1858 he instituted suit against a surgeon in the Maine Hospital Service for infringing his patent, and got a verdict in the United States Circuit Court. Naturally, this did not increase his popularity with the medical profession.

He had married Elizabeth Whitman of Farmington, Connecticut, in 1844, and when he died in poverty in 1868 she had difficulty in supporting herself and her son, William James Morton (q. v.). Morton was elected to the Hall of Fame on University Heights, New York City, November 6, 1920.

Dr. Morton published "Morton's Letheon" (cautioning those who attempted to infringe on his legal rights), Boston, 1846, also "Remarks on the Proper Mode of Administering Sulphuric Ether by Inhalation," 1847.

WALTER L. BURRAGE.

Moses, Thomas Freeman (1836-1917), physician, educator and writer of Hamilton, Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 826.

MOSHER, Jacob Simmons (1834-1883), of Albany, New York, chemist and legal physician, was born in Coeymans, New York, March 19, 1834. His father was of English, his mother of German descent. In 1853 he entered Rutgers College, where he displayed most remarkable ability, but, owing to various circumstances, he left that institution near the close of his junior year. Shortly afterwards he accepted the position of principal of Public School No. 1, at Albany, but in 1862 entered the Albany Medical College, from which he was graduated in 1863, having made a record in scholarship which has rarely been equalled since. His thesis, "Diabetes" was clever and original. While still in his student days he became instructor in chemistry and experimental philosophy in the Albany Academy, and in 1865 was advanced there from the instructorship to the professorship of the same subjects. The year 1864 saw him surgeon to the Army of the Potomac, and later he was assistant medical director for the state of New York. The professorship

of chemistry and medical jurisprudence in the Albany Medical College became his in 1865, and, in the same year, the registrarship and librarianship.

Among the positions which Dr. Mosher held were: surgeon to Gov. Hoffman's staff, with rank of brigadier-general; military superintendent and surgeon in charge of the Albany Hospital for disabled soldiers; surgeon-general for New York; deputy health and executive officer of the port of New York; member of the commission of experts, appointed by President Hayes to study the origin and cause of the yellow-fever epidemic; member of the medical and surgical staffs of the Albany and St. Peter's Hospitals; founder, trustee, and professor of the Albany College of Pharmacy; president of the faculty of the same institution; and a member of innumerable medical societies. His most distinguished work was done as professor of medical jurisprudence and hygiene in the Albany Medical College.

He married, December 30, 1863, Emma Montgomery, of Albany, and had four sons and one daughter.

Besides being a man of active life and wide-ranging sympathies, Dr. Mosher was an expert in botany as well as in medicine. A bibliophile, also, he possessed a wonderful library of rare and curious volumes, and was an authority on prints and etchings, of which he had a large collection. As an expert witness, he was unsurpassed, and yet, busy as he was, his time was ever at the disposal of his friends and the poor.

He died on the morning of August 13, 1883. For several days he had been complaining of pain about his heart, but neither his friends nor he had suspected anything serious. In the morning, his attendant could not rouse him by the loudest of knocking, and the doctor was found in his bed, dead, a book, one of his cherished volumes, tightly grasped in his hand.

THOMAS HALL SHASTID.

MOTT, Alexander Brown (1826-1889), it is always rather a doubtful privilege to be the son of an illustrious father, particularly when following in his profession, but Mott the younger was operating with his father when only twenty-four. He was the fourth son and fifth child of Dr. Valentine (q. v.) and Louisa Dunmore Mott and grandson of Dr. Henry Mott, and was born in New York City the twenty-first of March, 1826. As a boy he went to Columbia College Grammar school. Then followed five years in Europe with his family, an experience in naval warfare as a marine in 1844, and in a mixed following of medicine and business at Havre, France. On returning home he was graduated (in 1850) at the Vermont Academy of Medicine and took an M. D. from the University of Pennsylvania in 1857. He had been helping his father before graduation and continued to do so, taking charge of the operating room and performing most of the operations in the surgical clinics.

In 1851 he married the youngest daughter of Thaddeus Phelps and ten years later went off to the war as brigade-surgeon and medical director successively, helping to found the first United States Army General Hospital in New York, in which were received some 4,000 patients. This gave him an ample surgical experience. Among other operations he tied the common carotid nine times, twice exsected the entire ulna, and twice removed the entire lower jaw. He may justly be said to have transmitted to posterity the heritage of a name illustrious in surgery with added memories of his own good work. On August 11, 1889, he died at his country house at Yonkers, after a two days' illness from pneumonia.

Among his writings was: "Surgical Operations and the Advantage of Clinical Teaching." His appointments included: senior surgeon, Mount Sinai Hospital; surgeon, Bellevue Hospital; surgeon, New York State Militia; co-founder and professor of anatomy in Bellevue Hospital Medical College.

MOTT, Valentine (1785-1865), eminent New York surgeon, was born at Glen Cove, Oyster Bay, Long Island, on August 20, 1785, son of Dr. Henry Mott. As a schoolboy he had private tuition in Newton, Long Island, and then attended medical lectures at Columbia College, working as well under his relative, Dr. Valentine Seaman (q. v.). Like all young physicians who could afford it, he straightway, after graduating M. D. in 1806, went to Europe, first to London, where he saw all the best men at work and became a pupil of Sir Astley Cooper. At Edinburgh he consorted with men like Hope, Playfair and Gregory and wanted afterwards to get into France in spite of the Anglo-French War and Napoleon's prohibition against foreigners. He had some idea of smuggling himself over on a small fishing boat, but friends dissuaded him. In the spring of 1809, he returned to New York, and feeling the competency of genius, succeeded in getting permission from

the trustees of Columbia College to lecture and demonstrate on operative surgery, being the first in New York to give private lectures. In 1811, although only twenty-six, he was elected professor of surgery at Columbia College, and when the medical faculty of that college and the College of Physicians and Surgeons were united he was soon given the post of professor of surgery. Here he continued until 1826, but, difficulties arising between the professors and trustees on principles of college government, he resigned and with his able associates founded Rutgers Medical College in New Jersey.

The reputation which Dr. Mott enjoyed was due mainly to his original operations; his bold carefulness and self-possession when undertaking that which was entirely new and his great success in rescuing from prolonged suffering the victims of morbid growths. Many a time was he called upon to perform at midnight by the flickering aid of a candle, operations not only difficult in themselves, but dangerous to the patient and without other assistance than that of excited relatives or ignorant friends. So intent was the young professor on practical improvement that, in the very face of severe penal laws, he went one dark night, dressed as a poor workman and driving a common cart, to a lonely graveyard, where his confederates unearthed eleven bodies. He drove all alone to the medical college with his perilous load, for he jeopardized not only his professional reputation but his life in order to advance scientific knowledge.

He was the first, or one of the first, in the United States to give clinical instruction. In 1818, when but thirty-three, he placed a ligature around the innominate artery only two inches from the heart for aneurysm of the right subclavian artery for the first time in the history of surgery, and the patient survived twenty-eight days, dying from secondary hemorrhage. In 1827 he ligated the common iliac artery extra peritoneally. Gross said of Mott, in his memoir: "No surgeon, living or dead, ever tied so many vessels or so successfully for the cure of aneurysm, the relief of injury or the arrest of morbid growths." In all, he is said to have ligated great arteries of the body one hundred and thirty-five times.

In 1828 he exsected the entire right clavicle for malignant disease, where it was necessary to apply forty ligatures and expose the pleura. He has priority, too, in tying the internal iliac artery for aneurysm successfully, and early introduced his original operation for immobility of the lower jaw in 1832. In 1821 he performed the first operation for osteosarcoma of the lower jaw and was the first to remove it for necrosis. He did the operation of lithotomy one hundred and sixty-five times. Sir Astley Cooper said, "He has performed more of the great operations than any man living." And all this before anesthetics, when stout arms had to hold down the writhing man and firm strength keep proportionally quiet the shrieking child.

When Rutgers Medical College finally closed in 1831, Mott was re-appointed professor of operative surgery in the College of Physicians and Surgeons, but his health failing a little, in 1834 he traveled in Europe, Asia and Africa. "It was during these travels that, full of love for his profession and always ready for a surgical operation, he tied the carotids of a cock in the valley of the Peneus and sacrificed him to Aesculapius." Mott returned to New York in 1841, after six years' absence, to meet with a very warm welcome and the offer (accepted) of the surgical chair in the University Medical College on its foundation in 1841. This position he filled until 1850, serving also as president during this time. "His experience was so vast, his observations so acute, his enthusiasm for surgery so undying that his lecture hall was always crowded with students and physicians anxious to profit by his teaching." But during his whole career he would never sacrifice a limb for the mere eclat of an operation, but would say to his students, "Allow me to urge you when about to perform an important surgical operation to ask yourselves solemnly whether, in the same situation, you would be willing to submit to it." In 1850 he went abroad again and on his return became professor of surgery in the Medical Department of New York University for a second time. His writings were relatively few and may be found in the Surgeon General's Catalogue. He translated Velpeau's Operative Surgery, four volumes, and reported many of his own unusual operations. He died of "typho-malarial fever" and gangrene of the left leg, resulting from occlusion of the arteries, April 26, 1865, in the eightieth year of his age.

The year following his death his widow founded a memorial in the form of a building at No. 64 Madison Avenue containing a library of more than four thousand volumes, open to students and physicians, and mementoes of Dr. Mott's life, such as instruments, pathological specimens and plates. The Mott

Memorial was maintained by Alexander B. Mott for many years and was finally closed in 1909, when the books, instruments and plates were transferred to the New York Academy of Medicine.

His son Valentine (1822-1854) was graduated M. D. from the University of the City of New York in 1846 and became his father's assistant. While abroad for his health he became identified with the rebellion in Sicily, both as surgeon and as colonel of cavalry. On his return to the United States he was elected professor of surgery in the Baltimore Medical College. While in search of health in California he caught yellow fever and died. Another son was Alexander Brown Mott, a New York surgeon and one of the founders of the Bellevue Medical College. A grandson, son of Alexander Brown Valentine, was born in New York November 17, 1852, and died in the same city June 20, 1918, of angina pectoris. He studied under Louis Pasteur, after graduating from Bellevue Medical College in 1878, and in 1887 brought home the first rabbit that had been inoculated for the prophylactic treatment of hydrophobia.

In consideration of his great merit, Valentine Mott received many honorary titles, among them: LL. D., University of the State of New York; fellow of the Medical Societies of Louisiana, New York, Connecticutt, and Rhode Island; fellow of the Imperial Academy of Medicine, Paris; of the Chirurgical Society of Paris; of the Medical and Chirurgical Society of London; of Brussels; of Kings College of Physicians, Ireland.

MOULTRIE, James (1793-1869), medical educator of Charleston, South Carolina, was born in that city, March 27, 1793, a descendant from Dr. John Moultrie, of Culross, Fife, Scotland, who emigrated to South Carolina prior to 1729. His father was Dr. James Moultrie, a scholarly physician. His early education was received at Charleston, South Carolina, and at Hammersmith, England. Upon returning to America, he began to study medicine with Dr. Barron and Dr. Wilson, and was graduated from the University of Pennsylvania in 1812. He was a member of his state medical societies; the Société de Médicine de Marseilles; Société Phrénologique de Paris. Dr. Moultrie began to practice in his native city in 1812, but upon the breaking out of the War of 1812, he offered his services and was appointed surgeon in charge of a hospital in Hampstead. On May 22, 1813, he was commissioned by Gen. Joseph Alston, physician of the port of Charleston.

The main energies of his life were spent as a teacher of physiology and in furthering the cause of medical education. As early as 1822 he was in correspondence with Dr. Thomas Cooper (q. v.), president of the South Carolina College, with regard to the founding of a medical college in South Carolina. When the college was finally established at Charleston in 1824 Dr. Moultrie declined a chair upon the ground that, failing to secure an appropriation, the venture could not succeed. In 1833 he accepted the chair of physiology under the new charter, a position he held for many years. In 1835 he wrote a memorial on the state medical education in South Carolina, that was published in 1836, suggesting calling a convention of delegates from all the colleges in the Union.

He was one of the delegates from the Medical Society of South Carolina who were sent to Philadelphia in 1847 to join in the organization of a national medical association. On account of his active work in this connection he was made one of the vice-presidents of the American Medical Association, and in 1851, at the Charleston session, he was elected president.

Dr. Moultrie was a man of simple and refined tastes, devoted to agriculture, horticulture, music and the fine arts. In his special sphere he exhibited profound thought and a high degree of analytical power. As a lecturer he preferred to sacrific beauty of diction to the claims of a minute and detailed presentation of his subject.

He married Sarah Louise Shrewsbury, on November 12, 1818, but had no children, and died on May 29, 1869, of "old age" after an illness of only a few hours.

His chief publications were: an article on the "Uses of the Lymph," published in the first volume of the "American Medical Journal," and an essay on the "State of Medical Education in South Carolina," published in 1836 by the South Carolina Society for the Advancement of Learning.

ROBERT WILSON, JR.

Mower, Thomas Gardner (1790-1853), surgeon's mate in the army during the war of 1812. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 830.

MOYER, Isaac Shoemaker (1838-1898), physician and zealous botanist of Pennsylvania flora, was born in Harleysville, Pennsylvania,

February 27, 1838. The son of Jacob Detwiler Moyer and Barbara Ann Shoemaker, he was graduated at the Pennsylvania Medical College in 1859 and moved to Quakertown, Pennsylvania, where his daily practice was combined with assiduous work collecting the flora of Bucks County, Pennsylvania. These botanical studies resulted in a catalogue with the title "Flora of Bucks County," published in W. W. H. Davis's "History of Bucks County" (1876). The list contains the names of 1,166 phaenogams and cryptogams, the number being brought up to 1,581 by Dr. Clayton D. Fretz, of Sellersville, Pennsylvania, who was Dr. Moyer's pupil in both medicine and botany. In 1905 he revised and brought up to date Dr. Moyer's catalogue. In April, 1884, Dr. Moyer read before the Bucks County Historical Society a paper on "Indigenous and Naturalized Flowering Plants, Ferns, and Fern Allies of Bucks County; this was published in the first volume of the papers of the Society.

He was married twice—in 1859 to Laura Kratz of Plumsteadville, Pennsylvania, who died in 1869, leaving a daughter, Lilian (now Mrs. Edwin H. Bush), and in 1869 to Caroline Fackenthal, of Easton, Pennsylvania, who survived him with their daughter, Florence Barbara (now Mrs. Charles E. van Laer).

Dr. Moyer died at Quakertown, September 7, 1898.

HOWARD A. KELLY.

MUDD, Henry Hodgen (1844-1899), surgeon of St. Louis, the son of the Honorable Henry T. and Elizabeth Hodgen Mudd was born in Pittsfield, Illinois, April 27, 1844. After getting his A. B. from Washington University, St. Louis, Missouri, he studied medicine under his uncle John T. Hodgen (q. v.) and was graduated from the St. Louis Medical College in 1866. He was assistant physician at the St. Louis Hospital, then enlisted as acting assistant surgeon, U. S. A., in General Sherman's old regiment, the 13th U. S. Infantry, and went to Montana. Returning to St. Louis, he began general practice and surgery in partnership with his uncle whose large practice he inherited as well as the position of surgeon-in-chief of St. Luke's Hospital. During 1872-83, he was prosector and demonstrator of anatomy at the St. Louis Medical College and successively held there the chairs of anatomy (1880-83), anatomy and clinical surgery (1883-86), surgical anatomy and clinical surgery (1886-90), clinical surgery (1890-99), and practice of surgery and clinical surgery (1899 to death). From 1890, he was also dean of the faculty.

Among his journalistic contributions are "The New Method of Incision of the Intestine," 1888, and "The Hodgen Suspension Splint," 1890; he was also the author of the section on surgery of the mouth and tongue in Dennis' "System of Surgery," on special fractures and dislocations in Park's "Surgery by American Authors," and on hernia in Wood's "Reference Handbook of the Medical Sciences."

On September 20, 1869, he married Elizabeth Hassell Albright of St. Louis; they had two sons and two daughters.

Following an attack of grippe after a prolonged period of hard work, Dr. Mudd developed evidences of a serious heart lesion with symptoms of Bright's disease and went to Europe for rest and the Schott treatment. He gradually grew worse, however, and died November 20, 1899, having reached home but a few days before. His final contribution to medical affairs was the consolidation of the St. Louis Medical College and the Missouri Medical College. He was an indefatigable worker with infinite patience and splendid judgment. His surgical work was more extensive than any other in the West. As a teacher, he was concise, clear, direct. Although distant in manner, he was warm-hearted and sympathetic.

Muir, Samuel Allan (1810-1875), Scotch practitioner of Truro, Nova Scotia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 830.

MUIR, William Scott (1853-1902), of Nova Scotia, writer, promoter of the medical society was the third son of Dr. Samuel Allan Muir. He was born at Truro, Nova Scotia, in 1853, and died there in 1902. After a good education in the public schools of Truro, he began to study medicine with his father, and continued under the medical faculty of Dalhousie College, Halifax, from which he graduated M. D. and C. M. in 1874. After filling the position of house surgeon at the Provincial and City Hospital, Halifax, and a brief period of practice at Shelburne, Nova Scotia, he went to Edinburgh, where he subsequently took his L. R. C. S. and L. R. C. P. Returning from Edinburgh to Truro in 1877, he soon acquired an ever-increasing practice. He had one of the best libraries in the Province, and kept well abreast with medical progress. No notice of his career

would be at all complete without reference to his work for the Medical Society of Nova Scotia, for under his skilful guidance its active membership more than quadrupled. He also found time to contribute frequently to the medical press, and some of his communications were of unusual interest. The following are the titles of some of his papers published in the "Maritime Medical News," Halifax: "Cocaine, Its Use and Abuses;" "Fracture of Patella;" "Notes on Midwifery Cases;" "Therapeutics," an address before the Canadian Medical Association; "Thrombosis of the Vulva;" "Tuberculosis of the Arm Cured by an Attack of Erysipelas;" "Infectious Pneumonia;" "Typhoid Fever;" "Presidential Addresses" before the Colchester Medical Society, and before the Maritime Medical Association.

He married Catherine, daughter of Walter Lawson, C. E., of Scotland, and had one son, who graduated M. D. and C. M. in 1906.

Besides being an active member of the Medical Society of Nova Scotia he was a member of the Maritime Medical Association, and its president in 1901; vice-president of the Canadian Medical Association in 1890 and a fellow of the New York State Medical Society.

DONALD A. CAMPBELL.

MUMFORD, James Gregory (1863-1914), of Boston, eminent as a surgeon and still more eminent as a writer, both upon pure surgery and upon a number of topics related to medicine, in a lighter vein, was the son of George Elihu and Julia Emma Hills Mumford. He was born in Rochester, New York, in 1863 and died at Clifton, New York, October 18, 1914. The Mumfords were of North of England stock, the first of the name settling in Newport, Rhode Island, in 1655. The family subsequently moved to New London and Dr. Mumford's grandfather began the practice of law at Cayuga, New York, in 1795. In all these years the Mumfords were citizens of the best type, always prominent in local affairs and adding to their prestige by marrying into noteworthy New England families such as the Winthrops, Dudleys and Saltonstalls, to whose influence may be attributed many of the qualities of the subject of this sketch. Dr. Mumford prepared for college at St. Paul's School, Concord, an institution to which he was always intensely loyal and of which he eventually became a trustee. He entered Harvard as a member of the class of 1885 and graduated from the Harvard Medical School in 1890, serving as House Officer at the Massachusetts General Hospital in 1890-91. He had further admirable surgical training from acting as assistant for some years to the late Dr. M. H. Richardson (q. v.). At college Dr. Mumford enjoyed life thoroughly and was by no means a "dig," yet he gave abundant evidences of that bookishness that was so marked a characteristic of his later life. After the usual chances to show what was in him, offered by sundry outpatient appointments and as surgeon at the Carney Hospital, he was taken into the staff of the Massachusetts General Hospital and in due course of time rose to the position of visiting surgeon. His surgical work, while not of a pyrotechnic nature, was good work, tempered by remarkable sound judgment.

As do most of the staff of the Massachusetts General Hospital, Dr. Mumford taught a certain number of the students of the Harvard Medical School. He enjoyed teaching and apparently his students enjoyed being taught by him. While he was not one of the great teachers it is very probable that had he risen above the rank of "Instructor" his success in this field would have been much greater, for he had the rare faculty of saying things in the way to make them remembered. Thus far the record of Dr. Mumford's life is that of any successful surgeon. He had, however, other claims to our regard. The bookishness already hinted at felt the need of constant expression, and the dozen books and sixty or more medical articles he published in the course of twenty years attest sufficiently to the alertness of his mind; the wide range of his taste is shown by the titles of his best known books: "Mumford Memoirs," "A Narrative of Medicine in America," "Clinical Talks on Minor Surgery," "Surgical Aspects of Digestive Disorders," "Surgical Memoirs and Other Essays," "Practice of Surgery," "One Hundred Surgical Problems," and "A Doctor's Table Talk." He edited the "Harvard Medical School: a History," in 1905, three volumes, the material for which Dr. Thomas F. Harrington had gathered. Medical history appealed to him strongly and besides sundry articles on bygone worthies he wrote the chapter on the history of surgery in W. W. Keen's "System of Surgery." His more fugitive medical writings cover nearly the whole range of surgery. Dr. Mumford had none of the literary slovenliness so often found in medical writings. To him good style was quite as important as good matter and he took extraordinary pains

to use the right word. His style was alive and individual, a style one remembers with pleasure, a style that makes his "Practice of Surgery" read almost like a novel—no mean achievement. As an example of his happy facility in using words I will quote a few lines from a letter to his class secretary written in 1910: "So the simple record runs on, telling of mild employments in the Harvard Medical School and elsewhere. I like teaching: students pass me out the usual compliments due to credulous senility (he was then 47). I like practicing surgery; patients toss me roses mingled with thorns. I like writing about people and things, for the reviewers deal me comments which chasten the soul. Although, life continues a pleasant experience."

But perhaps Dr. Mumford's greatest claim to be remembered is not for what he accomplished but for what he hoped and tried to accomplish and did not, for many of the things he had most at heart are now being gradually worked out much as he hoped they might be. He was a man before his time and essentially a reformer, not of the irritating, aggressive type to whom we surrender out of sheer boredom, but the quiet, persistent kind of man who sees clearly what he feels ought to be done and keeps his goal steadfastly in mind in spite of hostile criticisms and constant failures. He was firmly convinced of three things: first, that in many cases Religion is quite as potent a remedial agent as is Medicine, or rather that in many cases the clergyman might coöperate with the doctor to the manifest benefit of the patient. Hence he became closely identified with the "Emmanuel Movement" led by Rev. Elwood Worcester, a movement the success of which has been by no means commensurate with the hopes Dr. Mumford held. Now, however, that the fires of battle no longer rage, many of us are beginning to have a much more just view of what the movement stands for. Secondly, as far back as 1906 he foresaw that the time was coming when great medical schools like Harvard should have professors whose chief business was to teach and to whom teaching was not merely incidental in a very busy life. The idea then seemed Utopian and Mumford was rather laughed at for entertaining it, yet now, after his death, it is in the way of accomplishment. The third and probably most profound conviction in his life was that while the rich and the very poor get good medical care there is no provision under our modern conditions by which the man of slender purse, yet by no means a "charity patient," can obtain the services of really competent specialists; to this end in 1910 he devoted much thought and labor for the establishment of a fully equipped modern coöperative hospital for people of moderate means, of which he was to be the surgical head with Dr. R. C. Cabot in charge of the medical side, and under them a staff of good specialists. It was perhaps the deepest disappointment of Mumford's life that this scheme got no further than its prospectus. Undeterred, however, by this failure, he soon embarked upon a cognate undertaking of far more grandiose scope. Ill health rendered it necessary for him to resign from the Massachusetts General Hospital and in 1912 he accepted an invitation to become physician in chief to the Clifton Springs (N. Y.) Sanitarium. Understanding that he was to be given a practically free hand he set about gathering around him a body of brilliant, well equipped younger men, hoping to change the time-honored Sanitarium from a resort more or less for valetudinarians into an actively constructive institution, not for the very rich, perhaps, but primarily for the only moderately well-to-do, where at no ruinous expense they could command the very best medical care. Differences of opinion as to policies led, however, to his resignation some two years later, with his dream only partly realized. Meanwhile, during his short stay at Clifton he had made a host of friends and his appointment as trustee of Hobart College is only a token of the esteem in which he was held in Western New York.

In 1892 he was very happily married to Helen Sherwood Ford of Troy, New York. There were no children.

I have referred to Dr. Mumford's bad health. The last dozen years of his life were one constant struggle with a failing heart, under stress that most men would have accepted as a stern warning that it was time to retire. After each bout with his enemy Mumford returned to the fray with indomitable hope and enthusiasm. Such a gallant struggle against pitiless odds is seldom recorded.

Dr. Mumford was a member of the various medical societies to which most of us belong and although he much preferred his own fireside he was a member of the Somerset and other good social clubs, while his interest in his fellow men led him to join the Economic Club, the Reform Club and other similar

bodies identified with civic uplift. His historical tastes naturally led him into the Society of Colonial Wars.

MALCOLM STORER.

MUNDE, Paul Fortunatus (1846-1902), gynecologist of New York. This foreigner, who took root on American soil and dying left behind a record of good gynecological and obstetrical work both practical and literary, was a native of Dresden, Germany, where he was born on September 7, 1846, the son of Dr. Charles, and of Bertha Von Horneman, daughter of a councillor to the King of Saxony. The elder Mundé, becoming involved in the revolution of 1848, came to the United States with his wife and three-year-old boy, and settled in Florence, Massachusetts, and opened a sanitorium. The son went to the famous Boston Latin School, afterwards entering the medical side at Yale University. In 1864 he secured a place as acting medical cadet in the Union Army and began a career which led to his taking part in three most important wars. After six months' service he studied medicine again, this time at Harvard, and was graduated with high honors in 1866. The succeeding seven years he spent in Germany, serving in 1866 as assistant surgeon in the Bavarian Army in the war between Prussia and Austria and gaining the medal of honor for services to the wounded. Three years followed as resident physician at the Maternity Hospital in Würzburg as assistant to Prof. Scanzoni, whose gynecological work undoubtedly turned young Mundé toward that specialty. In 1870 the war flame was again lighted in Europe and this time, as battalion lieutenant-surgeon, Mundé served in the Bavarian ranks for Prussia against the French. In the siege of Paris, while away at headquarters, he was told his field hospital was on fire. He rode back to find that two inmates in the top story had been cut off by the flames. Instantly he rushed in and rescued both. For this the Emperor William gave him the iron cross. Such was the receiver's innate modesty that I never knew of this or the Austrian medal until after his death. Again the soldier turned student, at Heidelberg, Berlin, and Vienna, where he spent nearly two years and took the degree of master of obstetrics in 1871. Later he was in London, Edinburgh and Paris seeking all that was new in gynecology and obstetrics, and when in 1873 he returned to America he determined, as soon as he could afford it, to devote himself to these specialties. This same year he married Eleanor Claire Hughes, of New Haven, Connecticut.

In order to occupy his time well while practice came in he, in 1874, took over the editorship of the "American Journal of Obstetrics," and held the position eighteen years. Many of his earlier articles appeared in it and had wide influence in shaping the opinion of the day. When he became secretary to the New York Obstetrical Society he had no official stenographer and relied on his own notes for the accurate and full accounts published. At that time the society was dominated by master minds—Sims, Peaslee, Emmet, Thomas, Jacobi and others. Mundé was rather in advance of his own set and bridged the gulf between the old and the new. The surgical spirit of the times led him early to surgery and I well remember his first laparotomy (1877), an ovariotomy, of course. He did first what was then considered indispensable —drew off some of the fluid for examination, using a needle, probably far from aseptic, and an old stomach pump, the modern aspirator and antiseptic surgery being then unknown. There was a necessarily fatal result when the tumor was removed but his next case was a success. His next appointment was as assistant surgeon to the Woman's Hospital under Dr. Fordyce Barker (q. v.), but this did not give him enough surgery. He found more when he became gynecologist in 1881 to the Mount Sinai Hospital and at St. Elizabeth's Hospital where most of his surgical work was done. When the American Gynecological Society was formed in 1876, he was successively treasurer, vice-president and president. Other honors came upon him. He was president of the New York Obstetrical Society; vice-president of the British Gynecological Society; member of the German Gynecological Society; consulting gynecologist to the St. Elizabeth Hospital, and to the Italian Hospital.

Mundé's valuable literary contributions comprise more than 100 articles on gynecologic and obstetric subjects covering a period of thirty years. His book, "Minor Surgical Gynecology," 1880, had a second edition in 1885. His "Diagnosis and Treatment of Obstetric Cases by External Examination and Manipulation" came out in 1880; his last and greatest work was the rewriting and editing of "A Practical Treatise on the Diseases of Women" by Gaillard Thomas. The articles are given in a full list in the "Transactions of the American Gynecological Society," 1902, vol. xxvii, under his name.

As a lecturer Mundé was a fluent and interesting speaker, not a great orator, but one who commanded attention by the forceful way in which he put facts founded on personal experience. Dartmouth College appointed him professor of gynecology, a position he held for twenty years, lecturing in the summer. She also gave him her LL. D.

Of his personal character, he was devoted to his family, loyal to his friends, and had a love of truth which dominated all his actions and, through him, all those who were trained under his care.

MATTHEW D. MANN.

MUNN, Edwin George (1804-1847), pioneer ophthalmologist of Rochester, New York, was born at Munson, Massachusetts, May 8, 1804, of early colonial ancestry. While still a child his family moved to LeRoy, N. Y. There he had a common school education and studied medicine under Dr. Stephen O. Almy, finishing at the Fairfield Medical School in Western New York and taking courses in Philadelphia in 1828; then beginning practice in Scottsville, N. Y., near Rochester. He stayed there for nine years devoting most of his attention to diseases of the eye, a specialty at that time little developed. Dr. Edward Mott Moore (q. v.) is authority for the statement that Dr. Munn became interested in ophthalmology because, while he was a pupil of Dr. Almy, there were many cases of sore eyes in the new country and Dr. Almy was unable to help them. He would turn to his student and say, "Ed, for God's sake, try to help us." Thus was his interest in diseases of the eye aroused.

Removing to Rochester in 1837, Dr. Munn devoted himself exclusively to his specialty and had a very large following in the surrounding country. From a study of Dr. Munn's entries in his records it appears that patients came to him from Arkansas, Missouri, Illinois and Michigan, and even from some of the southern states, and it is related that his waiting room often held as many as a hundred patients at a time. It is plain that Dr. Munn was a man of great originality and brilliancy of attainments. He was the second specialist in ophthalmology in the United States. No writings of his have been discovered and his reputation must rest on the fact that he brought relief to a very large number of those suffering with eye diseases in the days when there were few practitioners who understood their treatment. While yet in Scottsville in 1834 Dr. Munn married Aristine Pixley, who survived him in 1912 at the age of ninety-five years. They had three children, one of them being Dr. John P. Munn, of New York City,

Dr. Munn died in Rochester at the early age of 43, December 12, 1847.

CHARLES W. HENNINGTON.

MUNN, William Phipps (1864-1903), physician, surgeon, writer of Denver, Colorado, his father, Dougald, of the Clan Campbell, a weaver by trade, came to America in 1845, settling first in Cincinnati and later in Pittsburgh. His mother was a McCall; her people emigrated from Dumfries in 1820 and were among the early settlers of Pittsburgh. Henry Phipps, founder of the Tuberculosis Institute of Philadelphia, is one of the family. After a preliminary education in the schools of Pittsburgh, Munn entered the medical department of the University of Michigan, whence he was graduated in 1886. Slim in figure, sandy in complexion and with unlimited "sand" in his disposition, Munn already showed the bent of his nature.

On November 8, 1888, he married Adelaide E. Barrett, of Pennsylvania. His medical practice in Pittsburgh had just become well established when signs appeared of the pulmonary trouble which finally caused his death. He removed to Denver in the fall of 1890. Without friends, or money, or experience, or good health Munn so impressed the influential members of the profession that when, in 1891, the Denver Health Department was reorganized under Dr. Henry K. Steele, he was chosen to be one of two assistant commissioners. Those were great times in the sanitary history of Denver. For the first time the interests of public health were intelligently and conscientiously studied. In the division of duties in the Health Department the department of contagious diseases was assigned to Munn. Dr. Munn was the first physician in Colorado to employ antitoxin in the treatment of diphtheria, and he recognized also the dangers of implanting an indigenous tuberculosis through the presence of invalids seeking Colorado for the benefits of the climate; therefore he led in the organization of a society for the control of tuberculosis long before there was any general national awakening on the subject. In 1893 Dr. Munn was appointed a member of the Colorado State Board of Health, to serve six years. But time and again it was found that the sanitary recommendations first made by

Munn were thought too radical to be practicable, yet were afterwards adopted.

Though devoted to the public health service, Munn found it necessary to give attention to private practice; his chosen field being genito-urinary surgery, in which he secured an enviable distinction. He was elected president of the Denver Arapahoe County Medical Society in 1894 and president of the Colorado State Medical Society in 1900. He paid the cost of a strenuous life, for while his energies were diverted from consideration of his own health, the insidious disease which had first ostracised him to Denver made secret strides and, after a series of hemorrhages, he died, in the flower of his age, on March 12, 1903.

HENRY SEWELL.

MUNRO, John Cummings (1858-1910), Boston surgeon, born in Lexington, Massachusetts, March 26, 1858, a Franklin medical scholar and graduate of the Boston Latin School, he entered Harvard University in 1877, was graduated in 1881, and received the M. D. from Harvard Medical School four years later. His father was James S. Monroe, of Lexington, for whom a station on the Boston and Maine R. R., Monroe's Bridge, was named. John decided to drop the final E of his name. Establishing himself in general practice in Boston, he soon began to specialize in surgery, developing a rare skill which placed him early in his career in the front rank of the profession. Dr. Munro was associated with the Harvard Medical School as assistant in anatomy from 1889 to 1893; assistant demonstrator of anatomy from 1893 to 1894; assistant in clinical surgery from 1894 to 1895; instructor in surgery, 1896 to 1902, and lecturer in surgery, 1903 to 1905. He was keenly interested in the development of surgery, towards which his work was a great contribution. He was surgeon at the Boston City Hospital, 1893 to 1903; consulting surgeon, St. Luke's Home, 1901; special consulting surgeon, Quincy Hospital, 1902; consulting surgeon, Framingham Hospital, 1905; and surgeon-in-chief, Carney Hospital, 1903 until his death. He was a member of the Association of American Anatomists, American Surgical Society, Clinical Surgical Society, of which he was president in 1905, and member of the Southern Surgical and Gynecological Association.

He died at his home in Boston, December 6, 1910, from recurrent cancer of the bladder, for which operation had been performed three years before. A son, Donald Munro, is a practicing surgeon in Boston.

Munro will be best known for his surgical clinic at the Carney Hospital instituted in 1903, the first continuous surgical service to be established in New England. His work there served a most useful purpose in various ways. It demonstrated the possibility of doing satisfactory surgery, successful in its results, with simplicity of plant and technic and with a minimum of red tape. In its instruction, it had to do with and reached not so much the undergraduate in medicine as the general practitioner, the worker in the surgical field, the visitor in search of sensible ideas and their application in the field of surgery. His contributions to the literature of surgery were numerous and on a variety of subjects, mostly short articles. His skill as a surgeon was acknowledged by all. Back of it, however, and revealed to but few, were qualities of mind and heart that deserve more admiration than his skill and made the man even greater than the surgeon. Munro was keen in observation of men and their methods, he was always charitable in his judgments of both. Traveled, well versed in general literature, appreciative of art in all its aspects, he made a most charming companion. His influence on his fellows was wide and stimulating. A hard worker himself, he incited younger men to action, and his hand was ever ready to aid and encourage them.

MUNSON, Eneas (1734-1826), organizer of the Connecticut Medical Society, clergyman, a physician renowned for knowledge of materia medica and the natural sciences, he was born in New Haven, June 13, 1734, the eldest child of Benjamin Munson, a mechanic and whilom schoolmaster. He was graduated from Yale in 1753, and immediately after taught school in Northampton, Mass.; studying also divinity, he was soon licensed to preach. In 1755 he acted for a short time as domestic chaplain for the Gardiner family of "Gardiner's Island." Hard study (so-called) and insufficient exercise, soon broke his health, so he relinquished the ministry for medicine, studying under the Rev. John Darbe, of Oyster Ponds, Long Island, and at first settled in Bedford, New York, as a physician. Two years later he removed to New Haven to spend the remaining sixty-six years of his life as a physician of great eminence in his native town.

He was among the first to endeavor to incorporate the Connecticut Medical Society, which he served as first vice-president for two years, or, until, by the death of its president, he succeeded to the presidency. This office he held for seven years. The degree of M. D. was conferred upon him by the society in 1794. "It is generally believed that, up to the early part of the present century (i. e., nineteenth) Dr. Munson was the ablest physician who ever practiced for a long time in New Haven. In the matter of professional learning and scientific information, he ranked with the eminent men of his country." On account of his knowledge of mineralogy, chemistry, botany and materia medica he had a wide reputation, which led to his selection to fill the chair of materia medica and botany in 1810, in the newly established medical institution at Yale, although he was then seventy-nine years old. He was, consequently, unable to perform the active duties of this office, which he left to his younger associate, Dr. Eli Ives (q. v.). His quaint dry humor still survives in many amusing anecdotes. Bronson relates that "he was once dining with the Yale corporation at commencement dinner when Pres. Dwight, who was a good trencherman, remarked, preparatory to some observation on diet: 'You observe, gentlemen, that I eat a great deal of bread with my meat.' 'Yes,' said the doctor instantly, 'and we notice that you eat much meat with your bread.' "

He married first Susanna, eldest daughter of Stephen and Susanna Cooper Howell, on March 15, 1761, and had nine children, all of whom reached adult life, and one practiced medicine for a short while. His wife dying on April 21, 1803, he married again in November, 1804, Sarah, widow of Job Perit, a daughter of Benjamin and Mary Sanford, of New Haven. She survived him three years.

His death was due to an enlarged prostate, and occurred on June 16, 1826, at the age of ninety-two. His portrait is in the possession of Yale University and an engraving from it is to be seen in Thacher's "Medical Biography." His writings consist of a report of two cases in "Cases and Observations by the Medical Society of New Haven County, Connecticut," 1788, pp. 26-28, 84-86; "A Letter on the Treatment most Successful in the Cure of Yellow Fever in New Haven," in 1794, and a letter on a collection of papers on the subject of "Bilious Fevers," by Noah Webster, New York, 1796.

WALTER R. STEINER.

MUNSTERBERG, Hugo (1863-1916), eminent psychologist, educator and publicist, held a degree of doctor of medicine, as did his predecessor in the chair of psychology at Harvard, William James (q. v.). The son of Moritz Münsterberg, a lumber merchant and traveler, he was born at Danzig, Germany, June 1, 1863. Hugo was the third of a family of four brothers and his was a childhood of happiness in a home where interest in art, literature, and music were fostered. At the age of seven he wrote his first poem, and the muse of poetry never left him throughout a busy life. At nine he took lessons on a violoncello; he attended the city "Gymnasium" of Danzig until 1882, when he began university life at Leipzig, deciding to combine the study of psychology with that of medicine. He worked in Windt's laboratory and received the degree of doctor of philosophy in 1885; then to Heidelberg, where he was made doctor of medicine two years later after listening to the lectures on philosophy of Kuno Fischer. At the close of his student life Münsterberg married Selma Oppler, daughter of Dr. Anselm Oppler of Weissenburg, a physician in the German army, and settled as "Privatdocent" of philosophy at the University of Freiburg, becoming assistant professor in 1891. The following year William James invited Münsterberg to become director of the psychological laboratory at Harvard. It was an attractive opportunity and he accepted for a trial of three years, returning to Freiburg in 1895 to resume his professorship. At last, in 1896, the chance to interpret the best spirit of America to Germany and of carrying the ideals of German scholarship to America proving too alluring, he resigned his professorship and took up his residence in Cambridge, Massachusetts, for the rest of his life, an active life that was to end suddenly in a stroke of apoplexy while lecturing to a class of Radcliffe students, December 16, 1916.

Münsterberg not only directed the work of the Harvard psychological laboratory, he gave courses at Harvard and Radcliffe on philosophy as well as on psychology. His courses were extremely popular; he was instrumental in bringing about the erection of Emerson Hall, headquarters of philosophy, housing a fitly appointed psychological laboratory of which he was director. His marked influence on the public life of the United States was exerted through books, essays, articles in scientific and educational reviews,

in the "Atlantic Monthly," and other popular magazines, and in the Sunday newspapers. His publications followed one another in swift succession and Münsterberg became an acknowledged educational factor in the country. One of his leading motives was to foster cordial relations between Germany and America. The International Congress of Scholars held at the St. Louis World's Fair in 1904 was Münsterberg's idea and he worked out the plans for it, personally visiting scholars in Germany, inviting them to attend. As exchange professor from Harvard to the University of Berlin he promoted friendly relations; there he lectured on applied psychology and idealistic philosophy; founded and directed the "American Institute," a kind of intellectual clearing-house for educational institutions in Germany and America. He refused a call from the Prussian government to the University of Königsberg, to fill the chair of philosophy once held by Immanuel Kant, remaining loyal to Harvard. On his return to Cambridge, Dr. Münsterberg conducted experiments in applied psychology for the purpose of determining how psychology could be applied to industrial life, testing workmen in different trades as to their fitness for their work, by psychological methods. He wrote "Vocation and Learning," and "Psychology and Industrial Efficiency," 1912.

At the opening of the world war in 1914 he found himself severed from his country and kinsmen. At once he published an article, "Fair Play," a defense of Germany, and soon a book entitled "The War and America." He remained true to his mission of interpreting Germany to America and continued his work at Harvard with unabated energy. In 1916 he gave his attention to a new field of applied psychology,—the art of the moving pictures, and his book, "The Photoplay," appeared that year. At the time of his death he had finished one chapter of a book on "Twenty-five Years in America," a book of reminiscences ending with the words: "When shall I see my native land again?"

Dr. Münsterberg was president of the American Psychological Association in 1898 and of the American Philosophical Association in 1908; he was a fellow of the American Academy of Arts and Sciences and a member of the Boston Authors Club and many scientific and social organizations. He had a good command of both spoken and written English and was a prominent factor in American educational life.

MURDOCH, James Bissett (1830-1896), of Pittsburg, Pa. His father was the Rev. David Murdoch, M. D., who came from Scotland to Canada as a missionary of the London Colonial Missionary Society in 1832, his mother, Elizabeth Bissett, of Glasgow, Scotland, himself being born in Glasgow, October 16, 1830, and brought to America when a child. His boyhood was passed in Bath, Canada, and in Catskill, New York, his early education received in these places and in Kinderhook Academy. Some months were spent in Dr. Doane's drug store in Catskill, New York, and later he studied under Dr. William Wey, of Elmira, afterwards going to the College of Physicians and Surgeons in New York, whence he received his M. D. in 1854 and later served as resident physician in Bellevue Hospital. Dr. Murdoch was a member of the Oswego County (New York) Medical Society and its president in 1865, also a member of the New York State Medical Society. A member of the Allegheny County (Pennsylvania) Medical Society and its president in 1885, and a member of the Pennsylvania State Medical Society, of which he was president in 1888. After serving as resident physician in Bellevue Hospital, New York, in 1885, he was surgeon on the steamship "North Star," a vessel sailing between New York City and Havre. After a year so spent he practiced a year in Oswego, New York, where he remained until 1872, with the exception of the four years from 1861 to 1865, during which he served in the army, being present at the battles of Bull Run, Falmouth, and others. In 1872, Dr. Murdoch moved to Pittsburgh, the scene of his greatest professional activity. From 1872 until his death he was attending surgeon to the Western Pennsylvania Hospital. On the organization of the Western Pennsylvania Medical College in 1887, he became clinical professor of surgery and also dean of the college, positions he held until shortly before his death.

In 1861 he married Jane Pettibone, of Oswego, who died four years later, leaving him one son. In 1868 he married Jennie Moorhead, youngest daughter of the late Gen. James K. Moorhead, of Pittsburgh, by whom he had two sons and two daughters. The only member of the family who followed the profession of medicine was Dr. J. M. Murdoch, of Polk, Pennsylvania.

Dr. J. B. Murdoch was a frequent contributor to the medical journals of the country on surgical subjects. Dr. Murdoch was an ardent advocate of the "torsions of arteries"

for the arrest of hemorrhage in surgical operations. He died October 29, 1886, at Pittsburgh, the cause of death being diabetes. His portrait is in the rooms of the Allegheny County Medical Society, in Pittsburg, Pa.

ADOLPH KOENIG.

MURDOCH, Russell (1839-1905), Baltimore ophthalmologist, was born in Baltimore, February 12, 1839, but much of his early life was spent in Scotland, and his collegiate education was received at Edinburgh University (1856-59), yet he returned to this country to study medicine at the University of Virginia, where he was graduated in 1861. Soon after, he became resident physician at the Baltimore Almshouse, and later (1862) attending physician to the Baltimore General Dispensary. In 1862 he was appointed surgeon in the Confederate Army and served in the engineers corps until the close of the war. He was with Gen. Lee at the surrender of Appomattox. After the war he took up the study of ophthalmology in America and abroad, and, returning to Baltimore, became lecturer on diseases of the eye and ear at the University of Maryland (1868-69). About this time Dr. C. R. Agnew (q. v.) invited him to come to New York as his associate, but he declined. He was one of the founders of the Baltimore Eye, Ear and Throat Charity Hospital in 1862, and an attending physician until his death, for several years professor of ophthalmology and otology at the Woman's Medical College of Baltimore (1884-87), and was elected a member of the American Ophthalmological Society, July 21, 1868.

He had great artistic talents, to which his works in sculpture testify. Several reliefs which he executed are well known in his community and highly prized. His inventive skill produced a number of very useful instruments, the best known of which is his eye speculum; an enlarged form of this he devised as a mouth-gag. He was an able and successful operator, and was one of the few men of his years who was ready to apply rigidly the rules of asepsis. He invented various ingenious forms of bandages for eye operations, particularly one that could be used for one eye or both. In his relation to patients, public as well as private, his gentleness and kindness and patience were extreme. Dr Murdoch was a spiritual man and a member of the Presbyterian Church, to which he devoted much time. But though intensely religious he was very tolerant of the views of others. His great familiarity with the Bible was a constant source of wonder to his friends.

He was married in 1873 and had four daughters, all of whom became medical missionaries to China. He was in active ophthalmic practice until the time of his death. On March 18, 1905, he performed a cataract operation. After its completion, while speaking to a colleague, he suffered an attack of apoplexy, at first very slight, it increased in severity, and he died in a few hours.

This is a meagre outline of the life of a man who in many ways was remarkable. He was many sided. Well trained in the natural sciences, especially in zoology and botany, he took an active and continued interest in the Maryland Academy of Sciences until his death. His special studies were in the comparative anatomy of the eye, a subject upon which he was an authority.

HARRY FRIEDENWALD.

MURPHY, John Alexander (1824-1900), of Cincinnati, was born in Hawkins County, East Tennessee, January 23, 1824, the son of Patrick and Margaret McKinney Murphy. The father, a native of Ireland, came to this country while a young man, and settled in East Tennessee, where he married Margaret McKinney, whose family came to America after the Covenanter's War in the North of Ireland. Murphy received his education in the public schools and in Cincinnati College, in 1843 beginning to study medicine with Dr. John Pollard Harrison, and graduating at the Medical College of Ohio, 1846, serving afterwards as interne in the Commercial Hospital. He was one of the founders of the Miami Medical College, organized in 1852, and professor of materia medica, therapeutics and medical jurisprudence. In 1853 he went to Europe, and studied in the great hospitals. When in 1857 the Miami Medical College was united with the Medical College of Ohio, Dr. Murphy was made professor of materia medica and therapeutics, and in 1865 the Miami Medical College was re-organized, Dr. Murphy being appointed professor of theory and practice. In association with Drs. George Mendenhall and E. B. Stevens he established and edited the "Medical Observer" until its union with the "Western Lancet." He was until near the time of his death on the staff of the Commercial Hospital and for many years a member of the Ohio State Medical Society, and its president in 1880.

He married November 11, 1862, a daughter of Dr. Samuel G. Menzies, of Kentucky, and

had two daughters, Nora and Mary Ann, and a son, Archibald. The latter died at the age of three. Dr. Murphy died in Cincinnati, February 28, 1900.

ALEXANDER G. DRURY.

MURPHY, John Benjamin (1857-1916), Chicago surgeon, was born of Irish Catholic parents, Michael and Ann Grimes Murphy, Dec. 21, 1857, at Appleton, Wisconsin. His preliminary education was obtained in the public schools of Appleton, and his education in medicine in Rush Medical College, from which he was graduated in 1879. He was then an interne in Cook County Hospital, Chicago, completing his service in 1880. As a graduate in medicine he spent two years in Vienna.

Dr. Murphy was a man of extraordinary energy and great scientific imagination. Traditional medicine had little interest for him, but the newer knowledge that came from the discovery of the bacterial origin of disease furnished a fruitful field for his talents. His earliest interest was in abdominal surgery, then in its infancy. The Murphy button ("Medical Record, 1892, vol. xliii, 665-676)," the greatest mechanical aid in surgery, is an evidence of his inventive capacity and laid the foundation for the gastro-intestinal surgery of today. Murphy was among the first to investigate the cause and treatment of peritonitis following appendicitis, the cause and various forms of ileus, and the pathologic processes in the pelvis, gallbladder, stomach, pancreas and kidneys. Each subject he investigated he left on a higher plane before entering a new field. His writings on the principles underlying surgery of the lung and nervous system have been among the most important contributions on the subject. In recent years he was deeply interested in the subject of deformities, especially those due to infections of the bones and joints, and the results of his investigations were of high order. He was a dramatic figure in the operating room. With instrument in hand he fairly thrilled his audience, as he reviewed the history of the case, exhibited a specimen and proved the minute accuracy of his diagnosis.

In reviewing Dr. Murphy's manifold activities, and attempting to determine the greatest of his many great qualities, I think we may place first his ability as a teacher of clinical surgery, and sum up by saying that in this respect he was without a peer. In his talented and discriminating writing we find evidence of his teaching on every hand. Dr. Murphy was the surgical genius of our generation. In recognition of his work he was awarded the Laetare medal by Notre Dame University in 1902. He also received the following degrees: A. M., St. Ignatius College; M. D., Rush Medical College, 1879; LL. D., University of Illinois, 1905; LL. D., Catholic University of America, 1915; D. Sc., University of Sheffield, England, 1908; F. R. C. S., Royal College of Surgeons, England, 1913, and F. A. C. S., American College of Surgeons, 1913. In 1916 the Pope made him a Knight-Commander of the Order of Saint Gregory the Great.

Dr. Murphy was a member of the American Association of Obstetricians and Gynecologists; a fellow of the American Surgical Association; a member of the Southern Surgical and Gynecological Association and of the Western Surgical Association; a life member of the Deutsche Gesellshaft für Chirurgie; an honorary member of the Société de Chirurgie of Paris; and a member of other scientific bodies. He was president of the Chicago Medical Society, 1904-1905; president of the American Medical Association from 1910-1911; and president of the Clinical Congress of Surgeons, 1914-1915.

He held teaching positions as follows: lecturer in surgery, Rush Medical College, 1884; professor of clinical surgery in the College of Physicians and Surgeons, Chicago, 1892-1901; professor of surgery, Northwestern University Medical School, 1901-1905; professor of surgery, Rush Medical School, 1905-1908 and again professor of surgery, Northwestern University Medical School, 1908-1916. For many years also he was Professor of Surgery in the Graduate Medical School of Chicago. He became chief of the Surgical Staff of Mercy Hospital on March 21, 1895, a position he held until his death.

On November 25, 1885, Dr. Murphy married Jeannette C. Plamondon of Chicago, to whom he owed inspiration, aid, and encouragement throughout his subsequent brilliant career. Of this union five children were born, a son and four daughters.

For several months previous to his death at Mackinac Island, Michigan, August 11, 1916, Dr. Murphy had been in poor health. The cause of death as disclosed by the autopsy was aortitis with sclerosis of the coronary artery.

WILLIAM J. MAYO.

MURPHY, Patrick Livingston (1848-1907), superintendent of the West North Carolina Insane Hospital, was born in Sampson County, North Carolina, October 23, 1848. He was prepared for college, but did not take a college course owing to the outbreak of the Civil War. He studied medicine first under a preceptor, then at the University of Virginia, and finally at the University of Maryland, from which he graduated in 1871. Returning to North Carolina, he settled at Wilmington, and entered upon the practice of his profession. Finding the routine of practice irksome he accepted a position as assistant physician at the Western Virginia Asylum at Staunton, Virginia, to fit himself to become superintendent of the West North Carolina Hospital at Morgantown, North Carolina. He was appointed superintendent, and entered upon his duties at the latter institution in January, 1883. He had great success in the management of this institution, and developed it into a hospital in name as well as in fact, when through his influence the name of state institutions for the insane was changed from asylum to hospital. His work was that of a pioneer, and he was obliged to contend with meagre appropriations, great misapprehension of the duty of the state toward her insane, and a heartless indifference to their welfare on the part of the legislators. He wrote no elaborate papers on insanity, but his reports and pamphlets showed him to be a vigorous thinker and forceful writer. As a medical expert he was considered very able, and was often called upon to give expert testimony. He was a member of the North Carolina State Board of Medical Examiners, president of the State Medical society, and at one time director of the school for the deaf.

He died September 11, 1907, after a long and painful illness. A portrait in oil was placed in the State House at Raleigh in his honor.

MURRAY, Robert (1822-1913), Surgeon-General of the United States Army, from November 23, 1883 to August 6, 1886, was born at Elkridge, Maryland, August 6, 1822, and died in Baltimore, Maryland, January 1, 1913. He was the son of Daniel and Mary Dorsey Murray. His primary education was obtained from the public schools; his medical training from the University of Maryland and the University of Pennsylvania, graduating from the latter in 1843. He entered the Army as an acting assistant surgeon in 1846 and after examination was commissioned assistant surgeon June 29 of the same year. He was promoted to the rank of captain in 1851, and surgeon or major June 23, 1860. In 1861 he married Adelaide Atwood of Gardiner, Maine. At the outbreak of the Civil War, Surgeon Murray served in the hospitals in Washington and Alexandria. Later he served in the Army of the Cumberland; then became medical director of the department, but took the field and served successively under Generals Anderson, Sherman, Buell, and Rosecrans. He was chief medical officer on the second day of Shiloh and rendered excellent service in the evacuation of the wounded in that battle. In 1863 Surgeon Murray became Medical Purveyor at Philadelphia, the largest purchasing depot for medical supplies, and continued in this office until the close of the war. He was breveted lieutenant-colonel and colonel for meritorious service in the war in March, 1865. He was promoted lieutenant-colonel July 28, 1866; colonel, 1870. From 1870 to 1880 he was Medical Director of the Division of the Missouri and from 1880 to the date of his appointment in 1883 as surgeon general, held the same position in the Department of the Atlantic.

General Murray died in 1913 at the age of ninety. He was the last surviving Medical Director of the Civil War.

DOUGLAS F. DUVAL.

MURRAY, Robert Drake (1845-1903), naval surgeon, son of Joseph Arbour and Nancy Drake Murray, was born in Ohio, April 21, 1845. Although a native of Ohio, he became a Floridian by adoption in the early 70's. He was senior-surgeon in the Public Health and Marine Hospital Service, having entered that department of the government in 1872, his first station being Key West, Florida. He came from a family of Revolutionary fame. Entering the army in the war between the states at the early age of fifteen, he was several times wounded, and in the last encounter, at the battle of Saltville, Virginia, was so seriously injured that he was left on the field for dead, and was captured and imprisoned at Richmond. In 1865 he began the study of medicine in the Tripler United States Army Hospital at Columbus, Ohio, afterwards became a pupil of J. Augustus Seitz, in Bluffton, Ohio, and later studied under John E. Darby, M. D., of Cleveland. Dr. Murray attended the Cleveland Medical College and in 1868 received his degree, and, after one course at the Jefferson Medical

College, he took an M. D. there in 1871. In the same year, after serving as resident physician to the Philadelphia Hospital, Dr. Murray was appointed assistant surgeon of the United States Navy, 1871-72, and did active work in the United States Marine Hospital Service, being senior surgeon of the service after 1896. He encountered yellow fever during twenty-five summers in over fifty towns and in eleven states, besides on board ship, serving in epidemics of that disease at Key West, Florida, in 1875; at Fernandina, 1877; and New Orleans, 1878. He was secretary of the Thompson Yellow Fever Commission of that year. He commanded the first armed "cordon sanitaire" in the United States, one hundred miles in length at Brownsville, Texas, 1872. He had command of the district of South Mississippi during the epidemic of 1897, and served as an inspector to decide on the character of cases of fever during much of 1898 and 1899.

Among the public positions held by Dr. Murray were those of postmaster of Bluffton, Ohio; demonstrator of anatomy, in the Cleveland Medical College, 1868-70, and in the Philadelphia School of Anatomy, 1869-71; member of Florida Medical Association (of which he was president in 1873); Medical Society of the State of Tennessee; Medico-Legal Society of New York; Philadelphia Hospital Medical Society (of which he was president in 1870); and Association of Military Surgeons of the United States.

He wrote a number of works of value, principally devoted to the specialty which constituted his life work. Among these are the "History of Yellow Fever in Key West in 1875"; "Report on the Fernandina Epidemic of Yellow Fever," "Treatment of Yellow Fever," and numerous official reports and tracts. He deserves the credit of writing the first letter in 1873, which led to the organization of the Florida Medical Society in the following year.

In 1875 he married Lillie, daughter of the Rev. C. A. Fulwood, D. D., at Key West, Florida. She died at Ship Island Quarantine in 1887, leaving five children, Gillie, Rebah, Karlie, Robert Fulwood and Joseph Arbour.

Dr. Murray died November 22, 1903, at Laredo, Texas, from injuries received in a runaway accident, eight days previously. He had been ordered from Key West to Laredo, Texas, in the latter part of September to settle disputes of diagnosis arising over an outbreak of "fever" along the Texan border of the Rio Grande River, that had been variously termed "dengue," "jaundice," and "malaria." His reputation as a diagnostician was worldwide, and because of this knowledge he was always chosen and ordered to points where such skill was demanded, especially was he an expert in his knowledge of tropical diseases, such as yellow fever and malaria. Yellow fever was on the wane, the disease had been conquered and he was at the zenith of fame at the close of a well directed and satisfactorily conducted campaign against a most insidious foe, when he received injuries from which he subsequently died. While his own life from the age of fifteen, when he was wounded in the war, to his death at fifty-eight, was one of constant pain and suffering, yet his own discomforts and troubles were never spoken of by him, for selfishness had no place in his nature.

JOSEPH YATES PORTER.

MUSSER, John Herr (1856-1912), eminent clinician, teacher and writer of Philadelphia, was born at Strasburg, Lancaster County, Pennsylvania, the twenty-second of June, 1856. He was the son of Dr. Benjamin Musser, the son of Dr. Martin Musser, the son of Dr. Benjamin Musser, a native of Berne and one of Penn's Colony on the Delaware; his mother was Naomi Musser; thus his forebears back to his great grandfather were physicians, as was a son, John H., his successor.

He was educated at the Millerville State Normal School, and the University of Pennsylvania Medical School, where he was graduated in 1877.

He was a resident of the Philadelphia Hospital (Blockley) in 1879, and then a successful quizmaster and bedside investigator; he soon acquired all the traditions of the older school as typified in the then professor of medicine Alfred Stillé (q. v.). He was first assistant professor of clinical medicine in the University of Pennsylvania 1889-98; professor of clinical medicine 1898-1912. He was instrumental in establishing in 1910 and then was the director of the John Herr Musser Department of Research Medicine. In 1911 he refused the didactic chair of medicine, as his greatest ambition ever lay in clinical lines, and a large consulting practice left no time for the pressing duties of the chair. He also inaugurated and remained the directing head of the Social Service Department of the University of Pennsylvania Hospital.

Dr. Musser was constantly active as a member of numerous medical societies; he was

president of the American School Hygiene Association, the Pathological Society of Philadelphia in 1893-97, the Philadelphia County Medical Society in 1899, the American Medical Association in 1904, and the National Medical Library Association in 1910, as well as vice-president, of the Pennsylvania Society for the Prevention of Tuberculosis. He was a corresponding member of the Sixth International Anti-Tuberculosis Congress and Honorary Fellow of the Institute of Hygiene of London. In 1910 Franklin and Marshall College conferred its LL. D. degree on him.

He contributed over two hundred papers, covering a wide range of subjects and articles to Hare's "System of Practical Therapeutics" and Osler's "Modern Medicine"; he edited the volume on "Diseases of the Lungs and Pleura" in Nothnagel's "Practice"; and was an editor with A. O. J. Kelly of a system of therapeutics.

His early and steady progress in diagnostic skill was manifestly due in large measure to his zeal for autopsies in his Blockley days and later. He was pathologist to the Presbyterian Hospital; his clinical work was done at Blockley Hospital, at the Hospital of the University of Pennsylvania, and at the Presbyterian Hospital.

Musser is an illustration of the possibilities which lie within the grasp of the average life of a man of good mentality who consistently and persistently turns his energies in one specific direction and says "This one thing I do and I am determined to do it well." He thus became by successive degrees a leading consultant in a great metropolis, a well-read scientific physician, an acceptable teacher, and a pathologist to a grade rarely found in the ranks of our general practitioners.

As a young man, quizzing the boys through Alfred Stillé's lectures, and in middle age (for he never grew old), Dr. Musser was characterized to a remarkable degree by a certain downright genuineness. Friend or patient always knew that he spoke with entire frankness and realized that his good rare horse sense could be relied upon. He had both unusual opportunities and a rare gift for making friends. For a generation at least there was no one quite like Musser in the profession in Philadelphia. His sterling character and his rare qualities cannot be portrayed in a brief biography.

He married Agnes Gardner Harper in 1880, by whom he had five children, the three oldest surviving.

Troubled for some years with a weak heart, he died after a brief acute illness the third of April, 1912.

HOWARD A. KELLY.

MUSSEY, Reuben Dimond (1780-1866). As a surgeon some of Mussey's surgical exploits have become historical and gained approval not only in the United States, but in Europe. The ligation of both carotids in the same patient for the cure of an immense nevus in the scalp, also removal of the scapula with a portion of the clavicle after previous amputation at the shoulder-joint were achievements of a high order. He also antedated Sims in the successful surgical treatment of vesico-vaginal fistula and performed lithotomy forty-nine times with four deaths. The son of Dr. John Mussey, of Pelham Township, Rockingham County, New Hampshire, he was born June 23, 1780. The story of his youth resembled that of many other doctors, short means, long hours of work on a farm or in teaching to get money for tuition fees, and a brave uphill fight through Amherst, New Hampshire, academy into the junior class at Dartmouth College, whence he graduated in 1803, and studied medicine under Dr. Nathan Smith (q. v.). He took his M. B. in 1805, and in the same year began practice in Ipswich, now a part of Essex, Massachusetts, but after three years went on to his M. D. (University of Pennsylvania) in 1809, receiving also an M. D. from Dartmouth in 1812. On his return from Philadelphia he settled in Salem, Massachusetts, and in his six years there attained a large practice, chiefly obstetrical, but he had already distinguished himself as a surgeon, and from 1812 to 1838 held the chair of anatomy and surgery and in 1814 also the chair of medical theory and practice at Dartmouth. He was professor of anatomy and surgery at Bowdoin College from 1831 to 1835, and the next year lectured at the Fairfield (N. Y.) Medical College. From three professorships offered him in 1837 he accepted that of the Medical College of Ohio at Cincinnati and lectured there fourteen years. When the Miami Medical College was opened he lectured on surgery there for six years, resigning in 1857 and going to Boston, where he spent the remainder of his life and died on June 21, 1866.

While in Ipswich he married Miss Sewall, who survived the marriage only three years. His second wife was Hetty, daughter of Dr. Osgood, army surgeon. Besides some daugh-

ters he had four sons—Charles, Reuben B., Francis B., and William H. (q. v.), the last two becoming physicians.

As a man of science he was diligent and deliberate with the most conscientious attention to details. As an operator he was slow and cautious and according to Samuel Gross (q. v.) admitted the human side by praying with and for his patients. He was at issue with Benjamin Rush (q. v.) concerning the non-absorptiveness of the skin and to prove his theory immersed himself in a strong solution of madder for three hours. He had the satisfaction of detecting madder in the urine for two days, the addition of an alcohol rendering it red. But this bold experimenter nearly killed himself in trying to see whether he could not pass ink by immersing himself in a solution of nutgall and subsequently in sulphate of iron. In 1830 and before that Sir Astley Cooper had taught there could be no union after intracapsular fracture, so Mussey set out for England with a specimen showing such a possibility.

Harvard gave him her Hon. A. M. in 1806 and Dartmouth her LL. D. in 1854. Dr. Mussey was president of the New Hampshire Medical Society from 1824 to 1834.

He was fond of music and played on the bass viol and on one occasion played to the New Hampshire Medical Society having transported his instrument all the way from Hanover to Portsmouth, N. H. at least a hundred miles on top of an old fashioned coach. Whenever Dr. Mussey happened to be called off on a visit or consultation on a Sunday, and was paid money for going, he always devoted whatever he received to the support of the church he attended regularly, when at times not busy professionally.

His valuable library is now in the Cincinnati Public Library. His writings included: "Experiments and Observations on Cutaneous Absorption," Philadelphia, 1809; "Animalcula in the Atmosphere of Cholera," Cincinnati, 1849; "Aneurysmal Tumours on the Ear Successfully Treated by Ligation of both Carotids," 1853, and various pamphlets on the subject of "Drink and Tobacco."

REUBEN D. MUSSEY.

MUSSEY, William Heberden (1818-1882), surgeon, son of Reuben D. (q. v.) and Hetty Osgood Mussey, was of French descent and was born in Hanover, New Hampshire, September 30, 1818. He went as a boy to Moore's Indian Charity Academy, Hanover, and various other schools, then when twenty-nine gave up a grocery business in Cincinnati and entered the Medical College of Ohio, graduating M. D. in 1848, at the same time studying with his father and practicing with him three years. In 1851 he had a profitable two years in Paris as pupil of Ricord, Trousseau and Bernard, and was elected president of the American Medical Society of Paris, returning to Cincinnati in 1853, and during the war acting as surgeon to St. John's Hospital for Invalids. He with Cincinnati business men organized also what was perhaps the first voluntary military hospital in wartime. After serving in various positions during those dark days he was associated with Gen. I. F. Wilder and in 1862 became medical inspector in the United States Army and lieutenant-colonel. When a year later his health broke down he went back to Cincinnati and held the chair of operative and clinical surgery in the Miami Medical College (1865-1882), being also later surgeon-general for the state of Ohio with the rank of brigadier-general.

Most of his writings were published in medical journals, specially the "Western Lancet" and "Medical Observer," of which he edited the surgical columns. But his best gift to Cincinnati was that of 5,000 volumes and 2,500 pamphlets as a nucleus of the Mussey Medical and Scientific Library as a memorial of his celebrated father.

On May 5, 1857, he married Caroline Webster, daughter of Dr. Harvey Lindsay, of Washington, D. C. They had two children, one of whom, William, became a doctor.

Dr. Mussey's death came very suddenly. He operated at the Cincinnati Hospital on the morning of July 31, 1882, and spent some hours afterwards with his patients. But in the afternoon he was stricken with paralysis and never regained consciousness, but died the next day.

REUBEN D. MUSSEY.

MUTTER, Thomas Dent (1811-1859), professor of surgery in Jefferson Medical College, Philadelphia. A museum bequeathed, a lectureship founded, and skill in plastic surgery make Thomas Dent Mütter worthy of remembrance. He came of German and Scotch ancestry, the son of John and Lucinda Gillies Mütter, his ancestors having settled in North Carolina, in ante-Revolutionary days. Thomas was born in Richmond, Virginia, March 9, 1811. At eight he was an orphan and a relative had him educated at Hampden Sydney College, afterwards placing him with

a Dr. Simms of Alexandria. When twenty he took his M. D. from the University of Pennsylvania (1831), but his health failed and he went as surgeon on the corvette "Kensington," bound for Europe. He is next seen eagerly studying the methods of master minds at European clinics. Returning in 1832 he devoted himself to surgery and became an assistant to Dr. Thomas Harris in 1835 in the summer school of medicine called the Medical Institute. Here he laid the foundation of a teaching career. The subjects of club-foot and its analogous class of affections; the deformities resulting from burns, with the institution of plastic treatment for their relief of a bold, original, and successful character, and the reparation of the innumerable disfigurations that arise from the loss or distortion of parts, added greatly to his renown as a surgeon. In the thorough reorganization of the faculty of Jefferson Medical College, which took place in 1841, he was promoted to a higher place of usefulness and honor by an appointment to the professorship of surgery in that institution. From this date began the halcyon period of Prof. Mütter's career as a surgeon. From year to year his efforts increased, and his ambition expanded with the success that followed his elevation. The toil of constant preparation, the task of daily appearance before his class in this arena, putting on and off his armor, and his exercise under it in the field, seemed not to oppress or weary him. Sir William Fergusson, writing in 1867, says "the greatest success recorded before my own views were made public was that achieved by Mütter, of Philadelphia, who operated successfully on nineteen out of twenty cases of harelip." "After he became a teacher," says in no unkindly tone Dr. S. D. Gross, "Mütter loved to refer to these men (Dupuytren, Louis, Liston) as his 'friends' and to hold them up to the admiration of his pupils. Like most of the young doctors who went abroad he considered one Frenchman equal to a dozen Americans."

He carefully prepared himself, whether for lectures or cases, even in the minutest points and then with equal skill and firmness, with a sparkling eye and dilating faculties, advanced to his task. He had a beau ideal of the art of surgery. One weakness—thought almost a laudable one—was his great desire to lead and to have personal influence. One of his biographers says he would occasionally adopt the old method of being called out of church or of making an appointment for a pseudo operation with his students, by whom he was adored. In 1856 a complication of gout and lung disease forced him to resign his chair, though at once elected emeritus professor by the faculty. A winter sojourn at Nice did not fulfill his expectations and he returned in 1858 and passed the next winter at the Mills House, Charleston, with his devoted wife. His disorders returned and he died there March 19, 1859, at the early age of forty-eight, leaving a young wife but no children.

His generous gift of his museum the year before he died to the Philadelphia College of Physicians, with $30,000 for upkeep and a lectureship in connection with it formed his best monument. He was not fond of writing and a somewhat loosely written treatise on "Club-foot" and his edition of "Liston's Operative Surgery" are his only literary remains. Oddly, he never held a hospital appointment.

MYERS, Albert William (1872-1918), pediatrician and editor, of Milwaukee, Wisconsin. Dr. Myers was born in Dixon, Illinois, in 1872; after completing a high school course at Ishpeming, Mich., he was engaged in the banking business for a period of five years, after which he entered the medical department of the University of Pennsylvania, where he was graduated in 1896. After serving interneships at the Episcopal and Philadelphia Children's Hospitals, he entered upon private practice in Milwaukee in 1900. He soon evinced a leaning toward pediatrics, gradually devoting more and more of his time to this specialty, and during the last few years limited his practice to this branch of medicine. Through his active association with the Milwaukee Children's and the Milwaukee Infants' Hospital and through his teaching position at Marquette University Medical School, as well as through an extensive private and consulting practice, he established himself as the foremost specialist in his branch in the city and state. His virility as a writer on medical subjects was exhibited during his editorship of the "Wisconsin Medical Journal." His unselfishness and his devotion to the cause of modern medicine and to the welfare of society at large were manifested by the self-sacrificing and efficient service which he rendered as editor of this publication for a period of six years and by his labors in the several medical and medicosociologic societies in which he took an active interest and to which he rendered such

constructive and far-reaching service. His position in these societies cannot be readily filled. His innate patriotism was revealed by the keen disappointment which he manifested when apprised that he was, for physical reasons, rejected for service with Milwaukee's Base Hospital Unit in the World War. His conscientiousness, his unusual ability, his gentleness, early ripened the appreciation and admiration of his friends, colleagues and patients into an affection which the lapse of time will not efface.

Dr. Myers died from pneumonia, of a few days' duration, July 2, 1918, at his home in Milwaukee.

NANCRÉDE, Joseph Guérard (1793-1857), was born in Boston in June, 1793. His father, Paul J. G. de Nancréde, was an officer under Rochambeau and was wounded at Yorktown. The boy had his early education in a Catholic seminary in Montreal, where he started a lifelong intimacy with Papineau, who afterwards played so conspicuous a part in Canadian politics. Thence he went to Paris, where he received his collegiate education and studied medicine. On returning to his native country he attended the medical lectures at the University of Pennsylvania, and in 1813 obtained his M. D. Thus qualified, he began to practice in Louisville, Kentucky, but soon returned to Philadelphia, where he spent the remainder of his life.

At a very early date he was associated with his elder brother, Dr. Nicholas C. Nancréde, in bringing out a translation of Legallois' "Experiments on the Principles of Life"; afterwards he made a translation and abridgment of Orfila's work on "Toxicology." He wrote occasional papers for the medical journals; of these, one was on "Mania a Potu," in the first volume of the "Medical Recorder"; another, "An Account of the Doctrine of Fevers," by Broussais, in the eighth volume of Chapman's "Philadelphia Journal." In the fourteenth volume of his work appeared his Memoir of Dr. Mongez; and in the sixteenth volume of the "American Journal of the Medical Sciences," "Observations on a Case of Cesarean Operation," occurring in his own practice, in which both mother and child were preserved. He was instrumental in procuring the first use to be made here of Monoesia. He was also active in causing trials to be made of the sphygmomanometer, and translated an account of its use and application.

In 1822 he married Cornelia, a daughter of Com. Truxton; her death preceded his own by eight years.

Nancréde died on the second of February, 1857, in his sixty-fourth year, of phthisis pulmonalis. He died as he lived, in the communion of the Roman Catholic Church, leaving his estate in default of issue, to his adopted son, Dr. Samuel J. G. Nancréde.

NEILL, Henry (1783-1845), a well-known physician of Philadelphia, and member of an interesting medical family, was born in Snow Hill, Maryland, March 12, 1783. His father, John Neill, son of John Neill, a lawyer of Tyrone, Ulster, Ireland, who came to America in 1739, was a physician of Snow Hill, born in Lewes, Delaware, June 3, 1749; he was a member of the Board of Examiners of the Eastern Shore, and a "strong Whig in the Revolution" (Cordell); he married Elizabeth Martin and died at Snow Hill, in June, 1816. Henry Neill was educated at the Washington Institute, Somerset County, Maryland, then began to study medicine with John Church of Philadelphia. Dr. Church had married a daughter of Benjamin Duffield (1753-1799), a graduate of the University of Pennsylvania in 1774, and in 1806 Neill married Martha Rutter, another daughter of Dr. Duffield. In 1807 he was graduated in medicine at the University of Pennsylvania with a thesis on "Bubonocele." He settled to practice in Philadelphia and remained there all his life. He had a large practice in obstetrics; was interested in delirium tremens; and suggested a novel treatment for club-foot.

He was physician to the Walnut Street Prison and to the Almshouse, including its lying-in-department; he was fellow of the College of Physicians of Philadelphia, one of its censors and in 1844 its vice-president.

He died at Belvedere, October 7, 1845. His children were: Catherine Elizabeth Duffield (who married John Rodman Paul, M. D., University of Pennsylvania, 1822); Benjamin Duffield, M. D. (1811-1872), (University of Pennsylvania, 1833); Anna Phillips; Henry (graduate at Amherst College, 1834); Emily Martha; John (q. v.); James Patriot Wilson (captain in the United States Army); Edward Duffield (1823-1893, graduate of Amherst College, 1842, minister, author and educator); and Thomas Hewson (1826-1885, distinguished soldier; general in the United States Army).

Dr. Neill's portrait hangs in the College of Physicians, Philadelphia.

NEILL, John (1819-1880), Philadelphia surgeon, third son of Henry Neill, physician (q. v.) and Martha Rutter, second daughter of Dr. Benjamin Duffield (1753-1799), was born in Philadelphia, Pennsylvania, July 9, 1819. He was graduated in Arts at the University of Pennsylvania in 1837, then entered the medical department of the University and received an M. D. in 1840, with a thesis on "Diseases of the Eye." He began to practice in Philadelphia, but spent a short time in the West Indies in 1841, returning in 1842, to practice and give private medical instruction. He was appointed assistant demonstrator of anatomy in the University, and in 1845 demonstrator of anatomy, succeeding Paul B. Goddard. From 1849 to 1852 he was surgeon at Wills Eye Hospital; in 1849 he was physician to the Southeast Cholera Hospital, where his method of treatment formed the basis of a report published by the College of Physicians and Surgeons. In 1852 he was elected to the staff of the Pennsylvania Hospital, from which he resigned in 1859; he was professor of surgery in the Pennsylvania Medical College, 1854-1859. He was a contract surgeon in the United States Army 1861-62, and in 1862 was made surgeon of volunteers. When Fort Sumter fell he was the first to attempt to secure a military hospital "by converting Moyamensing Hall on Christian Street into one, and telegraphed to the surgeon-general of the Army for authority to establish it as a branch of the United States Army. This was so timely for service after Bull Run that he was given charge of the establishment of hospitals . . . and was finally placed at the head of Broad Street Central Hospital." (Henry.) In 1863 Dr. Neill was made medical director of the forces from Pennsylvania, and for able service was brevetted lieutenant-colonel; after the Civil War he was post-surgeon.

Neill was instrumental in founding the Presbyterian Hospital in Philadelphia, and wrote the first printed matter on the subject, "Shall Presbyterians have a Hospital in the City of Philadelphia?" printed during the war. He was on the first medical board of the hospital, serving from 1872 to 1875, when he resigned. Neill invented an apparatus to treat fractures of the leg and he modified Desault's splint for fracture of the femur.

He was the first professor of clinical surgery in the University of Pennsylvania, 1874-75. He wrote twelve articles for the "Medical Examiner" (1849-1875); and seven for the "American Journal of the Medical Sciences" (1842-1875). Henry says: "Neill's 'Treatment of Fracture of the Patella and Extension and Counter-extension of the Leg' have a permanent place in surgical literature." He wrote: "Outlines of the Arteries," 1845; "Outlines of the Nerves," 1845; "Outlines of the Veins and Lymphatics," 1847; illustrated with original drawings, the names being "placed upon the parts, instead of being referred to by numbers—rather a novelty then and a great relief to the student." With Francis Gurney Smith (q. v.), he compiled an "Analytical Compendium of the Various Branches of Medical Science," 1848. "Dr. Neill, in after years, frequently was heard to regret that he had ever been connected with a publication, however successful, which contributed so largely to make the study of medicine superficial" (Shippen). He had planned a work on the principles of surgery, but died when only notes for the first chapter had been completed.

In 1844 he married Anna Maria Wharton, daughter of Samuel Hollingsworth, merchant of Philadelphia, and sister of Samuel L. Hollingsworth, editor of the "Medical Examiner," 1854-56; their children were: Caroline Hollingsworth (M. D., University of Pennsylvania, 1874); Patty Duffield; and John.

Dr. Neill died at Philadelphia, February 11, 1880.

HOWARD A. KELLY.

NEILSON, William Johnston (1854-1903), professor of anatomy in Manitoba Medical College, was born in Perth, Ontario, March 4, 1854; his father, Cornelius Neilson, emigrated from Ireland in 1818. His mother, Eleanor Moorehouse, was born in Ontario, of Irish parents. He went as a boy to the Perth public and grammar schools, and his medical course was had in McGill University, Montreal, where he took the M. D., and C. M., in 1878, after a very brilliant career as a student. Neilson practiced for a short time at Parkdale, Ontario, and Hastings, Minnesota, then went to Winnipeg in 1881, where he lived until his death. He was chosen professor of anatomy in Manitoba Medical College in 1888, and was also a member of the staff of the Winnipeg General Hospital from 1892 onwards. He died on the evening of a large political gathering in the Constituency of North Winnipeg of which he was elector, at the Winnipeg General Hospital, July 17, 1903, of pulmonary abscess.

A painting by V. A. Lang hangs in the library of the College of Physicians and Surgeons of Manitoba, in Winnipeg.

JASPER HALPENNY.

NELSON, David (1793-1844), surgeon in the War of 1812 and later a Presbyterian minister and author, was born near Jonesborough, East Tennessee, September 24, 1793, and died at Quincy, Illinois, October 17, 1844, aged 51. His parents were from Virginia, his father an officer of the church and his mother of Scotch descent. In childhood he was of a contemplative disposition and at the age of twelve thought himself converted to religion. His education was at Washington College, Virginia, graduating in 1810 at sixteen and then studying medicine with Dr. Ephraim McDowell (q. v.) in Danville, Kentucky, and at the Philadelphia Medical School, where he received his M. D., and had but just entered on the practice of medicine when he became surgeon to a Kentucky regiment and went to Canada in the War of 1812. There he nearly lost his life from exposure in the wilderness, being rescued by his cousin, Colonel Allen. On his return to Kentucky, he practiced medicine at the age of 22, married a daughter of David Deaderick, made a new profession of his early religious belief, forsook a lucrative practice, said to yield him $3,000 a year, and became a minister in the Presbyterian church, being licensed to preach in April, 1825. Then he preached in various parts of Tennessee for three years, helped to edit a periodical called "The Calvinistic Magazine" and finally succeeded his brother Samuel as pastor of the Presbyterian church in Danville, Kentucky. He was said to be singularly striking in manner and his eloquence was fervid, powerful and picturesque. Removing to Missouri in 1830, he was instrumental in founding Marion College in Marion County and was its first president, the students of the college supporting themselves by engaging in manual labor. Dr. Nelson, a warm emancipationist, went to Quincy, Illinois, in 1836, and established an institution for the education of young men as missionaries, but this failed because of the lack of business ability of the founder. In his first summer there he wrote "The Cause and Cure of Infidelity," N. Y., 1836, which passed through several editions and was translated into French, German and Spanish.

In the latter part of his life he was subject to attacks of epilepsy that impaired his faculties.

WALTER L. BURRAGE.

NELSON, Robert (1794-1873), Canadian surgeon and revolutionist, brother of Wolfred Nelson (q. v.), was born in Montreal, P. Q., Canada, in January, 1794, and died at Gifford's Staten Island, March 1, 1873. He studied medicine and attained eminence as a surgeon. He served during the War of 1812 and in 1827 was elected with Louis J. Papineau to represent Montreal in Parliament. He was known to sympathize with the insurgents, but did not participate actively in the uprising of 1837. After the encounter between his brother and the royal troops at St. Denis, Robert was arrested and imprisoned, but he was afterwards admitted to bail. He then went to the United States and in 1838 invaded Canada at the head of 600 men and concentrated his force at Napierville. He styled himself "President of the Provisional Government." Hearing of the approach of the British under Sir James Macdonell he retreated toward the frontier, but made a final stand from which he was dislodged and fled to the United States, leaving 50 killed and an equal number wounded. He went afterwards to California and in 1862 was a consulting surgeon in New York. In addition to articles in medical journals he wrote an account of the Asiatic cholera that prevailed in Canada in 1832 and translated Hupeland's "System of Medicine."

His son, Charles Eugene (1837-), was a physician who became editor of the "New York Planet" in 1883, in 1885 assistant editor of the "Eastern Medical Journal," Worcester, Massachusetts, and in 1886 its editor. He wrote a life of his father, which was published in the "New York Medical Register," 1873, and invented a rectal bougie which bore his name.

NELSON, Wolfred (1792-1863), Canadian physician and revolutionist, was born at Montreal of Loyalist parents, July 10, 1792. In 1811 he began to practice medicine and a few years later entered the brewing and distilling business. When the War of 1812 broke out he went to the border with his local militia regiment. From an early age he sympathized with the French Canadians in their efforts to secure a more equitable form of government and the notorious "patriots" were nearly all numbered among his friends. He was elected to Parliament in 1827. In 1837 Governor Lord Gosford issued warrants for his and Papineau's arrests and a reward of $1,000 was offered for his apprehension. Papineau suggested sur-

render, but Nelson barricaded himself in his brewery, and, with the assistance of Cartier and others of the patriots, successfully withstood the attacks of the military. On the defeat of the insurgents at Sorel, Quebec, a few days later, he escaped, but was captured on his way to the border, imprisoned for some time in a Montreal jail, and eventually transported to Bermuda, his sentence being subsequently annulled by the home government. He lived in the United States from 1838-1842. He returned to Canada and in 1845 was elected to the Canadian Assembly for the constituency of Richelieu. In 1845 he was elected chairman of the Board of Health and four years later appointed an inspector of prisons. He was twice chosen mayor of Montreal, and was at one time president of the College of Physicians and Surgeons.

He died June 17, 1863.

NELSON, Wolfred (1846-1913), of Panama and New York, was born in Montreal in 1846 and graduated from McGill University in 1872. From 1880 to 1885 he practiced at Panama, Colombia, and from 1885 to 1888 traveled in Central America, South America, Mexico, and the West Indies, collecting data in climatology and tropical diseases. In 1890 he began the practice of medicine in New York, which he continued until his death. In 1904 he went to Cuba for the "New York Herald," and for his work in the prevention of tropical diseases was given the Order of Queen Isabelle the Catholic. He was the author of "A Review of Several Difficulties to Be Overcome in the Construction of the Panama Canal," 1887, and "Five Years of Panama," 1885, and he contributed many papers to the medical press.

NEUHOF, Selian (1872-1924), cardiologist of New York, was born September 19, 1872, in New York City. He took his bachelor's degree from the College of the City of New York in 1890 and his M. D. from Columbia in 1893, and after an internship at Lenox Hill Hospital, settled down to general practice. During the last twelve years of his life he specialized in cardiology on which he wrote many articles, also "Clinical Cardiology," 1917, and "The Heart," 1923. He was professor of cardiology at Fordham University where he was active in teaching for a number of years. Dr. Neuhof took a prominent part in medical meetings in the metropolitan district, not only in medical presentations and discussions, but also in movements for improvement in the care of the sick and for physicians' welfare.

He died of heart disease October 6, 1924.

HIRAM N. VINEBERG.

NEWBERRY, John Strong (1822-1892), an eminent scientist of New York City, was born in Windsor, Connecticut, December 22, 1822. While he was yet an infant his father, Henry Newberry, removed to Summit County, Ohio, where he founded the present town of Cuyahoga Falls. The son was educated entirely in Ohio, and graduated in 1846 in the Western Reserve College, at Hudson. He immediately turned his attention to the study of medicine, attended lectures in the Cleveland Medical College, and received his degree of M. D. there in 1848. The next two years of his life were spent in travel and study in both the United States and Europe, a large part of this period being passed in Paris. In 1851, however, he returned to Cleveland, Ohio, and began to practice, but was too much interested in the natural sciences to enjoy the dull routine of medical practice, and in May, 1855, when offered by the War Department the position of acting assistant surgeon and geologist of the United States Exploring Expedition under Lieut. R. S. Williamson, designed to explore the region between San Francisco and the Columbia River, accepted it without hesitation. In 1857-1858 he was again assigned by the War Department to accompany Lieut. J. C. Ives on his exploration of the Colorado River, and his report of the results of this exploration was scarcely completed when he was ordered to join Capt. J. N. Macomb, topographical engineer, United States Army, in a further exploration of the San Juan and upper Colorado Rivers. Elaborate and valuable reports of these expeditions were published by the War Department, until the outbreak of the Civil War in 1861 turned the attention of the government to more pressing duties. Soon after the close of the war in 1866 he was called to the chair of geology and paleontology in the School of Mines of Columbia College, New York, and this position he continued to fill with entire success until his death, December 7, 1892. In 1869 he was called to Ohio as state geologist, to direct the geological survey of the state then ordered. He at once organized the work and directed it with energy and success until its completion in 1875, when he prepared and published valuable reports of the results of

his labors. In 1884 he was appointed paleontologist of the U. S. Geological Survey, with charge of the fossil fishes and plants.

Dr. Newberry was a member of the Ohio State Medical Society, before which he read in 1852 a paper on "The Specific Identity of Typhus and Typhoid Fevers." Most of his writings were of a geological or paleontological character. He was one of the original corporators of the National Academy of Sciences, president of the New York Academy of Sciences and a member of numerous scientific societies of both this country and Europe.

HENRY E. HANDERSON.

NEWTON, Robert Safford (1818-1881), editor, organizer of an eclectic state medical society and an eclectic medical college in New York, was a descendant of John Newton, an officer in Cromwell's army, who fled to America after the Restoration and settled in Massachusetts—his grandfather on his mother's side, Robert Safford, went from Massachusetts to Ohio, where he was a pioneer settler. His father was John Newton. Born in Gallipolis, Ohio, December 12, 1818, the younger Newton's early education was limited and the plan was to make him a farmer; but he begged for larger learning than that of the common school and was permitted to go to the academy at Lewisberg, Virginia. He was a good student, but his father had him return to the farm in 1834; he taught school intermittently with farming, until in 1837 he decided suddenly, while in the midst of plowing, that he "would never plow another furrow, or even finish the one that was half accomplished," but that he would be a doctor. He had already begun to study medicine, and the next day, with fifty cents as his sole fortune, he went to Gallipolis, started to study medicine under Edward Naret, working for his preceptor to meet expenses. He belonged to the Methodist Church and his pastor taught him Greek and Latin, and he studied mathematics, history and philosophy under the guidance of the principal of the Gallipolis Academy. He entered the Medical Department of the University of Louisville in 1839 and received an M. D. in 1841. One month after graduation he began to practice in Gallipolis (April, 1841); in 1843 he married Mary M. Hoy, of that town. In 1845 he moved to Cincinnati, Ohio, where he became well known; in 1849 he accepted the chair of surgery in Memphis Institute, of the University of Memphis, resigning in 1853, to take the chair of surgery in the Eclectic Medical Institute at Cincinnati, left vacant by the death of T. V. Morrow. He continued in this or in the chair of theory and practice of medicine until 1860. He conducted Newton's Clinical Institute here assisted by Zoheth Freeman. From 1851 to 1861 he edited the "Eclectic Medical Journal" (with J. R. Buchanan). In 1863 he settled in New York, helped to organize a State Eclectic Medical Society, and served as president for three years; he aided also in establishing the Eclectic Medical College of the City of New York (chartered in 1865; beginning in 1866). He was one of the original signers of the call for the National Eclectic Medical Association (1848) and was active in reorganizing the Association (1870).

He was an assistant editor of the "Eclectic Medical Review," and helped editorially with the "Medical Eclectic." He wrote "Theory and Practice of the Eclectic School of Medicine"; "Eclectic Treatise on the Diseases of Children" (with W. B. Powell); and edited several works. He died of apoplexy at New York, October 9, 1881.

Dr. Newton's son, Robert Safford Newton, Jr., was born in Cincinnati, September 2, 1855, and received his M. D. at the Eclectic Medical College (New York), in 1876, then studied in London, Paris, Vienna and Berlin until 1880. From 1876 to 1877 he was clinical assistant at the Royal London Ophthalmic Hospital, and held other medical positions in London until 1878. On his return to New York he became professor of diseases of the eye, throat and skin in the Eclectic Medical College, and dean of the faculty (1881-1886). He edited the "New York Quarterly Cancer Journal" (1880-1881); and the New York "Medical Eclectic" (1877-1885).

NICHOLS, Charles Henry (1820-1889), constructor and superintendent of St. Elizabeth's Hospital Washington, D. C., was born on October 19, 1820, at Vassalboro, Maine. He stood long in the front rank of American superintendents of institutions for the insane, and was associated with very much of their work. He went as a boy to the schools of Maine and Providence, Rhode Island, and afterwards to the Universities of New York and Pennsylvania. He held his M. D. from the last, 1843, also A. M., Union College, and an LL. D. from Columbian College, District of Columbia. His tutorage in ministering to the insane was under Dr.

Amariah Brigham (q. v.), in the State Asylum at Utica, New York, where he was chosen medical assistant in 1847. In 1849 he was appointed physician to the Bloomingdale Asylum, New York City, and resigned in 1852. He was mentioned by Miss Dorothea Dix and selected by President Fillmore to superintend the construction and take charge of the government hospital for the insane at Washington. It was a great work, demanding a capable, broad man, and the manner in which he administered his trust showed that the President had made no mistake in his choice. He had looked to the end to some purpose; an end that justified all his labors of love; that built twenty-five of the best years of his life into those hospital walls. He saw his plan reproduced in Australia, in Newfoundland, and in many state institutions. At considerable pecuniary sacrifice to himself he doubled the hospital land, he extended its accommodations, he kept the institution in everything abreast of the most enlightened, curative treatment of the time, so that when after a quarter of a century they called him back to Bloomingdale Asylum, creating the office of medical superintendent for him, he left St. Elizabeth's a hospital the most perfect of its kind.

He was, for a succession of years, president of the Association of American Superintendents of Institutions for the Insane. He was also an honorary member of the Medico-Psychological Association of Great Britain. He died on December 16, 1889. In the jurisprudence of insanity, those who remember the Mary Harris case do not need to be told how he stood. But his principal work was in the daily hospital routine.

DANIEL SMITH LAMB.

NICHOLS, Edward Hall (1864-1922), associate professor of surgical pathology and clinical professor of surgery in Harvard Medical School, was born at Reading, Massachusetts, January 6, 1864, the son of Edward Childs and Abbie Susan Hall Nichols. After taking his A. B. "magna cum laude" at Harvard in 1886 he entered Harvard Medical School and served as house officer at both the Boston City Hospital and the Children's Hospital before receiving his M. D. in 1892. Then for two years he was executive assistant and assistant superintendent at the former institution. He did not enter on private practice at once but became assistant pathologist to the City Hospital and demonstrator of surgical pathology in Harvard Medical School. In the course of time he passed through the grades of instructor, assistant professor and finally associate professor in surgical pathology; after 1916 he was clinical professor of surgery. He was director of the cancer laboratory and of the Croft Research Fund from 1899 to 1905. In his later years he devoted himself to private practice in general surgery. While in the laboratory he did noteworthy investigations on diseases of the bones, especially osteomyelitis, tuberculosis of the bones and joints and arthritis deformans. He published in this connection: "Tubercular Disease of Bones and Joints," in the Transactions of the American Orthopedic Association, 1898, vol. ix, p. 353; "The Surgical Anatomy of Congenital Dislocation of the Hip Joint," in the "American Journal of the Medical Sciences," 1900, vol. 119, p. 629; "The Relation of Blastomycetes to Cancer," "Journal of Medical Research," 1902, vol. 7, p. 312. Dr. Nichols was a forceful and interesting instructor in surgical pathology during his entire connection with the medical school; he had a gift of picturesque expression which arrested the attention of his auditors. He was commissioned an honorary lieutenant colonel in the British army in 1915 and took across the first Harvard Unit; he was a major in the medical officers reserve corps in the United States Army in 1917 and then chief surgeon to the United States Base Hospital 7, in France, from July 1918 to January 1919, being cited by General Pershing for "exceptionally meritorious and conspicuous service." He had unusual executive ability and was a thoroughly trained surgeon capable of performing the most difficult operations. While in college he was a renowned pitcher of the baseball nine; after the year 1904 he was surgeon in charge of the football teams until his death. Nichols was a Fellow of the American Academy of Arts and Sciences and of the American College of Surgeons, as well as being a member of the American Surgical Association.

On October 3, 1894 he married Edith Walker Judd of Reading. They had two children, a son and a daughter. He was stricken with apoplexy while performing a minor operation at a private hospital and died a few days later, on June 12, 1922, at the age of 58.

WALTER L. BURRAGE.

NICHOLS, James Robinson (1819-1888), druggist, writer and editor of the "Boston Journal of Chemistry," son of Stephen and

Ruth Nichols, was born at West Amesbury, Masachusetts, July 18, 1819, the first years of his life being spent on a farm, until, in his eighteenth year, he worked with his uncle, a druggist in Haverhill. After three years, he entered the medical department of Dartmouth College. His course here was interrupted by illness and the degree of M. D. was conferred on him in 1867. Being, by illness, obliged to give up active practice, Dr. Nichols returned to the drug business in Haverhill and gave his time to lecturing and chemistry. In 1856 he established a laboratory in Boston, where for sixteen years he worked successfully. His next venture was an experimental farm near Haverhill. As a member of the Board of Agriculture, Dr. Nichols was able to give practical help to the farmers of the state. He was also a member of the Massachusetts Medical Society. The "Boston Journal of Chemistry," later called the "Popular Science News," was founded by Dr. Nichols in 1866. His writings include: "Chemistry of the Farm and Sea," 1867; "Fireside Science," 1872, and "Whence, What and Where," 1883.

He married Harriet Porter in 1844, and Margaret Gale in 1851. After a long illness from chronic gastric disturbances he died at Haverhill, on January 2, 1888.

MARGARET K. KELLY.

NICHOLS, Thomas L. (1815-), pioneer dietician and hydrotherapist, was born in Oxford, Grafton County, New Hampshire, in 1815. His maternal grandfather was a participant in the Boston Tea Party and fought in the battle of Bunker Hill; his father fought in the War of 1812.

Dr. Nichols traveled widely. In 1834, he was in Lloyd Garrison's office in Boston when the Boston mob opposed to the abolitionists came to wreak their vengeance upon George Thompson, the English abolitionist, and caught Garrison who was saved by the mayor. During the next two years, Nichols lived in Lowell, Massachusetts, returning thence to New York where he was given charge of the new "Evening Herald" at four pounds a week. In 1837, he went to the little frontier town of Buffalo by canal packet and two years later took a steamboat excursion around the lakes between the United States and Canada, visiting Chicago, a village of a few hundred inhabitants with one brick hotel. The year 1840 found him editing a political journal in Rochester. In 1845, he started from New York, with a consumptive friend seeking health, to visit New Orleans, writing on his trip down the Ohio a series of letters descriptive of his first southern journey; these were published in a New York paper. In New Orleans they were amazed to find the markets more crowded and fuller of creole and negro gaiety on the Sabbath than on week days and the theatres open in the evening as in Paris.

In 1848 he married Mary Sargeant Neal—the divorced wife of Hiram Gove. She was widely known through her advocacy of the water-cure system and as an authoress. With Dr. Nichols, she established a "Water Cure House" the year of their marriage. Under the "nom de plume" Mary Orme, she wrote "Uncle John, or is it too much Trouble," "Agnes Norris, or the Heroine of Domestic Life," "The Two Loves," and published "Lectures to Ladies on Anatomy and Physiology," 1840, "Experiments in Water-Cure," 1859, "American Eclective Papers," and a number of articles on hygiene for Godey's "Lady's Book."

In Philadelphia, he was co-editor of the "American Vegetarian and Health Journal" during 1850-54, after he had received the M. D. degree from New York University in 1850. He again spent a winter in New Orleans in 1859. Early in 1861, he started a weekly newspaper in New York City, which ended with the first issue. At the outbreak of the Civil War, believing in the sovereignty of the individual states, he sailed on a London packet and settled at Malvern, England. Nichols held that the northern sympathy for the slave was wasted and might find more appropriate objects nearer home.

Among his writings are an introduction to the water cure, 1850; "Esoteric Anthropology," 1853; "Human Physiology, the Basis of Sanitary and Social Science," London, 1872, 1875, 1885; "How to Cook: Aesthetic Gastronomy," London, 1872; "How to Behave: a Manual of Manners and Morals," London, 1874; "How to Live on a Sixpence a Day," London, 1875 (abridged edition, 1879); "Social Life, its Principles, Relations, and Obligations," London, 1878; "Count Rumford: How he banished Beggary from Bavaria," London, 1879; "A Scamper across Europe with Glimpses of Paris," London, 1879; "The Gift of Healing: the Sympathetic Cure," London, 1880; "Eating to Live: the Diet Cure," 1881; "Marriage in all Ages," London, 1886. Nichols will probably be best remembered by two readable volumes entitled "Forty Years of American Life," London,

1864 (new edition, 1875), full of history, chatty anecdotes, and local flavor.

HOWARD A. KELLY.

NICKLES, Samuel (1833-1908), professor in the Medical College of Ohio, was born in Cincinnati, Ohio, August 8, 1833, the son of Francis and Mary Winkerman Nickles, of Berne, Switzerland, who came to Cincinnati just before his birth. Owing to the death of his father while he was still an infant, Samuel's early years were passed in comparative poverty, but the sterling qualities of his mother, coupled with the lad's insatiable thirst for knowledge, led him to gain a good common school education.

Later, while supporting his mother and sisters as an employee in various mercantile houses he devoted all his spare time to studying medicine. German was to him as his mother tongue. In 1856 he was graduated from the Eclectic Medical Institute in Cincinnati; in 1862 he served as surgeon to the 81st Ohio Reserve Militia, and in 1865 received his M. D. from the Medical College of Ohio, and was at once appointed its demonstrator of anatomy, a position held until 1869, when he was made professor of medical chemistry. In 1874 he was given the chair of materia medica and therapeutics. This he held until 1898, when he was made professor emeritus, and retired from active teaching. He was known among the students as "dear old Sammy Nickles." His life was epitomized by his clinical assistant, Dr. T. W. Hays, as follows: "Attention to duty, honesty, conscientiousness." In 1885 he became president of the Academy of Medicine of Cincinnati. While in active practice he contributed to medical journals a great many excellent papers. He was a voluminous writer. In 1868 he translated the second German edition of Emil Siegle's "Treatment of Diseases of the Throat and Lungs." He wrote many articles for the "Reference Handbook of the Medical Sciences" and for other medical periodical literature.

August 8, 1858, he married Alice Bilmer, of Cincinnati, and had six children; Mrs. Nickles died December 27, 1869. Only two children survived their father. On March 15, 1871, Dr. Nickles married Mrs. Caroline Dick Weglan, and had two more children. He died April 21, 1908, the result, primarily, of an attack of influenza in the latter part of the previous January.

ALEXANDER G. DRURY.

NOEGGERATH, Emil Oscar Jacob Bruno (1827-1895), pioneer gynecologist of New York, was born at Bonn, Germany, October 5, 1827. He studied medicine in his native city from 1848 to 1852, when he received his medical degree from the University of Bonn. He studied under C. Mayer in Berlin, and Carl Braun in Vienna, and was an assistant of Rokitansky. For several years he was assistant to Kilian in the Bonn gynecological clinic and then he emigrated to America in 1857, to establish there the teachings of his master and to do original work in the new specialty of diseases of women. Not being satisfied with a professorship offered him in St. Louis, he stayed in New York where he held the following positions: physician to the female department of the German Hospital; professor of obstetrics and diseases of women, New York Medical College; surgeon to the Woman's Hospital in the State of New York; consulting surgeon to St. Mary's Hospital for Women. He was a member of the New York Academy of Medicine from 1861 to 1886, when he went back to Germany; he was also corresponding secretary of the New York Obstetrical Society for several years. Dr. Noeggerath was one of the founders of the American Gynecological Society and at its first meeting in 1876 read his important paper, entitled "Latent Gonorrhea, especially with regard to its Influence on Fertility in Women." This article had been preceded by a paper on the same subject published in German, in Bonn, in 1872, that, as he said, "was not received very favorably by the medical press." Noeggerath maintained that "gonorrhea in the male, as well as in the female, persists for life in certain sections of the organs of generation, notwithstanding its apparent cure in a great many instances," also: "About ninety per cent. of sterile women are married to husbands who have suffered from gonorrhea either previous to, or during married life." His views excited much opposition in the profession and led to an animated discussion of his paper. In closing the discussion he said: "After the gentlemen have given five years or more of careful study to this question, I shall expect to hear more approval than I have done to-day," a prophecy that was due to come true after Neisser had discovered the gonococcus in 1879, and Bumm, Sänger and Wertheim had developed the subject of gonorrhea during the years from 1885 to 1896.

The newer methods of diagnosis in gynecology, the use of electrolysis and electrocausis in treatment and the technique of ovariotomy were subjects that engaged the attention of this pioneer. He wrote partly in German and partly in English. In 1853 he devised the operation of epicistectomy, or the supra pubic operation on the bladder ("New York Medical Journal," 1853, 3 s., vol. iv, 9-24). With Abraham Jacobi (q. v.) he founded the "American Journal of Obstetrics" (1868), and was editor for five years.

Due to poor health Dr. Noeggerath gave up practice in 1885 and a year later moved to Wiesbaden, Germany. There he brought out his "magnum opus" in 1892, a treatise on the structure and development of carcinoma. He died, of kidney disease, three years later, May 3, 1895.

He married Rolanda Noeggerath, of Brussels in 1874. Of the four children, one son, Jakob Emil, became a consulting electrical engineer. A younger son, Karl, was professor of pediatrics in Freiburg, Germany.

WALTER L. BURRAGE.

Norcom, William Augustus Blount (1836-1881), scholarly physician of North Carolina. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 852.

NORRIS, George Washington (1808-1875), of Philadelphia, eminent surgeon in pre-antiseptic days, authority on fractures, author of surgical papers, and a local medical historian, was the sixth son of Joseph Parker Norris and Elizabeth Hill Fox and was born November 6, 1808, in Philadelphia, in the house known as the "Chestnut Street House," built by his grandfather, Charles Norris, on the site where the Custom House now stands. His ancestors were English. The earliest known, Thomas Norris, London merchant in 1650, joined the Quakers and was driven by persecutions to seek a home in the Island of Jamaica. Here he and his entire family except an absent son, Isaac, were killed in the earthquake of 1692. Isaac, changing his home to Philadelphia, entered mercantile life, took active interest in all that concerned the colony, and was an elder in the Society of Friends; he was judge of the Court of Common Pleas, was the friend of William Penn and married a daughter of Thomas Lloyd, first deputy governor of the Province. He died in 1735, and his son, Isaac, became speaker of the Colonial Assembly 1751-64.

George W. Norris, as he was known, had his early education with the author and distinguished teacher James Ross, then entered the Academic Department of the University of Pennsylvania, graduating A. B. in 1827, after which he studied medicine under Joseph Parrish (q. v.); he took his M. D. from the University in 1830, offering a thesis on "Varioloid and Vaccine Diseases." Immediately after he was made a resident physician in the Pennsylvania Hospital, remaining until 1833, when he went to Paris and attended lectures of Dupuytren, Velpeau, Roux and Magendie. He was elected a member of the Société Médicale d'Observation. In 1835 he returned to Philadelphia and practiced. He succeeded John Rhea Barton (q. v.) as one of the surgeons in the Pennsylvania Hospital in 1836, serving until 1863; he was professor of clinical surgery in the University of Pennsylvania 1848-1857 when he resigned, having been elected a trustee of the University in 1856; he was consulting surgeon to the Orthopedic Hospital and to the Children's Hospital, and president of the board of managers of the latter. He was a member of the Academy of Natural Sciences, of the American Philosophical Society, and for many years a director of the Philadelphia Library. His tastes led him to historical research and, interested in the early history of Philadelphia, he gathered material for a book to be called "Medicine and the Early Medical Men of Philadelphia," and printed fifty pages on a hand press. These historical data were found among his effects and published by his son, William Fisher Norris (q. v.) in 1886 with the title "The Early History of Medicine in Philadelphia." "It is certainly the most interesting and valuable record of medical annals that has ever appeared in this country and the work is numbered by its fortunate possessors among their greatest treasures" (F. P. Henry). Norris's first publication was "Dislocation and Fracture of the Astragalus" ("Amer. Jour. Med. Sci., 1837, vol xx, 378-383); other papers, particularly dealing with statistics of operations, appeared in the same journal; he collected the chief of these and published them in one volume, "Contributions to Practical Surgery," Philadelphia, 1873. Of this work Henry says, "Dr. Norris conferred a favor upon his surgical contemporaries, to whom he thus made readily accessible a series of observations that had previously been widely

scattered." The paper on "The Occurrence of Non-Union after Fractures" is called by William Hunt "an exhaustive masterpiece," and by Frank Hastings Hamilton "the most complete and reliable monograph upon this subject contained in any language." His "Report of the Surgical Cases treated at the Pennsylvania Hospital, May—October, 1838" ("Amer. Jour. Med. Sciences," Feb. 1839, xxiii, 273), shows the admirable character of his work. It would be an acceptable report if issued by any hospital to-day.

Norris was tall and imposing in appearance and had a low, well-modulated voice; it was said that "he never flattered and he never sneered." He was in frail health for years, having chronic pulmonary trouble, and in 1872 suffered an attack of prostatic and cystic abscess; on March 4, 1875, he died.

Dr. Norris married Mary Pleasants Fisher, daughter of William W. Fisher, in 1838; they had two children, William Fisher (q. v.), who became a physician, and Mary Fisher (Mrs. James Parsons).

HOWARD A. KELLY.

NORRIS, William Fisher (1839-1901), Philadelphia ophthalmologist and historian, born in that city, January 6, 1839, was the son of Dr. George W. Norris (q. v.), an eminent surgeon. The son took the degree in arts at the University of Pennsylvania in 1857, and the medical one in 1861, afterwards spending eighteen months at the Pennsylvania Hospital as resident physician. Some phases of his character are well illustrated by a stirring episode occurring during his residency, which he related to me many years later. Hearing an unusual commotion in one of the wards, he entered and found the nurses and many of the patients fleeing in dismay before a stalwart and violent lunatic who had entered the opposite end of the ward with a huge cleaver in his upraised hand. No sooner did he see the young doctor dressed in his ward coat, than he ran violently with this weapon raised to brain him. Dr. Norris awaited calmly his rapid approach and, as the blow descended, with quick eye, firm and accurate hand, grasped the wrist with the unyielding, paralyzing grasp of the trained athlete, and at the same time tripped the feet of the man, pinioned his arms, and so held him until help arrived and he was placed in a straightjacket. After his hospital service he became assistant surgeon in the United States Army, and was in charge of Douglas Hospital at Washington, where he served until 1865 with distinguished merit. He visited Europe in 1865, spending most of his time with Arlt, Jaeger, and Mauthner in Vienna. He also worked with Stricker in the study of experimental pathologic histology of the cornea, the results of which were published jointly. In 1870 he returned to Philadelphia, became lecturer in ophthalmology and otology at the University of Pennsylvania, and soon devoted himself exclusively to ophthalmology, becoming clinical professor of this branch. Later he was honorary professor, and in 1876 full professor of ophthalmology. In 1870 he was elected a member of the American Ophthalmological Society; in 1884, its president, and in January, 1872, a member of the staff of Wills Eye Hospital.

His writings are not numerous, but have scientific merit. His largest work was his "System of Diseases of the Eye," published conjointly with Dr. Oliver, and his greatest influence can be seen in the large number of distinguished ophthalmologists who owe their training to him. From one point of view—that of the medical historian—the most important of Dr. Norris's publications is the "Early History of Medicine in Philadelphia," issued in 1886. Dr. Norris was not its author. The manuscript was found among the papers of his father after his death in March, 1875, and was printed "exactly as it stood." The work is extremely rare and very valuable, as only one edition consisting of 125 copies was printed for private distribution.

When he was thirty-three years of age, he was of massive frame, well rounded, not corpulent, with a large dome-like head, the blonde hair of a Norseman, trimmed in the conventional form, a full beard, light in color, fine in texture, a complexion ruddy with the tints of perfect, vigorous health, and a calm benignant manner, striking in one of his age, which found expression largely through his clear blue, unhesitating eyes.

He died November 18, 1901, in Philadelphia.

A list of his papers is given in the Surgeon-general's Catalogue, Washington, District of Columbia.

HARRY FRIEDENWALD.

NORTH, Elisha (1771-1843), of Connecticut, an early vaccinator, author of the first book on epidemic cerebrospinal meningitis, founder of the first eye dispensary in the United States, was born January 8, 1771, in Goshen,

Connecticut, and was destined to become one of the pioneers in certain lines of medical research. He early showed a predilection for medicine and at the age of sixteen is said to have cared for a broken leg with rare skill and success. Later he studied medicine with his father, Joseph North, who dabbled somewhat in the healing art, although his chief occupation was that of farming. Feeling the limitations in this preparation for his future career, the son came to Hartford to study under the then renowned Lemuel Hopkins (q. v.), and later spent, possibly, two years at the University of Pennsylvania. Returning to Goshen he practiced there until his removal to New London, in 1812. While living in Goshen, 1800, he carefully investigated the utility of vaccination. In the use of vaccine virus he met with considerable opposition at first, but seems eventually to have silenced the hostility of the public, although he claimed his practice of vaccination was not profitable, on account of the many, both experienced and inexperienced, who undertook to perform it. Besides being one of the pioneers in the study of vaccination, he early took up the investigation of epidemic cerebrospinal meningitis, when this dread disease appeared in this country in 1807, coming upon Goshen "like a flood of mighty waters, bringing along with it the horrors of a most dreadful plague." The malady completely mystified and baffled all the physicians who tried to cope with it; they found difficulty in giving it an adequate name; they were unable to classify it; they were at variance as to the best methods of treatment. With commendable care North sought to acquaint the public with this new and dread affection, by giving in book form the views of the various authors in this country upon it, as well as his own. His experience with it was very extensive and his treatment most successful, and though he attended more than 200 patients, yet he lost only two. The book was the first volume to be written upon this subject, the disease having been first recognized in Geneva in 1805. In the book, North details the symptoms pretty much as we now know them, including the joint affections. Unfortunately he never published the second edition, although he planned extensive alterations for it some thirty years later.

In 1812, when forty-two, he was invited to remove to the city of New London. The offer was too flattering to decline, so he accepted and spent the remaining years of his life in practice there. In 1817 he established, in New London, the first eye infirmary in the United States, which he thus refers to: "We had attended to eye patients before that time, but it occurred to us then that we might multiply our number of cases of that description, and thereby increase our knowledge by advertising the public in regard to an eye institution. This was done, and we succeeded; although not to our wishes in a pecuniary view of the case. Our success or exertions probably hastened in this country the establishment of larger and better eye infirmaries (i. e., for larger cities)." North was especially proud of his work, in this specialty, and in the title page of his "Outlines of the Science of Life" we find the words, under his own name, "conductor of an eye infirmary;" elsewhere he writes: "I have had the pleasure to prevent total blindness and restore sight to twelve or thirteen persons, during the last three years. These would now probably be moping about in total darkness, and be a burden to society and to themselves, had it not been for my individual exertions." He was active in the work of the State Medical Society, which conferred upon him the degree of M. D. in 1813. In practice he exhibited a remarkable degree of caution, deliberation and careful reflection. "As a physician he enjoyed the confidence and friendship of his brethren, and was much valued for his philosophical habits of mind in cases of difficulty and uncertainty." His quaint humor is yet preserved in numerous, amusing anecdotes. After his death, the following was found in his ledger: "Mr. Blank, to doctoring you till you died, $17.50."

His writings consist of twelve titles (Bolton's bibliography); nine of them represent papers in the different daily and medical or scientific journals. In one of them he describes his "Operation of Lithotomy, by the Posterior Method;" another paper of interest as it details an epidemic of "Typhoid Fever in Goshen. During 1807." Other writings were "Hydrocele Capitus Infantum," "Cyenanche Trachealis," "Epidemic Cerebrospinal Meningitis," "Fuel and Phrenology." His three volumes are entitled: (1) "A Treatise on a Malignant Epidemic, commonly called 'Spotted Fever;'" (2) "Outlines of the Science of Life," (3) "The Pilgrim's Progress in Phrenology."

He married Hannah, the daughter of Frederick Beach, of Goshen, on December 22, 1797, and had eight children. One of his sons, Ford North, studied medicine but for-

sook it to teach elocution at Yale and gained some prominence also as a microscopist.

Dr. North's death occurred when he had reached the age of seventy-three, on December 29, 1843.

WALTER R. STEINER.

NORTON, Arthur Brigham (1856-1919), York Ophthalmic Hospital. For thirty-five mon K. and Sarah Jane Brigham Norton, was born in New Marlborough, Massachusetts, September 15, 1856. After an education in the New Marlborough Academy and the Great Barrington High School, he studied in the New York Homeopathic Medical College and Hospital and was graduated in 1881. The next year, he received the degree of "Oculi et Auris Chirurgus" from the New York Ophthalmic Hospital. For thirty five years, Dr. Norton was surgeon to the New York Ophthalmic Hospital and professor of ophthalmology in the College of the Hospital; from 1902 to 1907 he was professor of ophthalmology in his alma mater; and he was also oculist to the Hahnemann and Laura Franklin Free hospitals. He was the author of "Ophthalmic Diseases and Therapeutics," third edition, 1901, "Essentials of Diseases of the Eye," 1904, and founder and for ten years editor of "Homeopathic Eye, Ear, and Throat Journal." He was a member of various professional associations and president of the New York County Homeopathic Medical Society, the New York State Homeopathic Medical Society, the American Institute of Homeopathy, the American Society of Homeopathy, Ophthalmology, Otology, and Laryngology, and the National Society of Electro-Therapeutics.

On November 25, 1885, he married Leah Louise Pixley.

He died from pneumonia at his home, June 18, 1919.

NORTON, Rupert (1867-1914), hospital superintendent, editor, was born at Cambridge, Massachusetts, July 21, 1867, the second son of Professor Charles Eliot Norton, the friend and companion of Carlyle, Ruskin, Emerson, Lowell and many other prominent men at home and abroad. His early life was spent among scholarly and thoughtful people, from whom he derived high ideals of duty and service. He was graduated from Harvard University in 1888, later studied medicine in Germany and Boston, and received the degree of Doctor of Medicine at Harvard in 1893. He was appointed an assistant in medicine at the Johns Hopkins Hospital in the latter part of the same year, resigning after a service there of nearly two years to establish himself in medical practice in Washington, D. C. At the breaking out of the Spanish-American War in 1898, he offered his services and was appointed to take charge of a laboratory in connection with one of the large Southern camps, where he did much valuable pathological work until the close of the brief war. Later he was appointed a medical officer of the New York Life Insurance Company in Paris, where he remained until 1906, when the company discontinued its active work in France. In the same year he became assistant superintendent of the Johns Hopkins Hospital and held the position until his death.

Among other duties he had editorial supervision of the "Johns Hopkins Hospital Bulletin" and Reports, which he conducted in the spare moments snatched from active and absorbing administrative duties. His accurate scholarship, well-trained mind and discriminating and critical faculty are to be seen in these publications. His published writings, which were few, were on topics relating to medical education and hospital management. For many years the "Notes on New Books" in the "Bulletin of the Johns Hopkins Hospital" were largely written by him. Dr. Norton was interested in the social service of the hospital and gave much thought and time to it.

He died in Baltimore June 19, 1914, after a brief illness of typhoid fever.

HENRY M. HURD.

NORWOOD, Joseph Granville (1807-1895), physician and geologist, he was born in Woodford County, Kentucky, December 20, 1807, on his father's farm, about five miles from Lexington. His father, Charles Norwood, was a native of Westmoreland County, Virginia, and the son of John Norwood, an Englishman, who came to Virginia about 1740. From Joseph's birth it was decided by his father and the attending physician (Dr. Ridgley) that he should study medicine. Later a strongly expressed desire to become a banker resulted in his being placed with Mr. Jacob Winn, a banker and manufacturer of bale-rope and bagging, who entrusted him for three months with the conduct of his banking business while absent in the East. Joseph held the position for a year and then attended lectures in science, chemistry and electricity in Lexington which gave him a

taste for experimental science. At last, determining to study medicine, he entered Transylvania Medical School of which Dr. B. W. Dudley (q. v.) was dean, and graduated in 1836, with special honors; his thesis "On Spinal Diseases" being published in pamphlet form by the faculty. He now entered into practice and was called, in 1840, to the chair of surgery by the Madison (Indiana) Medical Institute. He published "Outlines on a Course of Lectures on the Institutes of Medicine." The year 1843 saw him elected to the chair of materia medica in the University of St. Louis. There he found his work and the investigation of geological problems, to which he had already devoted much time and thought, too great a task for even his iron constitution, and resigning in 1847 he accepted the position of chief assistant geologist, on the Geological Survey of the Northwest ordered by Congress, under Dr. D. D. Owen as chief. Two reports on the country, then only known to fur traders and Indians, appeared and received due commendation, leading to his appointment in 1851 as state geologist of Illinois. This position he held till March, 1858, when a political upheaval put a new party into power, and an end to his activity as geologist, for they refused the means to publish any of his reports, excepting his "Abstract of a Report on Illinois Coals." Immediately upon his removal from the directorship of the Illinois Survey, Dr. Norwood was offered the position of assistant geologist of the Missouri Survey, which he held two years, when, without having made any application, he was elected to the chair of natural science in the University of Missouri at Columbia, where he henceforth rendered important and highly valued services as teacher and investigator till his death in 1895.

Dr. Norwood was a man of broad and deep scholarship, courteous and dignified, much liked, and, aside from his scientific and professional attainments was well versed in foreign literature, reading German, French and Spanish with ease, and even took up in his eightieth year the study of Dutch to afford him a better insight into its literature than translations could furnish.

His writings were largely on geological subjects. His reports as State Geologist of Illinois, 1851-1857, were written, but not published.

OVERTON FITCH.

NOTT, Josiah Clark (1804-1873), who thought that yellow fever was of insect origin, was born March 31, 1804, in Columbia, Richland District, South Carolina, and died at Mobile, Alabama, March 31, 1873, on his sixty-ninth birthday. He was the son of Abraham Nott, a judge and politician, who was born in Saybrook, Connecticut, in 1767 and died at Fairfield, South Carolina, in January, 1830. Dr. Nott's father was a graduate of Yale College, and studied for the ministry, but did not take Orders. Dr. Nott received an A. B. from South Carolina College in 1824, began the study of medicine in the office of James Davis, M. D., of Columbia, South Carolina, and attended his first course of lectures at the College of Physicians and Surgeons, New York, then situated in Barclay Street, in the winter of 1825 to 1826, under Profs. Wright Post, Valentine Mott, John W. Francis, David Hosack, Samuel L. Mitchill, William James Macneven (q. v. to all), and a second course at the University of Pennsylvania; graduating thence in April, 1827. He was resident student at the Philadelphia Almshouse from September, 1827, to September, 1828, after which he became demonstrator of anatomy in the University of Pennsylvania, under Professors Physick and Horner. In 1829 he returned to Columbia, South Carolina, and began practice. In 1835 he went to Europe and spent that and the next year visiting the hospitals and studying medicine, natural history, and kindred sciences. In the latter part of 1836 he settled in Mobile, Alabama.

In March, 1848, Dr. Nott published in the "New Orleans Medical and Surgical Journal" a paper on yellow fever in which he took the ground that it was of "probable insect or animalcular origin." Starting with Sir Henry Holland's paper "On the Hypothesis of Insect Life as a Cause of Disease," he called attention to the fact that many insects such as the moth tribe, the night "musquitoes" and many of the aphidæ are rendered inactive by too much light, heat and dryness. This he thought explained the greater activity of the morbific cause of yellow fever at night. He said further: "The insect theory is perhaps as applicable to periodic as yellow fever. We can well understand how insects wafted by the winds (as happens with musquitoes, flying ants, many of the aphidæ, etc.) should haul up on the first tree, house or other object in their course, offering a resting place . . ." explaining why a row of trees or houses seemed to offer a barrier to the spread of the disease. He quoted the article mentioned above to the effect that "It is probable that yellow fever is caused by an

insect or animalcule bred on the ground, and in what manner it makes its impression on the system, is but surmise." Dr. Nott had observed no facts that led him to believe that the disease was transmissible; he noted the migrations of insects and thought that the history of the great epidemic of yellow fever affords very strong support to the insect theory, thus paving the way for the researches of Walter Reed fifty years later.

In 1857 Dr. Nott was called to the chair of anatomy in the University of Louisiana, but resigned it after one winter's service to resume his profession in Mobile, and in 1858 founded the Medical School in Mobile, where he lectured two years on surgery, when the college was broken up by the war. During the Civil War he served on the medical staff of General Bragg. Soon after the close of the war he left the South, and in 1867 went to Baltimore, Maryland, remaining one year, and in April, 1868, removed to New York City. Here he soon took a prominent position as an able and accomplished physician and gynecologist. Skene, in his "Diseases of Women," says "coccyodynia" was first described by Dr. Nott in the "North American Medical Journal," May, 1844, but it attracted little attention until 1861, when Sir J. Y. Simpson revived the subject and gave it the name of "coccygodynia." Nott has also an article on "Extirpation of Os Coccyx for Neuralgia," in the "New Orleans Medical and Surgical Journal," 1844-45.

His first writing appears to have been a translation of Goupil's Exposition of the New Medical Doctrine with an essay on Leeches by the translator; 271 pp. Columbia, S. C., 1831. This and Animal Magnetism, a lecture delivered before the Mobile Franklin Society, Charleston, 1846, were timely topics. Contributions to bone and nerve surgery appeared in Philadelphia in 1866.

He was an untiring student and indefatigable worker, ever ready in public or private to advance science. During his short career in Baltimore, he read numerous papers bearing evidence of a well-trained mind and ripe scholarship. Besides contributing extensively on professional and kindred topics to the medical journals of New Orleans, Charleston, Richmond, Philadelphia and New York, he published several ethnological works, which attracted great attention in Europe as well as the United States. Among these are "Two Lectures on the Connection between the Biblical and Physical History of Man" (1849); "The Physical History of the Jewish Race" (1850); "Types of Mankind" (1854); and "Indigenous Races of the Earth" (1857). The last two were prepared in connection with Mr. George R. Gliddon. The object of these works was to refute the orthodox theory of the unity of the human race, by showing that the present types of mankind lived about the Mediterranean Sea 3,000 B. C., and that there is no evidence that during the last 5,000 years one type has been changed into another.

NOURSE, Amos (1794-1877), of Bath, Maine, destined to be versatile as a man and as a physician, was born in Bolton, Massachusetts, December 17, 1794, educated at Andover Academy, graduated from Harvard in the class of 1812, and studied medicine with Dr. John Randall of Boston. After some years, during which his career is not discoverable, we find him in 1819 a partner of Dr. Ariel Mann of Hallowell. Here he remained practicing until 1844, when, having entered the current of politics, he moved to Bath, Maine, where he was collector of customs for several years. Side by side with this position, he maintained regular consulting hours, kept up his studies, and, as a result, became known as a good obstetrician, and in 1846 was appointed lecturer on that topic in the Medical School of Maine. He lectured steadily until 1854, when he accepted the chair of medicine in the same school, and filled it until the year 1866. After resigning the position of collector at Bath, he was elected judge of probate of Sagadahoc County, and filled that position for twelve years. To show his versatility, and the general esteem in which he was held, we may mention that in 1861 the governor of Maine appointed him to fill a vacancy in the United States Senate, which he might have held permanently for life had he so desired. Although not educated for the law, his ability, culture and common sense, his ideas of justice and his impartiality combined with strict integrity fitted him for the faithful discharge of his duty as judge of probate. He was a member of the Maine Medical Society, and later, of the Maine Medical Association, with whose interests he was identified from their formation. His address as president of the association in 1865 was on "The Faults and Defects in the Cultivated of our Profession." In 1864 he wrote for the "Boston Medical and Surgical Journal" a paper on "Menstruation." As a teacher, his instruction was sound, and he was particularly noted for his personal interest in seeing that pupils

understood what he said. If he discovered in conversation that he had not been understood, he improved his lecture at the next opportunity.

Amos Nourse had one or more strokes of paralysis at a good old age and died after what might be called an illness lingering but not painful. He passed away at Bath, April 7, 1877, aged eighty-two, revered and honored.

JAMES A. SPALDING.

NOYES, Henry Dewey (1832-1900), New York ophthalmologist, was born in New York City in 1832 and was graduated from New York University A. B., 1851, A. M., 1854, and M. D. from the College of Physicians and Surgeons in 1855. After serving three years on the resident staff of the New York Hospital, and spending a year in study in Europe, he entered upon the practice of diseases of the eye and ear, 1859, in New York. He was assistant ophthalmic surgeon in the New York Eye and Ear Infirmary, 1859 to 1864, surgeon from 1864 to 1900, and executive surgeon from 1875 to 1898; professor of ophthalmology and otology in Bellevue Hospital Medical College from 1868; one of the founders of the American Ophthalmological Society in 1864 and president from 1878 to 1884. His special ability lay in his fine teaching powers and his keen clinical observation, to which his very numerous publications from 1860 to 1898 attest. He was among the first in this country to use cocaine as a local anesthetic in ophthalmic surgery. His text-book on diseases of the eye, published in 1890 (second edition in 1894), was one of the best. He died at Mount Washington, November 12, 1900.

HARRY FRIEDENWALD.

NOYES, James Fanning (1817-1896), ophthalmologist and otologist of Detroit, was born August 2, 1817, on a farm near Kingston, Rhode Island, a direct descendant of the Rev. James Noyes, Puritan and Nonconformist, who emigrated from England and settled in Newburyport, Massachusetts, in 1634. Dr. Noyes went as a boy to the private schools near his home, ill health preventing his taking a college course. In 1842 he began to study medicine with Dr. Joseph F. Potter, of Waterville, Maine, and in 1844 took a course of lectures at Harvard Medical School; and in 1845 one at Jefferson Medical College, Philadelphia, graduating M. D. in 1846. After some post-graduate work in New York City, Dr. Noyes was appointed assistant physician in the United States Marine Hospital at Chelsea, Massachusetts. In 1849 Noyes began active work at Waterville, Maine, where he soon secured a large practice. In 1851 he removed to Cincinnati, Ohio, to form a partnership with his former preceptor, Dr. Potter. The year 1855 was spent in Europe studying ophthalmology at Berlin, with A. von Graefe and Richard Liebreich. In 1859 he again returned to Europe and studied in Paris with Desmarres and Sichel. In 1863 he settled in Detroit, where he remained till his retirement in 1886, being the second regular physician to practice ophthalmology and otology in Michigan. He was a founder of the Detroit Academy of Medicine, president in 1873; member of the Michigan State Medical Society; of the American Ophthalmological Society and the American Otological Society. He was honorary member of the Texas State Medical Society; member of the Ohio State Medical Society; of the Rhode Island State Medical Society; and of the Maine Medical Society. In 1869 he was elected professor of ophthalmology and otology in Detroit Medical College, a position held for ten years. In 1872 he was president of the Detroit Academy of Medicine. From 1866 to 1880 he was ophthalmic and aural surgeon to St. Mary's Hospital, Detroit; and from 1863 to 1886, ophthalmic and aural surgeon to Harper Hospital, Detroit; from its foundation to 1886 he was ophthalmic and aural surgeon to the Detroit Woman's Hospital. He took great interest in the Oak Grove Insane Asylum at Flint, Michigan, and erected an amusement building known as "Noyes Hall."

Under a gruff exterior, Dr. Noyes carried a warm and sympathetic heart. If a patient gave instant attention and unquestioned obedience, Dr. Noyes was a most delightful doctor. To others he gave such attention as would inculcate proper respect for the profession. In general practice Dr. Noyes had a reputation for daring and skilful surgery and till his death nothing held so much interest for him as a well performed surgical operation. He was among the first to treat strabismus by the tucking method. His first operation was done March 3, 1874, and published in the "Transactions of the American Ophthalmological Society," p. 274. It differed from the modern tucking in that the tendon was divided and the ends sufficiently overlapped to correct the deformity and then stitched together.

He made many contributions on ophthalmological subjects to the "Detroit Review of Medicine and Pharmacy" and to the Transactions of the Michigan State Medical Society and other publications.

Dr. J. F. Noyes never married. He died in Providence, Rhode Island, February 16, 1896, from "heart failure."

LEARTUS CONNOR.

O'CALLAGHAN, Edmund Bailey (1797-1880). As a rule it is not a difficult matter to trace the life work of one who has devoted the greater part of his life to historical writings, but not so with Dr. O'Callaghan, the historian of Dutch Colonial New York; for some reason or other very little is said in relation to him in any of the well-known books on biography, except as found in the general encyclopedias. From a medical standpoint I have been unable to find anything recorded that would tend to show that he had accomplished anything more than would have come to the lot of the general practitioner. This may have been because his later work as a historian so overshadowed his labors as a physician, that no record was made of what he did or may have accomplished in that direction, but there seems to be no question that for a number of years he practiced the healing art and rendered service in behalf of suffering humanity in Europe, Canada and the United States.

It has been recorded that he was born in Mallow, County Cork, Ireland, February 29, 1797. His eldest brother, Theodore, held a commission in the English Army, the other brothers, Eugene and David, became priests and were distinguished for their learning. On completing his education in Ireland, Edmund went to Paris in 1820 to study medicine. In 1823 he emigrated to Quebec, where he was admitted to the practice of medicine. In 1827 he took an active part in the National Patriotic Movement and in 1834 became editor of its organ, "The Vindicator." He was elected a member of the Provincial Parliament, and in 1836 became secretary of the Association called "The Friends of Ireland," taking an active part in its deliberations. After his election he moved an address to the Governor in regard to the complaints against Judge Gale and on the 6th of November, the Doric Club, a Tory organization, attacked the office of his newspaper and completely destroyed the type, presses and material. He also took part in the action at St. Denis, where Colonel Gore and his associates in the "Vindicator" were repulsed and after this unsuccessful attempt to free Canada, he came to the United States. Lord Gosford on November 29, 1837, offered a reward for his body, on a charge of high treason. The first residence of Dr. O'Callaghan in the United States was at Saratoga, where he was the guest of Chancellor Walworth. In 1838 he resumed the practice of medicine in Albany, where he edited the "Northern Light," an industrial journal. The anti-rent agitation of the time led him to study the rights of the patroons. This study opened up to him the rich and neglected old Dutch records in the posession of the state. He mastered the Dutch language in order to facilitate his researches, and received the appointment of keeper of the historical manuscripts in the office of the Secretary of the State of New York. This office he held from 1848 to 1870.

Dr. O'Callaghan received the degree of M. D. from St. Louis University in 1846 and that of LL. D. from St. John's College, now Fordham University, in 1856. The doctor was commissioned by the New York Legislature to search the archives of London, Paris and The Hague and to make notes of documents bearing on New York Colonial History. The labors he performed in this direction, judging from the number of volumes, must have occupied all his time for many years, and the accuracy of his work is indicated by the references that are made by historical writers of today, whenever the subject matter of colonial history of the state of New York is under consideration. Dr. O'Callaghan was highly esteemed for his medical learning, but his claim on posterity rests upon his historical writings; the clearness of his style and the accuracy of detail in his narratives gives authority to these writings, which constitute a mine of original information. Among his published works are the following: "History of the New Netherland or New York under the Dutch," 2 vols., 8vo., 1846, Second Edition, 8vo., 1848, New York; "The Documentary History of the State of New York," 14 vols., 8vo., 1856-1883. The first ten volumes embrace the documents procured in Holland, England and France by John Romeyn Broadhead in 1855-1861. These volumes contain many scarce historical tracts relating to the history of New York State, its towns, Indian massacres, and speeches and other important historical matter not to be found elsewhere. Other works were: "The Register of the New Netherland," 1626-1674, 8vo., p. 198, Albany, 1865; "Cal-

ender of Dutch, English and Revolutionary Manuscripts in the Office of the Secretary of State," p. 423, Albany, 1865-1868. He contributed two volumes on the subject of religion: "Jesuit Relations, a Bibliographical Account," 8vo., 1847. Issued in French at Montreal, 12mo., 1850; "List of the Editors of the Holy Scripture and the parts thereof printed in America previous to 1860." Albany, 1860, 8vo., p. 415. Also at different times, eight papers in the French language relating to churches and missions.

Dr. O'Callaghan died at his residence in New York City, May 27, 1880, of inflammatory rheumatism. He was married twice, his second wife surviving him.

WILLIAM SCHROEDER.

OCHSNER, Albert John (1858-1925), Chicago surgeon, son of Henry and Judith Hottinger Ochsner, was born April 3, 1858 in Baraboo, Sauk County, Wisconsin. Albert grew up on his father's farm in Honey Creek until at sixteen he returned to Baraboo for better schooling, then for three years taught in rural schools, working on the farm at odd times, to become in 1880 principal of a graded school in Ironton. Nights of study enabled him to enter the University of Wisconsin in 1881, where he took the B. S. in three years with highest honors. After graduation from Rush Medical College in 1886, he was an interne at the Presbyterian Hospital of Chicago. Not only had he supported himself throughout his college life, latterly by tutoring in histology and embryology, but he managed as well to save enough to study in Vienna under Bilbroth, Kolisko, and Paltauf; returning, he made a stop in London for examination before the Royal Microscopical Society, which thereupon conferred on him the F. R. M. S. Later, he became an honorary fellow of the Royal College of Surgeons, Ireland.

On April 3, 1888, he married Marian A. Mitchell of Chicago and again set out for Europe to spend six months at the University of Berlin with Virchow, Koch, von Bergmann, Olshausen, and Martin, and a month in Hamburg with Schede. After several years of general practice, he limited his field to general surgery and from 1900 to 1925, occupied the chair of clinical surgery of the University of Illinois College of Medicine. During the World War, he rose from lieutenant in the U. S. M. R. C., 1908-16, to the rank of major. The Augustanar Hospital, Chicago, was his chief surgical forum where visitors were welcomed from all parts of the world.

Ochsner was president of the Clinical Congress of Surgeons of North America, 1910-12, a founder of the American College of Surgeons, of which he was regent and treasurer, 1913-25, and also president, 1923-24, and he was president of the American Surgical Association in 1924. He was an editor of "Surgery, Gynecology, and Obstetrics". His writings include: "Handbook on Appendicitis" (2nd edition 1906), "Clinical Surgery for Instructing Practitioners and Students" (6th edition, 1905), "Thyroid and Parathyroid Glands", 1910, "Organization, Management, and Construction of Hospitals" (2nd edition, 1913), "Treatise on Surgical Diagnosis and Treatment", 1918, also many monographs.

Indefatigable industry, sound judgment, fearlessness in operating, a kindly manner and gentle persuasive voice characterized him. A marked fondness for fine horses persisted through life. Making ready for an early morning ride, he was stricken with angina pectoris and succumbed July 25, 1925.

O'CONNELL, Joseph John (1866-1916), New York alienist and hygienist, was born in Brooklyn, New York, in 1866. Dr. O'Connell's special work was in psychiatry and he did notable work in sanitation. He was graduated at the Long Island College Hospital in 1887. For several years he was sanitary inspector of the Contagious Disease Bureau of the Brooklyn Board of Health; he was lecturer on hygiene in the New York University, lecturer on public health in the Long Island College Hospital and "ex officio" a member of the New York City Board of Health. He was health officer of the port of New York, and brought about important changes in the quarantine service, one of which was the construction of the Quarantine Pathological and Bacteriological Laboratory; he worked out the scheme of cleansing the person and clothing of typhus patients to prevent spreading the disease. He was examiner in lunacy for New York City and alienist of Kings County Hospital; he was visiting physician to St. Mary's Hospital and the Hospital for Mental and Nervous Diseases, and surgeon to St. Mary's Female Hospital. He wrote: "The Possibility of Choleraic Infection of the Waters of New York Bay;" "The World War and Maritime Commerce."

Dr. O'Connell died at his home in the Quarantine Station, Staten Island, January 1, 1916, of myocarditis.

O'DWYER, Joseph (1841-1898), the inventor of intubation, was born in Cleveland, Ohio, October 12, 1841, and shortly after, his parents moving to Canada, he was brought up and educated not far from London, Ontario, beginning medical studies under a Dr. Anderson and coming up to New York to attend lectures at the New York College of Physicians and Surgeons. Graduating there in 1866 and shortly after obtaining by competitive examinations the post of resident physician at the City Hospital of New York, on Blackwells Island he did good service but twice contracted cholera, when that disease was rife. His next post was examiner of patients for the City Board; he settled in New York in partnership with Dr. Warren Schoonover, and in 1872 was appointed to the place where he did his life work, at the Foundling Hospital. In 1891 St. John's College conferred on him an LL. D.

In the year 1872 a bad epidemic of diphtheria was in the hospital and forty or fifty per cent. of the children were, in those anteserum days, doomed, doctors and nurses being helpless to check the disease or to alleviate the horrors of asphyxiation. O'Dwyer, ingenious, reflective, a lover of children, began to ponder the situation. He often saw the inefficacy of tracheotomy, introduced by Trousseau in Paris, and began to devise some method of providing a channel for the passage of air through the larynx, and at first devised a small bivalve speculum, which accomplished a little but not much; the small patient, however, breathed with comparative ease for sixteen hours before death. An improved tube brought recovery in the second case and O'Dwyer's twelve years of labor and thought were rewarded. But the tubes were full of faults and O'Dwyer continued to work until he had perfected the instrument. The first mention of the "tube" occurs in a recorded history of the "dead-book" of the Foundling Hospital, April 25, 1884. His originality has been doubted, yet although there were many others on the same path he was the one to reduce the idea of intubation to practical utility. There was some opposition too in the Foundling Hospital, as he seemed to be adding to the torture of the children by experimentation, and some of the specialists in children's diseases had given the new method a trial and failed. A thorough discussion of the method was held at a meeting of the Academy of Medicine of New York, and it was a source of bitterest disappointment to O'Dwyer that many authorities on children's diseases agreed that his invention was of small service. Little by little, however, the advantages were seen and also in stenotic diseases of the larynx. It was characteristic of the real philanthropist to find O'Dwyer turning with equal eagerness to study and to use anti-toxin as soon as it was introduced, continuing its use when others were almost discouraged by the difficulty of determining a dose and the complications which followed.

Dr. Northrup, speaking of O'Dwyer, said, "In the maternity service he was the expert obstetrician; in intubation an inventor and teacher, in general medical service the constant consulting mind whose opinion in times of clinical difficulties and troubles everyone sought."

For nearly ten years after his wife's death he continued a large practice though never quite the same man again. He worried about his patients and was a poor sleeper. He was of a rather melancholy disposition and loved sad songs and stories. In December, 1897, he began to develop some anomalous symptoms pointing to a serious pathological condition within the skull. The prominent New York consultants could not agree as to the cause and a postmortem did not entirely clear up the doubtful diagnosis. On January 7, 1898, after being lethargic for some days, Dr. O'Dwyer died, having reached the maturity of his powers and with the consciousness of having done good work.

He married Catherine Begg, and had eight sons; four of them died when young, of the "Summer Complaint," so says the eldest son. The other four, Joseph, Frank, Launcelot and Victor, grew to manhood.

Among his writings, chiefly contributions to medical journals, are: "Analysis of Fifty-six Cases of Croup Treated by Intubation of the Larynx," 1888; "Intubation in Chronic Stenosis of the Larynx." 1888.

OGDEN, William Winslow (1837-1915), one of the leading medical practitioners of the city of Toronto, was born in the township of Toronto, County of Peel, July 3, 1837. He received such primary education as the schools of his native place supplied in those early days, and then went to the Toronto Academy (since extinct), at that time connected with Knox College. He afterwards attended Victoria College until he was eighteen, taking the ordinary arts course, and then taking the medical course in the Toronto School of Medicine, graduating with honors

in medicine from Toronto University in 1860, and at a later date in the same science from Victoria College, Cobourg. He settled in Toronto, where he spent his entire life. In 1869 he was appointed lecturer on medical jurisprudence and toxicology in Toronto School of Medicine, and lectured on these subjects and that of diseases of children, from that date until 1887, when, on the creation of the medical faculty of Toronto University, he was made professor of forensic medicine, which included toxicology and medical psychology.

He took a deep interest in all educational matters, and was a member of the Toronto Public School Board for forty-four years; from 1906 to 1911 he was on the Board of Education, Toronto. During this long period of public service he was universally liked and trusted by the teachers. The influence he had in the school board was very great and always used for the betterment of the educational methods and standards of the city. He was chairman of the board several times. He took an active part in city politics, being a staunch reformer, and during his long and useful life sacrificing largely in time and labor to advance the cause he had so much at heart.

He married Elizabeth Price McKeown in 1862, who survived him, as did also his two daughters.

He died at his home in Toronto, April 22, 1915, from heart disease, aged seventy-seven.

O'HAGAN, Charles James (1821-1900), of Greenville, North Carolina. The son of a newspaper editor, he was born in Londonderry County, Ireland, September 16, 1821, and attended school at Belfast, completing his course at Trinity College, Dublin, and coming to this country in 1842. He taught school in North Carolina, first at Kinston, then at Hookerton and finally at Greenville, where he afterwards permanently settled. He received his medical degree from the University of New York in 1847, and was president of the Medical Society of North Carolina in 1870. During the Civil War he served the Confederacy as surgeon throughout the four years, leaving behind him an honorable record. His chief duty was with the 30th North Carolina regiment attached to the brigade of Gen. Matt W. Ransom.

Dr. O'Hagan built up an extensive practice in Greenville and became the leader of his profession in that community. He was widely sought for as a consultant. Many years before the external application of water in disease was advocated he had systematically bathed his fever cases. One of the best of the very few papers he ever wrote was on "Veratrum Viride in Puerperal Eclampsia." ("North Carolina Medical Journal," May, 1879, vol. iii.) He was an important factor in the professional and social life of his time, and might have had high political honors, had he desired them. His personality was striking, his wit racy, of the soil whence he sprung; his sarcasm keen, but genial; his intellect trained and cultivated.

He was married twice, first to Eliza Forest in 1864, who died in 1871, leaving two children, and in 1877 to Elvira Clark, who bore him one child, and died in 1889. He died at his home December 18, 1900, of apoplexy.

His portrait by Jacques Busbee, the gift of the North Carolina Medical Society, was presented to the State Library on October 29, 1902, Senator Ransom delivering the oration.

HUBERT A. ROYSTER.

Ohlmacher, Albert Philip (1861-1916), pathologist, bacteriologist of Chicago and Detroit. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 862.

OLIVER, Charles Augustus (1853-1911), Philadelphia ophthalmologist, one of the authors of Norris and Oliver's "Text-book of Ophthalmology" and one of the editors of Norris and Oliver's "System of Diseases of the Eye," was born at Cincinnati, Ohio, December 14, 1853, a son of Dr. George Powell Oliver (the founder and first president of the Medico-Chirurgical College of Philadelphia). He removed in very early childhood with his parents to Philadelphia, graduated at the Philadelphia Central High School, and received the degree of M. D. in 1876 from the University of Pennsylvania. Having served a year as resident physician in the Philadelphia Hospital, he was appointed clinical clerk to Dr. William F. Norris (q. v.), professor of ophthalmology at the University of Pennsylvania. From 1890 until his death he was attending surgeon and secretary to the surgical staff at the Wills Eye Hospital. In 1894 he was made ophthalmic surgeon to the Philadelphia Hospital. He was appointed associate clinical professor of ophthalmology in the Woman's Medical College in 1897, and full clinical professor in 1906. He was for a time consulting ophthalmologist to the Friends' Asylum for the Insane and to the

State Hospital for the Chronic Insane of Pennsylvania. He was a member of fifty-six scientific societies in America, and of thirty-three abroad. A tireless worker, like many another gifted physician, he was early obliged to pay the penalty for overwork. Having acquired a chronic nephritis, with cardiac complications, he died suddenly from an attack of acute pulmonary edema, at his home in Philadelphia, April 8, 1911.

Dr. Oliver's writings were very numerous. The journal articles alone, inclusive of abstracts and reviews, are said to amount to "several hundred." His books were left to Harvard University and to the University Club of Philadelphia; his pictures to Lafayette College, Easton, Pennsylvania. His estate, outside his books and pictures, consisted of only $15,000, for he had been very generous. Of this amount one-third was given to the Wills Eye Hospital, another for the foundation of a prize in ophthalmology, while the remainder went to the College of Physicians of Philadelphia for the purchase of ophthalmologic journals.

THOMAS HALL SHASTID.

OLIVER, Daniel (1787-1842), a highly educated and versatile physician, was born in Salem, Massachusetts, September 9, 1787, the son of Rev. Thomas Fitch Oliver of old New England stock. After finishing his classical course at Harvard in 1805, he was graduated M. A. from Dartmouth in 1807 and M. D. from the University of Pennsylvania in 1810, received the "ad eundum" M. D. of Dartmouth, and settled in Salem where, in association with Reuben D. Mussey (q. v.), he built up a large practice. He was appointed lecturer on chemistry at Dartmouth in 1815, professor of the theory and practice of medicine in 1820 and of physiology and materia medica as well in 1825. He lectured on medical jurisprudence in 1836 when he resigned to fill the chair of mental philosophy for two years. In 1840 he followed Mussey to Cincinnati and lectured for a term on materia medica and pathology in the Medical College of Ohio. Health failing, he came East to live in Cambridge, Massachusetts, and died of cancer of the throat, June 1, 1842.

Oliver was a classical scholar of reputation and with Dr. J. Pickering of Dartmouth edited a Greek dictionary, which was a standard for years. His only important medical publication, using Albrecht Haller's title, "First Lines of Physiology; Designed for the use of Students of Medicine," 1835 (3rd edit., 1844), evidences a scholarly acquaintance with literature, chiefly French; it describes a successful operation for cancer of the breast in a patient in magnetic sleep. In a sympathetic quotation from Laplace, he says, "We are so far from being acquainted with all the agents in nature and their different modes of action, that it would be unphilosophical to deny the existence of phenomena merely because in the present state of our knowledge they are inexplicable," showing the large minded point of view always characteristic of progressive spirits in science. At the time of his death, he was preparing a book on pathology. He played several instruments, particularly the piano. He was modest, reserved, and dignified, deeply religious and a biblical scholar of note.

OLIVER, Fitch Edward (1819-1892), Boston physician and antiquarian, was born in Cambridge, Massachusetts, November 25, 1819, and died in Boston, December 8, 1892. He was descended from a distinguished line of ancestors, prominent in Massachusetts. Thomas Oliver, the emigrant ancestor, came from London to Boston in 1632, and practiced medicine there. His son Peter and grandson Daniel were prominent merchants, and the latter was a member of the Governor's Council. Dr. Daniel Oliver, the father of Fitch Edward, was a man of ripe scholarship and wide learning, a professor of philosophy at Dartmouth College for many years and lecturer on chemistry and materia medica in the medical college at Dartmouth as well. Fitch Edward Oliver received his early education at the Franklin Academy, at North Andover, and at Hanover, New Hampshire, entering Dartmouth College in the autumn of 1835. He was graduated in 1839 and during the winter of 1839-40 attended a course of lectures at Harvard Medical School. In 1840 he attended a similar course at Dartmouth Medical School, and in the same year he went with his father, then lecturing at the Medical College of Ohio, to Cincinnati, where he took another course. He returned to Boston in 1841, where he studied medicine with John S. Butler (q. v.) and later with Oliver Wendell Holmes (q. v.). In 1843 he was graduated from Harvard Medical School among the first of his class. He was immediately elected a fellow of the Massachusetts Medical Society, and continued in membership until his death. After traveling in Europe for a year, he returned to Boston in 1844, opened an office, and continued in

practice for forty-eight years. Among the positions of importance held in Boston may be mentioned: editor of the "Boston Medical and Surgical Journal," 1860-1864; visiting physician at the Boston City Hospital, from its opening in 1864 to 1872, then consulting physician of this institution; instructor in materia medica in the Harvard Medical School, from 1860 to 1870. As a physician Dr. Oliver brought to his duties fresh and abundant learning, conscientiousness and unsparing devotion. With H. I. Bowditch (q. v.) and six others he revived the Boston Society for Medical Operation, in 1846; in 1869-1870 he was instructor in materia medica in Harvard Medical School. But he was deeply interested in many subjects lying beyond the limits of his profession, especially in the history of Massachusetts, in which his family had borne a conspicuous part. He prepared for the press in 1880 a manuscript diary of current events, covering the social life of the Massachusetts Bay Colony from 1690 to 1780, illustrated with many valuable notes. He also made an important contribution to our Revolutionary history by publishing, in 1884, the journal of Hon. Thomas Hutchinson, Chief Justice and Governor of the Province of Massachusetts Bay at the breaking out of the Revolution. In 1878 he completed a copy of Rev. William Hubbard's "General History of New England"; the original work had disappeared, and the only copy in this country was defective, but after much search and labor Dr. Oliver obtained from England the necessary manuscript by which to complete this interesting history from 1620 to 1680. In 1890 he edited and carried through the press a diary left by William Pyncheon of Salem, Massachusetts, which covers the years from 1776 to 1789 and gives a vivid picture of early social life in Salem. His annotations are models of conciseness and faultless English. In 1876 Dr. Oliver was elected a resident member of the Massachusetts Historical Society, and four years later was appointed its cabinet-keeper. He was an ardent lover of his kindred and owned many family portraits by artists of note, and made a valuable collection of "Oliverana," comprising the publications of those bearing the name, discourses, lectures, engravings and memoirs in manuscript and in print.

Dr. Oliver was a member of the ritualistic Church of the Advent in Boston from 1847, three years after its establishment, until the end of his life, a period of forty-five years. He was thoroughly identified with its inception, growth and all its labors.

He married Susan Lawrence Mason, granddaughter of Amos Lawrence, a distinguished merchant of Boston, July 17, 1866. Mrs. Oliver and six children survived him. In social life Dr. Oliver was modest, courteous and dignified, and always an interesting and agreeable companion. In his later years he retired mostly from the practice of medicine, but not from intellectual and literary work. With the instincts and habits of a scholar he investigated widely, systematically and thoroughly.

OLIVER, James (1836-1918), biographer of the Oliver family, one of the honored and well-known citizens of Athol, Massachusetts, his native town, died February 8, 1918, at his home in Athol Highlands, at the age of 81 years. Dr. Oliver had for many years been a leader in Athol affairs and was for well over half a century practicing physician in that town. Some years before his death he retired to enjoy his later years in the political field. He represented the district in which he lived for four years in the House of Representatives of the General Court. In both military and health affairs he took an active part, serving as chairman of military and health committees. Dr. Oliver was the third of the same name to be born in Athol, and was the only son of James Oliver. He was born June 28, 1836. When he was seventeen he taught school at a salary of $14 a month. Later he taught in North Orange and Phillipston and at intervals attended the local high school. He also taught in both the Athol grammar and high schools. In 1860 he began the study of medicine with Dr. J. P. Lynde, finally becoming a practicing physician in 1862. At the outbreak of the Civil War he was commissioned an assistant surgeon in the 21st Regiment. At the second battle of Bull Run he was left in charge of the sick and wounded, was taken prisoner, but later managed to escape. He participated in the great battles of South Mountain and Antietam, and was later promoted to be surgeon of the 21st Regiment, on May 26, 1864. He went through many battles and was finally mustered out on July 30, 1865. After a residence of a few years in South Carolina, where he engaged in planting and cotton raising, Dr. Oliver returned to Athol, where he resumed his medical practice. He was much interested in the social affairs of his town, the G. A. R., the Grange, the schools

and town business generally. He was a prominent figure in town meetings, where he showed much strong common sense. In debate he was an able speaker and could hold his own with the best speakers in Athol and in the State Legislature. He was a member of the Athol Lodge of Masons and a leader in the old First Unitarian Church.

During his life he held several town offices, being for a long period of time a member of the school board, and for many years medical examiner of his district. For about twenty years he was chairman of the Cemetery Commission of Athol, and rendered most valuable service.

In 1916 Dr. Oliver published his autobiography, a book of 150 pages, in which he gives the history of the Oliver family from the date of the first settlement in Athol of the four brothers, John, James, Robert and William Oliver, who came to Athol from Hatfield in 1735. This autobiography is a most interesting and entertaining work, full of sketches of the life in Athol, anecdotes, stories, and accounts of events occuring before and during the Doctor's life. The book gives an account of the author's own life, his early trials amid straitened circumstances, his schooling, teaching, medical training. His story of his experiences in the Civil War is full of interest. Many of the Doctor's addresses before the Legislature are also comprised in this book, including those on health and military matters.

In 1876 he married Miss Kate Johnson, daughter of the late George T. Johnson. Mrs. Oliver died some years before him. They had two children.

Personally, Dr. Oliver, often called "Athol's grand old man," was delightful to meet and know. He was a great favorite in the Legislature.

OPPENHEIM, Nathan (1865-1916), pediatrist and eminent authority in the psychology of childhood, was born in Albany, New York, October 17, 1865, son of Gerson Oppenheim and Theresa Stein. He graduated at Harvard University in 1888, then entered the College of Physicians and Surgeons, New York, to study medicine, taking his M. D. in 1891. He was attending physician to the Children's Department of the New York Red Cross Hospital; the New York Children's Hospital and Schools; and the Children's Department of Sydenham Hospital. He wrote: "The Development of the Child" (1899); "The Medical Diseases of Childhood" (1900); "The Care of the Child in Health" (1901); "Mental Growth and Control" (1902).

In 1897 Dr. Oppenheim married Bertha Elsberg, of New York.

He died at the Hotel Belmont, New York, April 5, 1916.

ORDRONAUX, John (1830-1908), medico-legal expert, only son of John and Elizabeth Charreton Ordronaux, was born in New York City, August 3, 1830. His father, a Frenchman, served on the American side in our second war with England, at one time commanding the privateer "Prince of Neufchatel." The father dying in 1841, the lad was adopted by John Moulton, who owned the property now known as the William Cullen Bryant estate, at Roslyn, Long Island. Ordronaux received his A. B. at Dartmouth in 1850, later an A. M., and in 1852, an LL. B. at Harvard. For two years he practiced law at Taunton, Massachusetts, then removed to New York. He received an Hon. M. D. from Columbian University (D. C.) in 1859. On the breaking out of the Civil War Ordronaux was made examining surgeon for volunteers in Brooklyn, and in 1864 was appointed assistant surgeon of the 15th Regiment, National Guards, State of New York. During his services in these capacities he published the first American work on military hygiene, "Hints on Health in Armies," and also a "Manual for Military Surgeons on the Examination of Recruits and Discharge of Soldiers." His most important works were "Jurisprudence of Medicine" (1869) and "Judicial Aspects of Insanity" (1878), both of which went through several editions. He also wrote copiously for the medical and legal press. But, though Dr. Ordronaux was widely known as a writer on legal medicine, it is chiefly as a teacher of that important branch that his fame will always rest. For forty-eight years he was professor of this subject in various prominent schools of law and medicine, and probably under his care a larger number of doctors and lawyers have received their instruction in legal medicine than under any other man. His teaching record is as follows: 1860-1898, Columbia Law School; 1873, Columbian University Law School and 1873, Columbia University Law School and Medical School, Washington, D. C.; 1865-1873, University of Vermont, Medical Department; 1872-1889, Boston University Law School. In 1870 he received the degree of LL. D. from Trinity College, Hartford, Con-

necticut, and in 1895 the same degree from Dartmouth.

Dr. Ordronaux was a small, slender, frail-looking man ("of the ramrod type," as one of his army comrades expressed the matter) but very well built and wiry. His hair was red, in later life white. His complexion was absolutely pallid, his eyes were keen, luminous, and dark. He was slow, methodical, and thoughtful, except when excited; then he was rapid indeed, and voluble. He was a bachelor, and lived a simple, frugal life at Roslyn with a widow and her family, after her death obtaining quarters with a neighbor who continued to take care of him when at home up to the time of his death. He was so very sensitive that the slightest physical hostility, or even opposition which savored of hostility, caused the doctor, like the leaves of a sensitive plant, when touched, to fold up within himself. If, when he was testifying as expert in court, the cross-examination became of an overbearing or browbeating character, he could scarcely (as he often informed his friends) refrain from bursting into tears. He was pertinacious and stuck to his guns, but the mental and emotional strain was unduly great, and sometimes made him ill. He had few friends, in the ordinary acceptation of the word, but everyone who knew him loved him. He was fond of children, but they seemed to stand in awe of him, to feel that here was a being beyond their comprehension; and this was always a matter of great regret to the good doctor. Among his intimate friends were Joseph White Moulton, the historian (with whom he made his home for a number of years) and also William Cullen Bryant and Parke Godwin. He was fond of books, and was an authority upon them; yet he had not a large library. He had ample means, but motives of prudence and economy would ever cause him to consider the advisability of purchasing.

He was a communicant of the Episcopal church at Roslyn, and a regular attendant at the services, and most earnest in his responses and singing. During the absence of the rector he would occasionally conduct the services himself and read a sermon—usually one of Jeremy Bentham's. As a veteran of the Civil War, on Memorial Day, and at the funerals of deceased members of his Grand Army post, he would don his uniform and march with the rest.

The doctor was a man of enormous intellectual activity. Not only did he attempt to keep up with all the advances of medicine and law, but he was a profound theologian. He was reported to have, and doubtless did possess, a greater knowledge of theological dogma and ecclesiastical history than the great majority of accredited ministers and professors of theology. He never practiced medicine actively, but, in the legal profession, was recognized as a keen, close reasoner, and, though he had but little reputation as a lawyer before the public, was employed to write briefs in many of the celebrated cases which occupied public attention from 1900 back to the early seventies. His work as a lawyer was done in the same way that all of his labor was performed, quietly and without ostentation.

He was a man of great melancholy at times, and on such occasions was well-nigh inaccessible even to his intimates.

He died on the morning of January 20, 1908, having been stricken with cerebral hemorrhage the previous afternoon.

THOMAS HALL SHASTID.

Ormsby, John S. (1806-1876), of Pennsylvania, California and Nevada. See Cyclopedia American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii. p. 229.

O'REILLY, Robert Maitland (1845-1912), Major General United States Army, retired Surgeon-General of the Army from September 7, 1902 to January 14, 1909, was born in Philadelphia January 15, 1845, and died in Washington November 3, 1912. His parents were John and Ellen Maitland O'Reilly. His ancestors settled in Pennsylvania before the Revolution and were a branch of the distinguished Irish family to which belonged that General O'Reilly who was Captain General of Cuba and at one time Spanish governor of Louisiana. Robert began the study of medicine when a youth and in the summer of 1862 was appointed an acting medical cadet at the Cuyler General Hospital at Philadelphia. As a medical cadet he continued in the service until his discharge, when he matriculated at the University of Pennsylvania, from which he was graduated in 1866. In May, 1867, he entered the Medical Corps of the Army and served for some years on the frontier. He served twice in Washington, the first time from 1882-89 and the second from 1893-97, on each of these tours he was the physician and intimate friend of President Grover Cleveland.

At the outbreak of the Spanish-American War, Major O'Reilly was appointed chief surgeon of the 1st independent division. On May 20, 1898, having been commissioned a lieutenant colonel and chief surgeon of volunteers, he became chief surgeon of the 4th army corps, with which he served at Tampa, Florida, and Huntsville, Alabama. He served in Cuba from November 16, 1898, to November 11, 1899, most of the time as chief surgeon of the division. After his return to the United States he became chief surgeon of the Department of California and held this position until appointed surgeon-general.

General O'Reilly is closely associated with the advancement of the Medical Department. The outbreak of the Spanish War found the department in common with other staff departments insufficiently equipped in personnel and materials, and as a result it was greatly criticised. The Dodge Commission appointed by President McKinley to investigate the Army, made its report on the Medical Department in the form of recommendations, all of which with one exception were carefully met by General O'Reilly, and that one, the establishment of a volunteer hospital corps in time of war, was before Congress for some time as a part of a general law for the raising of volunteer troops. During General O'Reilly's term, the Medical Corps was reorganized, the Medical Reserve Corps created, and typhoid prophylaxis recommended for use in the Army. In connection with the latter, it should be stated that General O'Reilly was president of the board that recommended its adoption. In 1903 General O'Reilly collaborated with Major William C. Borden in a monograph on military surgery which was published in the fourth edition of Keen's "American Textbook of Surgery" (Philadelphia, 1903, pp. 1286-1307).

General O'Reilly was a man of delightful charm of manner, always courteous and possessed of an unusual wit. His death was greatly mourned by his many friends.

DOUGLAS F. DUVAL.

ORTON, George Turner (1837-1901), pioneer physician, legislator of Ontario and Manitoba, Canada, born in Guelph, Ontario, January 19, 1837, was the son of Dr. Henry Orton, a pioneer of Western Ontario and a scion of a family of doctors, for besides his father and his grandfather, two uncles and three brothers were doctors. The eldest brother was surgeon-major in the British Army, serving in the Crimean War and the Indian Mutiny. After receiving his early education in the Guelph public schools he was sent to Trinity College, Dublin, but completed his course at St. Andrew's University, Scotland, where he took his M. D. in 1860, and in 1861 he was elected member of the Royal College of Surgeons, England. After completing his medical course, Dr. Orton returned to Canada and began to practice at Fergus, Ontario, in 1862, where he remained till 1879, when he removed to Winnipeg, Manitoba. In Fergus, he soon built up one of the largest practices in the province, and was besides surgeon to the Thirtieth Battalion, Wellington Rifles, and for three years Reeve of the town. His wide influence as a physician undoubtedly made his entrance into political life easier than it would otherwise have been, but his ability as a statesman retained him there. His interest in public affairs, and the development of Canada in general, was such that he was elected to the House of Commons in 1874, and represented the constituency continuously for fourteen years. During the Rebellion in the Northwest Territories in 1885, he was brigade-surgeon under General Middleton and was present at the engagements of Fish Creek and Batouche. On his return to the House of Commons at the next session he was given an enthusiastic ovation by members of both sides of the House.

He married Annie Farmer in 1862, by whom he had two daughters.

He died at home in Winnipeg, November 14, 1901, of pneumonia.

JASPER HALPENNY.

OSLER, Sir William (1849-1919), great clinician, scientist, teacher, a founder of the Johns Hopkins Medical School, medical historian, bibliophile, and humanitarian, was born July 12, 1849, in Canada, descendant of a family said to have produced more distinguished men than any contemporary family in the Commonwealth and son of a Cornish canon, F. L. Osler, of Falmouth, England. Originally intended for the Church, he entered college in the expectation of becoming a clergyman, but after graduating in arts from Trinity College, Ontario, in 1868, he matriculated at McGill University, Montreal, and received his M. D. in 1872. Following the long-time custom of the ambitious, he spent two years in London, Berlin, and Vienna, devoting himself to microscopic work —the new impetus in medicine in America, —and returned to become lecturer then pro-

fessor of the institutes of medicine at his alma mater. His interest in blood work culminated in W. S. Thayer's pioneer volume. The study of skin diseases under Tilbury Fox accounted for a continued interest in the skin changes in disease. During this sojourn, also, he met Jonathan Hutchinson whose remarkable powers of observation and interest in rare things which had escaped others ever remained a source of wonder and inspiration. At twenty-five, Osler described the blood platelets associated with Bizzozero's name and defined their status as a third corpuscle of the blood. In 1884, he accepted the professorship of clinical medicine in the University of Pennsylvania; while there he became the life-long friend of S. Weir Mitchell (q. v.) and bade fair to oust the brilliant William Pepper from his primacy. Early in 1889, Osler undertook the organization of the medical service in the as yet unopened Johns Hopkins Hospital, Baltimore and occupied the chair of medicine in the University, anticipating the building up of a medical school on new lines. Perhaps his greatest work, in intimate cooperation with William H. Welch, was this new school which was opened in 1893. It was Osler who insisted on superabundant clinical instruction and threw the stress of education on bedside teaching. At a farewell banquet given him in New York, on his departure for England in 1905, he declared that he wished to be remembered for one thing, "He taught clinical medicine in the wards."

During this busiest and most constructive period of his life at the Hopkins was born Osler's great textbook, "The Principles and Practice of Medicine" (1892) which yet lives to defy his prediction in a deprecatory preface which frightened the publishers, that any textbook must of necessity be an ephemeral thing. In it he appears for the first time as the apostle of scientific rational medicine and in no little degree of a therapeutic nihilism, in the boldest and the greatest protest ever made against the polypharmacy of the current and preceding generations. He wrote on the cerebral palsies of children (1889), chorea (1894), abdominal tumors (1894), angina pectoris (1897), cancer of the stomach (1900). "Aequanimitas" (his life motto: Imperturbability, Serenity), with addresses to medical students, practitioners, and nurses, appeared in 1904. He discovered the parasite in verminous bronchitis in dogs—filaria osleri (1877) and was the first to emphasize the relation between mycotic aneurism and mycotic endocarditis and he described the ball-valve thrombus at the mitral orifice and the visceral complication of erythema exudativum multiforme (1895) and chronic polycythemia known as Vaquez' Disease (1908).

Osler's life in Baltimore marked a great activity in the building up and service of the library of the Johns Hopkins Hospital and of the Medical and Chirurgical Faculty of Maryland, both of these important educational adjuncts growing under his fostering care by leaps and bounds. He was also intimately known in many other libraries, such as the Boston Medical Library where he and the polished debonair J. R. Chadwick (q. v.) met on congenial ground and the Library of the New York Academy of Medicine; McGill is indebted to him as well as the fine library of the Academy of Medicine of Toronto. Numerous precious gifts of ancient medical lore to these libraries always carried a note of personal interest, greatly enhancing their value. With George M. Gould (q. v.) he was the prime mover in the National Medical Library Association. In Baltimore, the ever fruitful Book and Journal Club owes its birth to him. Not to miss the humanizing effects of a broader culture, he urged upon his students a bedside library of ten books,—the Bible, Shakespeare, Montaigne, Plutarch, Marcus Aurelius, Epictetus, Religio Medici, Don Quixote, Emerson, and Holmes. It was Osler, Welch, and Hurd, and their spirited coadjutors, who gave life and vigor to the Johns Hopkins Medical and Historical Societies. Through Osler, the older men, Sydenham, Mead, Garth, Linacre, Thomas Brown, Harvey, John Brown, Beaumont, John Bright, Graves, and Addison, resuscitated, came once more into our classes to teach, for he was ever a lover of original sources. He founded the Laennec Society for the study of tuberculosis and through his efforts the Phipps Tuberculosis Clinic was endowed by its generous patron.

The call to the regius professorship of medicine and fellowship at Christ Church at Oxford took him to England in 1905, where in 1911, he was created baronet by King Edward VII, his title, Sir William Osler, Bart., to descend to his son, Revere, at death.

A bibliography of his works and numerous addresses, prepared by Miss Minnie Wright Blogg and issued by the Johns Hopkins Press to honor his seventieth birthday, contains several hundred titles; he wrote no monu-

mental scientific monographs after the fashion of his day but was ever alert for less known diseases and studied intensively those which were familiar. He was interested in erythromelalgia, Raynaud's disease, hemophilia, angioneurotic edema, polycythemia, and sundry others little known when he began to discourse upon them. Much of his work appears in the Johns Hopkins Hospital Bulletins and Reports under the names of his residents and chiefs of clinic.

He was a Fellow of the Royal College of Physicians, honorary member of many eminent bodies, president of the American Association of Physicians (1895); he delivered the Gulstonian Lecture (1885), the Cartwright (1886), the Ingersoll (1904), and the Harveian (1906). He became president of the Bibliographical Society of London in 1912. His elaborate monograph, "Incunabula Medica—A Study of the Earlier Printed Medical Books, 1467-1480," unfinished at death, was published by the Bibliographical Society for whom it was intended, in 1923, with a foreword by A. W. Pollard. One of his later honors was the presidency of the Classical Association at Oxford in 1919. He was most active as a curator of the Bodleian Library, and the "Bodleian Quarterly Record" was started at his suggestion and with his support.

For years, he had been working on a catalogue of his rich library, with historical and biographical essays and notes; it is now being completed by a relative, Dr. W. W. Francis. The books were bequeathed to McGill University.

In 1892, Osler married the widow of his warm old friend, Samuel W. Gross (q. v.), formerly Grace Linzee Revere of Boston, and a happier more congenial marriage can not be found in medical annals. Mrs. Osler became at once an active co-partner in all his interests,—in every conceivable way a true helpmeet. Both loved hospitality, and their home "The Open Arms" was the asylum of all visiting Americans. In his last year, they entertained over sixteen hundred guests at their friendly board.

In August, 1917, a crushing blow fell upon them in the death of their only son, Second Lieutenant Revere, in action near Ypres.

Thayer writes: "Osler was a true Celt. A Celt in appearance, of a very dark, almost olive complexion, with a rather long drooping black mustache. A Celt in his charming vivacity and brilliancy and in his sparkling wit. Not large, but well built, with a wiry, athletic figure, a long, swinging, active gait, a peculiarly mobile face, serious and almost stern when at rest, and deep, dark brown eyes, with an irresistible humorous twinkle; deep clear eyes, so clear that although they might seem sometimes unfathomable, they told at a glance of a pure, kindly, loyal spirit behind."

Sir William died at his home in Oxford, December 29, 1919, from pleurisy, empyema (drained), and pneumonia, following a bronchitis due to exposure while journeying to a consultation. He thus paid his tribute to the disease he had long taught his students to call the "old man's friend."

His life has been written briefly by various friends, Welch, Garrison, Thayer, and in delightful fulness by Harvey Cushing. His portrait in a group by John Singer Sargent (1905) hangs in the Johns Hopkins University, and another by Thomas E. Corner is in the Osler Room of the Medical and Chirurgical Faculty of Maryland. A bust by Hans Schuler is in the University.

HOWARD A. KELLY.

OTIS, Fessenden Nott (1825-1900), genito-urinary surgeon of New York, a son of Oran Gray and Lucy Kingman Otis, was born in Ballston Spa, Saratoga County, New York, May 6, 1825. His family came from England to Hingham, Massachusetts, late in the seventeenth century, and his immediate ancestors settled in Ballston before the Revolution. He was first a pupil at the local public schools, then began to study medicine at the New York University in 1848, finishing at the New York Medical School, where he received his degree in 1852. After serving as interne at the Charity Hospital, New York, he became a surgeon to the Pacific Mail Steamship Company, and lived in Panama. He remained in the steamship company's employ until 1859; in 1860 he settled in New York and took up general practice.

He was first lecturer and in 1871 professor of venereal and genito-urinary diseases in the College of Physicians and Surgeons. His principal writings were upon genito-urinary disease, although he contributed some well-known articles on syphilis. His volume of six hundred pages, entitled "Practical Lessons on Syphilis and Genito-urinary Diseases," 1883, was an exhaustive work on the subject. He was the inventor of the Otis Urethrometer and the Otis Dilating Urethrotome. He was a member of the New York

State and County Medical societies and the New York Academy of Medicine.

In 1859 he married Frances H., daughter of Apollos Cooke, of Catskill, New York. During the last years of his life ill health compelled him to abandon active practice, and he died in New Orleans, May 26, 1900.

J. Mc F. WINFIELD.

OTIS, George Alexander (1830-1881), curator of the Army Medical Museum, and editor of the surgical volumes of the "Medical and Surgical History of the War of Rebellion," died at Washington, D. C., February 23, 1881, at the comparatively early age of fifty years. His great-grandfather, Ephraim Otis, was a physician who practiced at Scituate, Massachusetts. The father of Otis, also George Alexander Otis, married Maria Hickman, and George Alexander was born in Boston, Massachusetts, November 12, 1830. In 1846 he entered Princeton College and received the degree of A. B., in 1849, and the college conferred upon him the degree of A. M. in 1852. In the fall of 1849 he went to Philadelphia, and matriculated in the medical department of the University of Pennsylvania. That institution conferred upon him the degree of M. D. in April, 1851. During a stay in Paris Otis made diligent use of the opportunities afforded for professional improvement. Moreover, he took a deep interest in the stirring panorama of French politics, as shown by a series of letters he took time to write to the "Boston Evening Transcript." In the spring of 1852 Otis returned to the United States and established himself at Richmond, Virginia, where he opened an office for general medical and surgical practice, and where his tastes and ambition soon led him to embark in his earliest enterprise in the domain of medical literature. In April, 1853, he issued the first number of "The Virginia Medical and Surgical Journal." Dr. Howell L. Thomas, of Richmond, was associated with him as co-editor, but the financial risk was assumed entirely by Otis. Its most striking characteristic was the number of translations and abstracts from current French medical literature which appeared in its pages. Otis had, by this time, become dissatisfied with his prospects of professional success in Richmond, and circumstances led him to select Springfield, Massachusetts, as his place of residence. Another journal, "The Stethoscope," was united with "The Virginia Medical and Surgical Journal," with McCaw as editor, and Otis as corresponding editor, until 1859. The War of the Rebellion changed the whole tenor of his life. During almost the whole time Surgeon Otis accompanied his regiment—the 27th Massachusetts Volunteers—and shared its fortunes. January 22, 1864, he was detached and ordered to Yorktown, Virginia, to assume the duties of surgeon-in-chief of Gen. Wistar's command. June 26, 1864, he tendered his resignation and received an appointment as assistant surgeon of United States Volunteers, to date from June 30, 1864. At this time he renewed his acquaintance with Surgeon Crane, then on duty in the surgeon-general's office, and in 1864 Otis was assigned as assistant to Surgeon John H. Brinton (q. v.), curator of the Army Medical Museum, and engaged in the duty of collecting materials for the "Surgical History of the War of the Rebellion." The first half of the volume was occupied by the "Surgical Report" prepared by Otis. It was a thoughtfully arranged document, which excited the universal admiration of military surgeons in Europe as well as in America. The first was "A Report on Amputations at the Hip-joint in Military Surgery," published as "Circular No. 7," Surgeon-General's office, July 1, 1867. An examination of this monograph shows that he had already pretty well begun to emancipate himself from the leading strings of the French school, and had fully acquired the desire, so manifest in his subsequent work, to compare and weigh all accessible human knowledge on each branch of his subject before arriving at his own conclusions. The second of the studies was: "A Report on Excisions of the Head of the Femur for Gunshot Injury," published as "Circular No. 2," Surgeon-General's Office, January 2, 1869. During the interval between the appearance of these two volumes, and subsequently, Otis found time to prepare and publish several valuable reports on subjects connected with military surgery, one of which was: "A Report of Surgical Cases Treated in the Army of the United States from 1865 to 1871," issued as "Circular No. 3," from the Surgeon-General's Office, August 17, 1871. He was engaged at the time of his death on the third surgical volume, which he left in an unfinished condition; a colossal fragment. In 1869 Dr. Otis, then curator of the Museum, arranged with Secretary Henry of the Smithsonian Institution for the transfer to the museum of all human skeletal material, and by means of circulars and letters he so added to the anthropological collection of the Army Medical Museum, that

in 1873 they included approximately sixteen hundred crania of American aborigines and other races.

Otis received the appointments of captain, major, and lieutenant-colonel by brevet, to date from September 29, 1866, "for faithful and meritorious services during the war." He was promoted to be surgeon in the army, with the rank of major, March 17, 1880. He was elected a foreign member of the Medical Society of Norway, October 26, 1870; a foreign corresponding member of the Surgical Society of Paris, August 11, 1875, and an honorary member of the Massachusetts Medical Society in February, 1877. Until his last illness Otis retained much of the fondness for literature which characterized him in early life. Hesitating, often embarrassed in his manner in ordinary conversation, especially with strangers, he became eloquent when warmed by the discussion of any topic in which he took interest.

JAMES J. WALSH.

OTT, Isaac (1847-1916), writer and teacher of physiology, was born in Northampton County, Pennsylvania, November 30, 1847. His education was obtained at Lafayette College and at the University of Pennsylvania, where he took his M. D. in 1869, with a thesis on typhoid fever. After serving as a resident at St. Mary's Hospital he went abroad to study at the universities of Leipsic, Würtzburg and Berlin, and returning to America in 1873, he became lecturer on physiology at the University of Pennsylvania and held the position until 1878. In 1876 he settled in Easton, Pennsylvania, where he remained. Dr. Ott held the position of fellow in biology at the Johns Hopkins University in 1879 and in the same year was lecturer on physiology in the Medico-Chirurgical College of Philadelphia, becoming professor in 1894 and dean of the faculty in 1895. He was a most voluminous writer for the medical journals, largely on physiological topics, there being fifty-one titles in the catalogue of the Surgeon-General's Library. His largest work was his book on "The Action of Medicines," 168 pages, published in Philadelphia in 1898. He published a paper on poisonous mushrooms in the journal of "Nervous and Mental Diseases," January, 1877, 4, 48-53. His last work was a paper on Internal Secretions, which appeared in 1910.

He was consulting neurologist to the State Hospital at Norristown, Pennsylvania, and he was at one time president of the American Neurological Association.

He died at his home in Easton, January 1, 1916, survived by his widow, Katherine K. Ott.

OTTO, John Conrad (1774-1844), physician to the Pennsylvania Hospital, was the first in America to call attention to hemophilia in an article entitled "An account of an Hemorrhagic Disposition existing in certain families," that was published in the "Medical Repository," New York, in 1803. Dr. Otto's grandfather, a physician, emigrated from Germany and settled in Philadelphia in 1752. Having a European literary and medical training, he was highly thought of, served in the Revolution, attended the American army at Valley Forge and had charge of the hospital there during the winter of 1778. Dr. Otto's father, Dr. Bodo Otto, died of consumption at the age of thirty, leaving his widow with three small children, John being the youngest. John, who was born near Woolbridge, New Jersey, March 15, 1774, received an A. B. at Princeton College in 1792 and then entered the office of Benjamin Rush (q. v.) in Philadelphia as a student, in time becoming a favorite pupil, and getting his M. D. from the University of Pennsylvania in 1796. In 1798 he caught the yellow fever during the epidemic of that time and, on recovery, in the same year, became one of the physicians to the Philadelphia Dispensary, serving for a period of five years.

On the death of Dr. Rush, in 1813, Dr. Otto was appointed one of the physicians to the Pennsylvania Hospital, a position he held for twenty-two years, giving him an opportunity to become known as a forceful and clear clinical teacher and writer. His article on hemophilia, published in 1803, contained "some singular facts in regard to the occurrence of the most alarming, and even fatal, hemorrhages, after slight wounds or scratches, in the male descendants of a woman named Smith, in the vicinity of Plymouth, New Hampshire. The females of the family were exempt from the idiosyncrasy, but still were capable of transmitting it to their male children." In 1805 he published another paper on the same subject in Coxe's "Medical Museum," detailing the history of four fatal cases of hereditary hemorrhage occurring in the family of Benjamin Binny, of Maryland. Other papers on a variety of subjects are to be found in the "Eclectic Repertory," and

"North American Medical and Surgical Journal." Dr. Otto was physician to the Orphan Asylum and to the Magdalen Asylum for many years; he was a Fellow of the College of Physicians, holding the office of censor, and from 1840 until his death that of vice-president. In his practice he confined himself to the practice of medicine, avoiding surgery and obstetrics; in his social relations he was remarkable for simplicity and ease of manner; he was deeply religious, reading the Scriptures morning and evening, and favoring the Presbyterian sect.

In 1802 he married Eliza Todd, daughter of Alexander Todd, a Philadelphia merchant, and they had nine children. His eminently useful career was brought to a close by heart disease, June 26, 1844, in the 71st year of his age.

OUCHTERLONY, John Ardid (1838-1908), professor of medicine in Kentucky medical schools, was born in Gothenborg, Smalend, Sweden, June 24, 1838, his father, a captain in the army. He received his early education in Sweden, came to America alone in 1857, and settled in New York City, where he studied medicine with Dr. T. Gaillard Thomas (q. v.), and completed his medical studies in the medical department of the University of the City of New York, and there got his M. D. 1860. During 1861 he entered the United States Army as surgeon, and achieved notable success in his chosen work. In 1862 he was assigned to hospital work in and near Louisville. During his hospital service his skill and learning attracted much attention, and in 1864 he was elected lecturer on clinical medicine in the University of Louisville. He continued his army service in conjunction with his lectureship until the latter part of 1865, when he resigned from the government service and began private practice. He was one of the founders of the Louisville Medical College in which he was professor of materia medica, therapeutics and clinical medicine. He resigned from the Louisville Medical College in 1876, and for two years had no college associations. In 1878 he accepted the chair of principles and practice of medicine in the Kentucky School of Medicine, which he filled with marked success and ability until 1882, when he resigned to accept the chair of principles and practice of medicine and clinical medicine in the University of Louisville. He filled this chair from 1882 until his death. He had been president of the Medico-Chirurgical Society and of the Louisville Obstetrical Society. In 1890 he served as president of the Kentucky Medical Society; in 1891 he received from the Swedish Royal Academy of Sciences the Linnaean Gold Medal; in 1891, in recognition of his marked ability and renown, King Oscar of Sweden made him a Knight of the Royal Order of the Polar Star. In 1892 the University of Notre Dame conferred upon him the degree of LL. D. He was an honorary member of the Michigan State Medical Society, and had also served as vice-president of the American Medical Association. In 1894, in recognition of his ability and his devotion to his church, Pope Leo the XIII made Dr. Ouchterlony a Knight of the Order of St. Gregory the Great.

As a diagnostician he was preeminent. His extremely wide medical knowledge coupled with persistent and deep study and constant investigation gave him an extremely keen insight into the science of medicine. His contributions to medical literature were numerous. Perhaps one of his best known was a treatise in 1887 on the "Preventative Treatment of Tuberculosis." His studies were not confined to medicine alone, for he was distinguished as a scientist and a linguist, both here and abroad. He spoke five modern languages fluently and was thoroughly conversant with Greek and Latin. In 1863 he married Kate Grainger and had one son.

OSCAR W. DOYLE.

OUTTEN, Warren Bell (1844-1911), of St. Louis, pioneer in railroad surgery, was born December 3, 1844 in Lexington, Kentucky. He was graduated from the St. Louis Medical College in 1866 and became demonstrator of anatomy in his alma mater, and later professor of anatomy in the recently organized College of Physicians and Surgeons. During the cholera epidemic of 1866, he was acting assistant surgeon, U. S. A. His appointment in 1873 as local surgeon of the Iron Mountain Railroad at Carondelet, South St. Louis, began his real life work; when the Missouri Pacific and Iron Mountain medical departments merged, he became chief surgeon, serving for thirty years. As an authority on railway injuries, his work, "Railway Injuries; Their Clinical and Medico-legal Features," was widely recognized. He wrote an interesting sketch of Joseph Nash McDowell in the Medical Fortnightly for Mar. 25, 1908.

He died March 18, 1911.

Dr. Outten was honest, sincere, and charitable in his views and expressions, and attracted strong and lasting friendships. Music, art, and literature were his valued outlets.

Ouvière, Felix A. See Pascalis-Ouvière, p. 948.

OWEN, David Dale (1807-1860), geologist, had for father the well-known philanthropist celebrated for his coöperative experiments first in Scotland and later at New Harmony, Indiana. His mother was the eldest daughter of David Dale, merchant and Lord Provost of Glasgow. David was born at Braxfield House, New Lanark, Scotland, June 24, 1807. His early training included a course of architectural drawing and carpentering and a classical course at the Lanark Grammar School. This was followed by three years at the celebrated institution of Emmanuel Fellenberg, near Berne, Switzerland. David and his brother, Richard, selected chemistry in addition to the usual course and on returning to Scotland in September, 1826, studied under Dr. Andrew Ure at the Andersonian Institute in Glasgow. Soon after they left Liverpool in a sailing vessel, passed through the West India Islands and reached New Orleans about the last of December and arrived at New Harmony to join their father early in January, 1828. Here they began to practice with the chemical apparatus they had brought from Glasgow, and the two brothers worked together until 1831, when David returned to Europe to further qualify himself in chemistry and geology and worked under Dr. Turner at the London University. On returning the following year he fell a victim to Asiatic cholera and on recovery began to study medicine at Ohio Medical College in Cincinnati, with a view to improve himself in anatomy and physiology, as essential aids in the study of paleontology.

During the summers of these years Alexander Maclure, brother of the noted geologist, William Maclure, engaged Dr. Owen to arrange the extensive collection of minerals and fossils made by his brother and to distribute specific suites to colleges, the residue to form the nucleus of a museum. To this nucleus Owen added largely by purchase. After graduating M. D. in the spring of 1836 he went on a state geological survey with Dr. Gerard Troost, a journey undertaken by Owen, at his own expense, for the sake of practice. But in the next year he turned aside from things purely scientific in order to go to Switzerland to marry Caroline C. Neef, third daughter of Joseph Neef, the coadjutor of Pestalozzi, but he was soon at work again, this time as state geologist of Indiana, publishing his notes in 1838. His merits were recognized at the capital and he was deputed to survey the mineral possibilities of Dubuque and Mineral Point districts of Wisconsin and Iowa, some 11,000 square miles. His report was published in 1840. In one month from the time of beginning he had one hundred and thirty-nine sub-agents and assistants; had instructed the former in the elementary principles of geology; organized twenty-four working corps and furnished them with skeleton maps. In all this, Dr. John Locke (q. v.), of the Medical College of Ohio, was his valued helper. Such good work caused him to be appointed United States geologist and to be given the direction of the Chippewa land district survey. The preliminary report in 1848 has in it 323 lithographs from his original sketches, also numerous maps. A more full survey of an extended district occupied the next five years, and Congress made a large appropriation for its printing and illustration in finest style. The wood cuts in this volume of six hundred and thirty-eight quarto pages are by his brother Richard, while David for the first time brought the medal ruling style of engraving to bear on fossil specimens.

Gov. Powell, of Kentucky, selected Owen as state geologist in 1854, and the results of his survey occupied four large volumes, with maps and illustrations. Duties came thronging fast, for the Kentucky survey was not completed before Owen was made state geologist for Arkansas, but the second volume for this expedition was not quite finished when he died, though he dictated up to three days of his death.

Great and indefatigable perseverance marked Owen's life work. Although he found that the Arkansas summer surveys, often made in the rich malarial bottoms, injured his health and brought him home in the autumn in poor physical condition, he not only continued the surveys but continued his laboratory winter work far into the night. But the unrelaxed strain and attacks of cardiac rheumatism terminated his career on November 13, 1860. His wife, two sons and two daughters survived him.

His work as an artist deserves some mention, for, besides leaving some good paintings in oil of his family he richly illustrated his reports. He also sent to London on can-

vas in distemper, views of the fossil sigillaria found erect "in situ" twelve miles from New Harmony. These were presented by Sir Roderick Murchison at a meeting of the British Association for the Advancement of Science. Owen subsequently took Sir Charles Lyell to the locality. He was always eager to share his scientific pleasures and built at his own cost (some $10,000) a laboratory fully equipped in every respect, so fine also architecturally that he furnished the design for the Smithsonian buildings and carefully tested the various specimens of stone submitted.

OWEN, William (1788-1875), obstetrician and surgeon of Virginia, was born in Staunton, in that state, on the twelfth of January, 1788. Three years later his family removed to Lynchburg, then known as Lynch's Ferry, and there he spent his life. Beginning in a drug store, he pursued at the same time the study of medicine for three years under the guidance of able instructors, afterwards attending a course of lectures in the University of Pennsylvania, but being too poor to take at once the second course, and graduate, he therefore entered upon the practice of medicine, returning some years later to college and completing the course and receiving his degree in 1815, the subject of his thesis being "Mercurial Disease." He was a charter member and an honorary fellow of the Medical Society of Virginia, and the first president of the Lynchburg Medical Association. He was a man of great vigor and endurance and did an enormous amount of work, performing for many years nearly all the obstetrical and surgical operations in his town and the surrounding country. As early as 1816 he resected the entire shaft of the tibia, preserving the periosteum, the patient recovering with a useful limb. In 1832 he devised an anterior splint for fractured femur, which has ever since been in use in Lynchburg, and known as his invention. A gentle and kind man, he was much beloved by his patients. In spite of his enormous practice, he never forgot nor neglected the poor who needed his services, and died in very moderate circumstances, when he might have left quite an independent fortune, had he been less indulgent.

Dr. Owen married Miss Latham, a sister of Dr. Henry Latham, a physician of Lynchburg, and one of his sons, William O. Owen (q. v.), became a surgeon. After several years of failing health he died on the twenty-second of January, 1875, in the eighty-eighth year of his age.

ROBERT M. SLAUGHTER.

Owen, William Otway, (1820-1892), son of William Owen (q. v.), surgeon of Lynchburg, Virginia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto, 1920, page 872.

PACKARD, Frederick A. (1862-1902), internist of Philadelphia, born November 17, 1862, in that city, was the son of John Hooker Packard (q. v.), and Elizabeth Wood Packard. After receiving his preliminary education at Rugby Academy, he graduated from the Department of Arts of the University of Pennsylvania in 1882. He entered the Department of Medicine of the same institution and graduated at the head of his class in 1885, having during his course achieved a number of prizes for his work as a student. He was appointed a resident physician to the University Hospital. After completing that service, he was elected resident physician to the Pennsylvania Hospital and served in that capacity until the completion of his term, when he entered into practice in the city of Philadelphia. Dr. Packard very early achieved marked professional success. He was a very hard worker and possessed a most pleasing personality, in addition to professional skill of the highest order. He was especially interested in clinical laboratory work, and as that was the epoch at which microscopic examination of the blood and sputum for diagnostic purposes received its first great impetus, he early acquired reputation as a thorough, skilful, and progressive internist. He served at various times during his life as visiting physician to the Episcopal, the Methodist Episcopal, and the Philadelphia hospitals, but in his last years confined his services to two hospitals, the Children's and the Pennsylvania. His hospital work was always of the highest order and many of those who had served as internes under him still recall the enthusiasm for their profession with which he inspired them.

Dr. Packard was a firm believer in the educational value of the medical society and he took a prominent part in the procedures of many of them. He was a member of the following local Societies: The College of Physicians of Philadelphia; its Section on General Medicine; the Pathological Society; the Neurological; the County Medical Society; and the Pediatric Society. Of the state and na-

tional societies he was a member of the Pennsylvania State Medical Society; the Association of American Physicians; the American Pediatric Society and the American Medical Association. He served as president of the Pathological Society. At the time of his death he was chairman of the Section on General Medicine of the College of Physicians of Philadelphia.

From the long list of communications it is difficult to determine the most important. Those most extensively quoted are his papers on infection through the tonsils—the first a "Report of Five Cases of Endocarditis Occurring in the Course of Tonsilitis," read before the Association of American Physicians, May, 1899; the second the Wesley M. Carpenter Lecture on "Infection Through the Tonsils; Especially in Connection with Acute Articular Rheumatism," read before the New York Academy of Medicine, December, 1899. His contributions to the subject of Thermic Fever, based on the study of a large series of cases occurring in the Pennsylvania Hospital, were: "Report of Thirty-one Cases of Heat Fever Treated at the Pennsylvania Hospital During the Summer of 1887" ("Amer. Jour. Med. Sci.," 1888, N. S., xcv, 554-67); "Report of Ninety Cases of Thermic Fever Treated at the Pennsylvania Hospital in the Summer of 1901" (with Dr. Morris J. Lewis), read at the meeting of the Association of American Physicians, May, 1902 ("Amer. Jour. Med. Sci., September, 1902); and a paper on "Osteitis Deformans," read before the Association of American Physicians in May, 1901 ("Amer. Jour. Med. Sci"., November, 1901).

Dr. Packard married Katherine Shippen, a daughter of Dr. Edward S. Shippen, U. S. N. They had no children.

He died of typhoid fever at the Pennsylvania Hospital November 1, 1902.

FRANCIS R. PACKARD.

PACKARD, John Hooker (1832-1907), Philadelphia surgeon, was born August 15, 1832, at Philadelphia, Pennsylvania, a son of Frederick A. and Elizabeth Dwight Hooker. He graduated from the department of arts, University of Pennsylvania in 1850, and in the same university, from the department of medicine in 1853. He had for preceptor in medicine Joseph Leidy (q. v.), the eminent anatomist, to whose teaching he undoubtedly owed his fondness for and skill in anatomical pursuits. After graduation he went abroad and continued his medical studies in Paris. In 1855 he was resident physician to the Pennsylvania Hospital for eighteen months. He then began private practice and for many years was very active as a teacher, especially in anatomy, surgery and obstetrics. As time went on, however, he limited his work almost entirely to the practice of surgery. During the Civil War he was appointed acting assistant surgeon, United States Army, serving as attending surgeon to the Christian Street and to the Satterlee United States Army General Hospitals in Philadelphia, and as consultant to the Haddington Hospital, and to the hospital at Beverley, New Jersey. During the progress of the battle of Gettysburg, he received orders to report at the scene of action, and although quite ill at the time, from what subsequently developed into a very severe case of typhoid, he obeyed at once. For three days and nights he labored incessantly and then being unable to continue at work, was sent back to Philadelphia suffering from a nearly fatal attack of the fever. From 1863 to 1884 he was one of the visiting physicians to the Episcopal Hospital of Philadelphia, in 1884 visiting surgeon to the Pennsylvania Hospital, a position he held until his retirement from active work in 1896. He was also surgeon to St. Joseph's Hospital of Philadelphia. Dr. Packard was a member of the College of Physicians of Philadelphia, and vice-president from 1885-1888. He was the first Mütter lecturer in that institution from 1864-1866, his lecture being on "Inflammation." He was one of the founders of the Pathological and Obstetrical Societies of Philadelphia, and twice president of each. He was also one of the original members of the American Surgical Association.

Among his noticeable operations were two successful hip-joint amputations and a successful ligation of the internal iliac artery. In 1872 he published the first notice of the primary anesthesia from ether, and in 1880, an article in the "New York Medical Record" of May 22, on the value of an oblique incision in the skin in lessening the disfigurement of scars, that is still frequently referred to. In 1886, in a paper read before the Medico-Legal Society of New York, he suggested the use of a lethal chamber for the infliction of the death penalty, death to be caused by the abstraction of oxygen from the atmosphere and the introduction of carbonic acid gas.

Dr. Packard was a profoundly religious man, an Episcopalian. Although he rarely talked upon religious subjects, his belief was a vital part of his existence and colored all

the important actions of his life. He had very considerable artistic ability and much of his work was illustrated with his own pencil. In 1896 he infected himself in the course of an operation. Following the severe illness which ensued upon this accident, he retired from all active medical work. His culture, geniality and sense of humor endeared him to many friends, both contemporaries and also many of a much younger generation, with all of whom he maintained pleasant social intercourse.

His literary work, besides many contributions to current medical journals was as follows: A translation of "Malgaigne's Treatise on Fractures," 1859; "Handbook of Minor Surgery," 1863; "Lectures on Inflammation," 1865; "Handbook of Operative Surgery," 1870; articles on "Poisoned Wounds" and on "Fractures," in "Ashhurst's International Encyclopedia of Surgery," 1883; and on "Fractures and Dislocations," in "Keating's Cyclopedia of the Diseases of Children," 1889. He also published three editions of the "Philadelphia Medical Directory," in 1868, 1871 and 1873. In 1881 Dr. Packard edited the American edition of "Holmes's System of Surgery."

Dr. Packard married Elizabeth Wood, the daughter of George B. Wood (q. v.) June 3, 1858. Two sons followed the profession of their father, Frederick A. Packard (q. v.) and Francis R. Packard, medical historian and professor of the diseases of the throat and nose in the University of Pennsylvania.

A handsome oil painting of Dr. Packard was presented by the Ex-residents' Association of the Pennsylvania Hospital to that institution, and now hangs in the hall.

FRANCIS R. PACKARD.

Page, Alexander Crawford (1828-1899), practitioner of Truro, Nova Scotia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 874.

PAGE, Benjamin (1770-1844), one of the pioneer physicians of Maine, was born April 12, 1770, at Exeter, New Hampshire, son of the first Dr. Benjamin Page, who after his Revolutionary service practiced at Hallowell, and died October 28, 1824, aged seventy-six. In Andover, young Page studied medicine first with his father, then with Dr. Thomas Kittredge, after being educated at Phillips' Exeter Academy. He began practice at Hallowell in 1791, but after a year or so went to Boston, was inoculated with the smallpox and he and a friend passed the time of confinement practicing music. He returned to Hallowell and drew up plans for building a smallpox hospital in Winthrop, Maine. This plan, however, fell through, owing to Jenner's discovery of vaccination. He vaccinated early in Maine and devoted his time to it zealously for the rest of his life.

Previous to this, in 1790, Benjamin Page married Miss Abigail Cutler, of Newburyport, and she was a skilful nurse to her husband in times of sickness. They were never separated for a day for over forty years. Dr. Page was devoted to his profession and although not ambitious, enjoyed with complacency his unrivaled success. His access to the best medical library in New England, that of Dr. Benjamin Vaughn (q.v.) in Hallowell, helped him largely. He was excellent in the management of fevers and injuries, and his success in fractures was noted. He avoided calomel and bleeding when they were everywhere carried to excess. Better not used than abused, was his opinion. He was a remarkable obstetrician and is said to have brought into the world three thousand children without losing a mother or a child. In this branch of medicine he displayed wonderful tact and skill. He rarely used the forceps. Owing to his great diagnostic skill he was an unrivalled physician for children. An epidemic of spotted fever raged in Maine in 1812-14, during which he saved a large proportion of lives. James Thacher says that almost all of the cases were attended personally by Dr. Page, and that he is entitled to the greatest honor for his indefatigable industry at this time. He was well versed in Latin and French, and after attending Talleyrand and other distinguished Frenchmen who were journeying through Maine, Dr. Page was able to discuss their symptoms in their native language. It is averred that Talleyrand was so much pleased with his physician's treatment that he thanked him in a letter and enclosed five times the fee suggested. For many years he was at his best, had a very large practice in Central Maine and travelled extensively round about Hallowell, going sometimes as far as Canada on consultations. His standing with his professional brothers was of the highest, as is proved by the numerous letters received by him asking his advice in emergencies.

He was very communicative to his pupils, many of whom rode with him during his practice. He received from Bowdoin the honorary degree of M. D. in 1843. He was a

member of the Massachusetts Medical Society, and had an excellent medical library. He was a philosopher as he advanced in age, lived economically yet was generous to the poor. A man without rebuke in his own town, he never discussed politics or religion. Dr. Benjamin Page was large in stature, well formed, mild and benignant in countenance, of great intelligence and very cheerful. His head was small, his eyes sparkling and his face extremely vivacious. He was very suave, much given in later years to society, and a man very fond of company.

Dr. Page died of the after effects of smallpox, January 25, 1844, during an epidemic of this disease, after he had attended all the patients who went to the hospital.

He left a son, Dr. Frederick Benjamin Page, who distinguished himself as a physician in the South.

JAMES A. SPALDING.

PAINE, Martyn (1794-1877), founder of the New York University Medical School, was born at Williamstown, Vermont, July 8, 1794, and died in New York City, November 10, 1877. His death was caused by a compound fracture of the elbow joint. He was the son of Elijah and Sarah Porter Paine and was one of eight children. He was educated by private tutors who lived in his father's family, and among them may be mentioned Francis Brown, who later became president of Dartmouth College at Hanover, N. H. Martyn Paine received the degree of A. B. from Harvard University in 1813 and the degree of M. D. from the medical department of the same university in 1816. He was a pupil of Dr. John Warren (q. v.), in whose office he studied for two years, and upon the death of Dr. Warren in 1815 continued his medical studies under Dr. John C. Warren (q. v.). After graduation he practiced medicine in Montreal, Canada, until 1822, when he moved to New York City, where he lived during the remainder of his life.

To Dr. Paine's efforts the founding of the medical school of the University of the City of New York was largely due. In 1838, Dr. Paine and Drs. Charles A. Lee, Alfred C. Post, Gunning S. Bedford and A. Sidney Doane associated for the founding. Paine was the leading spirit and it was not until 1841 that the opposition of the College of Physicians and Surgeons had been overcome and Drs. Valentine Mott, John W. Draper, Granville S. Pattison, John Revere, Bedford and Paine formed the teaching staff of this medical school and it began under a charter from the Legislature, that Paine had been instrumental in obtaining. Dr. Paine was professor of the institutes of medicine and materia medica from 1840-1850 and from 1850-1867 of therapeutics and materia medica. After many years of active teaching he was made professor emeritus in 1867.

Among Dr. Paine's many contributions to medicine may be mentioned the Cholera Epidemic of New York, 1832; Medical and Physiological Commentaries (3 vols.), 1840-1844; Materia Medica and Therapeutics 1842; the Institutes of Medicine, 1847; the Soul and Instinct, distinguished from Materialism, 1848; Essay on Organic Life as distinguished from the Chemical and Physical Doctrines, 1849. In 1859 he published a number of articles to show the superiority of medical education in the United States over that in Great Britain. The Index Catalogue of the Surgeon-General's office gives a long list of lectures by Dr. Paine. He accomplished a great work for medical education in having the bill forbidding the dissection of the human body repealed in 1854. He spent much time in Albany, where he personally argued before the Legislature in favor of the repeal of this anatomical bill, and in spite of the popular feeling, he succeeded in securing enough votes so that dissection of the human body could be done without violation of law. This enabled medical students to dissect bodies which are obtained under legal restrictions, and did away with grave robbery.

Dr. Paine was a member of many local medical societies, including the New York Academy of Medicine. Among his foreign medical memberships may be mentioned the Royal Verein für Heilkunde, Gesellschaft für Natur und Heilkunde zu Dresden, also medical societies of Leipsic and of Sweden, and the Montreal Natural History Society.

The University of Vermont conferred upon him the degree of LL. D. in 1854.

He was married in 1825 to Mary Ann Weeks, the daughter of Ezra Weeks. They had three children.

FREDERIC S. DENNIS.

PALLEN, Montrose Anderson (1836-1892), gynecologist of St. Louis and New York City, was born in Vicksburg, Mississippi, January 2, 1836, and died in New York, October 1, 1892. His father, Moses Montrose Pallen (q. v.), was professor of obstetrics in the St. Louis Medical College for over twenty

years. Montrose was graduated A. B. at St. Louis University in 1853 and A. M. and M. D. at the same institution in 1856, then after spending two years in study abroad, he settled in practice in St. Louis. He was professor of gynecology in Humboldt Medical College, adjunct professor of obstetrics in the St. Louis Medical College, professor of gynecology in St. Louis College of Physicians and Surgeons, and professor of anatomy in the Missouri Medical College, holding all of these appointments between 1866 and 1874. In the latter year he was called to the chair of gynecology in the medical department of the University of the City of New York, and this he filled until 1882. During the Civil War he was medical director under Generals Wise and Hardee until 1863, and in the closing years of the war was sent to Canada and abroad on missions by the Confederate Government, finally being captured and held on parole in New York.

The Post-Graduate Medical School and Hospital was organized in 1883, partly as a result of Dr. Pallen's efforts. He was a surgeon to the Charity Hospital and a member of the New York Obstetrical Society. He contributed prize essays on the ophthalmoscope and on uterine anomalies to the American Medical Association in 1858 and 1869 and in later life furnished papers to the medical journals on a variety of subjects, but for the most part on gynecology.

In 1857 Dr. Pallen married Anne Elize, daughter of Louis A. Benoist of St. Louis, and they had two children.

PALLEN, Moses Montrose (1810-1876), St. Louis obstetrician, was the son of Zalma Pallen, a Polish officer, who served under Napoleon I, came to Virginia in 1800 and settled in King and Queens County, where Moses was born on April 29, 1810. The boy was educated at the University of Virginia and went to St. Louis in 1842. Among the professors of the St. Louis Medical College, none was more popular than Dr. Pallen, for he was indeed a teacher by nature, who adapted himself perfectly to the student classes of his time. He was of medium height, stocky build, an exceedingly solid looking man. He had a big head, well shaped, covered with a crop of gray hair; a broad round face, seemingly almost as equally broad as it was long. He wore a close cropped mass of side whiskers, his eyes were small and sparkling, his eyelids large and puffy. He had a strong fat nose, a large mouth with big lips, which were alternately relaxed and compressed fitfully at the command of his mind. A student, writing of him in the classroom, says: "His intense mind guides and forms his words, his memory is an ever-ready stock from which he draws capital to enhance the value of his discourse and compel truth itself. He tells you that when you approach the lying-in woman you are nearer to the throne of God than the stars of heaven are, that living is death and dying is life, and birth is both; that birth into this life is the death of the embryo-life. God grant that our earthly death may be our birth into a glorious new being. * * * * * *"

Moses Pallen's work bore fruit for fifty-eight years. Every detail of the lying-in period was placed before the student in its most effective light. His worth requires no interpreter and duty to him was as the voice of God. He was like necessity, he did everything well, never wild in his assertions, he always acted as he believed—that nothing is impossible to well directed labor. He held the chair of obstetrics in the St. Louis Medical College over twenty years and was also a founder and one time president of the St. Louis Academy of Science. This latter office he also filled with the St. Louis Medical Society. During the Mexican War he held a contract surgeonship in St. Louis for the United States Army.

He died in St. Louis on September 25, 1876. His wife was Janet Cochran, daughter of William Wallace Cochran, of Baltimore.

WARREN B. OUTTEN.

PALMER, Alonzo Benjamin (1815-1887), professor of medicine in the University of Michigan, was born October 6, 1815, in Richfield, New York, of Puritan parents; his father, a native of Connecticut, died when he was nine years old. His early education was at the schools and academies of Oswego, Otsego and Herkimer. In 1839 he took his M. D. from Fairfield Medical College, Fairfield, New York. After practicing twelve years at Tecumseh, Michigan, he removed to Chicago, where for two years he was associated with Dr. N. S. Davis (q. v.). Meantime he spent two winters in New York and Philadelphia studying in hospitals and clinics. During the cholera epidemic of 1852 he was city physician in Chicago and had charge of the cholera hospital, caring for about fifteen hundred patients yearly. In 1852 he was appointed professor of anatomy, medical depart-

ment, Michigan University, but from lack of funds never occupied the chair. In 1854 he was given the chair of materia medica and therapeutics and diseases of women and children, and in 1869 was transferred to the chair of pathology and theory and practice of medicine, which he occupied till death. In May, 1861, he was appointed surgeon of the Second Michigan Infantry and surgeon in Gen. Richardson's Brigade, at the first battle of Bull Run, and other operations of his regiment until he resigned in September. In 1864 he was professor of pathology and practice of medicine in Berkshire Medical Institution at Pittsfield, Massachusetts. In 1869 he was called to a similar position at the medical department, Bowdoin College, Maine, doing the work in the vacations at the other institutions. From 1854-60 he was an editor of the "Peninsular Medical Journal," and the consolidated "Peninsular and Independent Medical Journal," Detroit, and president, in 1872, of the Michigan State Medical Society. In 1875 he succeeded Dr. Abram Sager as dean of the medical department, Michigan University, and except for one year held the office till his death. In 1855 the University of Nashville, Tennessee, gave him the honorary A. M., and he had the LL. D., University of Michigan, in 1881. Above everything else he loved to lecture; one year to the same class he delivered one hundred and ninety-six lectures, half of them new. At any moment he was ready to fill a vacant hour in any course in the department, never regarding it a hardship.

In 1867 he married Love M. Root, of Pittsfield, Massachusetts, who survived him and perpetuated his memory by endowing the Palmer Ward at the University Hospital, also by erecting a tower on St. Andrew's Episcopal Church, of which he was a member. They had no children. Dr. Palmer died at his home in Ann Arbor, December 23, 1887, from septicemia.

Alonzo B. Palmer's most ambitious publication and towards which all other writings pointed was his "Treatise on the Science and Practice of Medicine, or the Pathology and Treatment of Internal Diseases," two volumes of about nine hundred pages each, published in 1882, followed by "A Treatise on Epidemic Cholera and Allied Diseases," of two hundred and twenty-four pages, Ann Arbor, Michigan, 1885. Many of his papers are to be found in the columns of the Transactions of the Michigan State Medical Society.

LEARTUS CONNOR.

Palmer, James Croxall (1811-1883), surgeon-general of the United States Navy. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 878.

PALMER, John Williamson (1825-1906), of New York, traveler, editor, prose writer and poet, was born in Baltimore, Maryland, April 4, 1825, the son of Edward Palmer, a merchant and descended from Edward Palmer, 1572-1625, the Oxford scholar and antiquarian, who in 1624 designed the foundation of the first college of arts in America on Palmer's Island, at the mouth of the Susquehanna. Dr. Palmer was graduated M. D. from the department of medicine of the University of Maryland, in 1846. He practiced for some years, being first city physician of San Francisco, 1849-50, and surgeon in the East India Company's service in the second Burmese War, 1851-52. After traveling extensively in China, Hindustan and other far Eastern countries, he returned to the United States in 1853 and abandoned medicine for literature. During the Civil War he was southern correspondent for the "New York Tribune"; attaché of the Confederate Government charged with singular and hazardous responsibilities skilfully and bravely discharged, and valued volunteer on the staff of Maj-gen. John C. Breckenridge. After the war he settled in New York City.

The following are the titles of some of his works: "The Queen's Heart," comedy, 1858; "The New and the Old, or California and India," 1859; "Up and Down the Irawadi," and "Folk Songs," 1860; "Epidemic Cholera," 1866; "The Poetry of Compliment and Courtship," 1867; "The Beauties and Curiosities of Engraving," 1879; "A Portfolio of Autograph Etchings," 1882; "After his Kind," 1886; "For Charlie's Sake and Other Lyrics and Ballads," 1901. He translated "L'Amour" (Michelet), 1859; "La Femme" (Michelet), 1859; "Histoire Morale des Femmes" (Legouve), 1860. Years before Bret Harte discovered the California of fiction, Palmer had revealed it in such stories as "The Fate of the Farleighs," "The Old Abode," "Mr. Karl Joseph Kraft of the Old Californians," and a number of others. He also contributed to the leading magazines and was one of the editors of the Century and Standard Dictionaries.

Palmer thus had a varied experience as traveler, editor, prose writer and poet, but it was especially in the last-named rôle that he achieved fame and success. As a lyric poet he shines preeminent among Americans.

His style is spirited and original, his language full of vigor, grace and pathos. He wielded the pen of a master and remarkable are the word-pictures he dashed off in the moments of his inspirations. His most famous poem was the Confederate war song—"Stonewall Jackson's Way"—composed within sound of the guns on the day of the Battle of Sharpsburg, September 17, 1862, a poem familiar to all Confederate soldiers. Some of these poems were published in 1901, under the title "For Charlie's Sake and Other Lyrics and Ballads." His poem "King's Mountain," a ballad of the Revolution, was published in the "Yale Alumni Weekly." His mind was clear and active up to his last illness and only about a year before his death he wrote what he considered his best poetic effort, "Ned Braddock."

Dr. Palmer died at Baltimore, from pneumonia, in his eighty-first year, on February 26, 1906. He married Miss Henrietta Lee, also an authoress, of Baltimore, in 1855, who survived him with one son.

EUGENE F. CORDELL.

PANCOAST, Joseph (1805-1882), noted anatomist and surgeon of Philadelphia, son of John and Anne Abbott Pancoast, was born in Burlington, New Jersey, on the twenty-third of November, 1805, the descendant of an Englishman who came to this country with William Penn. Joseph was graduated at the medical department of the University of Pennsylvania in 1828, and began to practice in Philadelphia. In 1831 making surgery his specialty he began to teach classes in practical anatomy and surgery. He was appointed physician to the Philadelphia Hospital (Blockley) and head physician to the children's hospital connected with it. In 1838 he was elected professor of surgery in the Jefferson Medical College, and in 1847, professor of anatomy in the same institution. He held the latter chair until 1874, when he resigned and was succeeded by his son, William H. Pancoast (q. v.). In addition, he was one of the surgeons of the Pennsylvania Hospital from March 27, 1854, until February 29, 1864. Many operations new to surgery were devised by him. Among them was one for soft and mixed cataracts. In this, a very fine needle, turned near the point into a sort of a hook, is passed through the front part of the vitreous humor, between the margin of the dilated iris and the lens, without touching the ciliary body. The advantage of this needle is that the soft part of the lens can be deeply cut and the hardened nucleus withdrawn, by a sort of horizontal displacement, along the line of entrance of the needle, the piece being left in the outer border of the vitreous humor. In 1841 he devised the plow and groove or plastic suture, in which four raw surfaces, the beveled edges of the flaps, and the margins of the groove cut by the side of the nose to receive the naps come together. He used this suture in all his rhinoplastic operations, and union almost invariably followed. He likewise devised an operation for empyema, by raising a semicircular flap of the integuments over the ribs, and puncturing the pleura near the base of the flap; putting a short catheter down to the inner end of the puncture, secured with a strong string, and forming thus a fistulous opening, to which the movable flap served as a valve when the catheter was removed. He demonstrated that often bad cases of strabismus are due to the fact that the oblique muscle is girdled by rigid connective tissue, and that the tendons must be drawn out with a hook and cut. For the occlusion of the nasal duct, in ordinary cases of epiphora, he introduced, by a puncture of the lacrymal sac, a hollow ivory tube from which the earthy matter had been removed and left it to slowly dissolve. He several times restored a voice that was unintelligible by cutting the posterior muscles of the velum palati and loosening any attachment it may have made to the pharynx. He performed four times with success a lumbar operation for large abscesses, lying in the connective tissues between the colon and the cecum and the front of the quadratus lumborum muscle. He originated an abdominal torniquet, first used in 1860, which, by compressing the lower end of the aorta and by shutting off the arterial blood from the lower limbs, prevented death by loss of blood in amputations at the hip-joint, or even high up on the thigh. In 1862, before the class of the Pennsylvania Hospital, Dr. Pancoast performed for the first time his cure for certain cases of tic douloureux, dividing the trunks of the fifth pair of nerves as they come out of their foramina, at the base of the skull. In January, 1868, he performed for the first time an operation, original with him, for the relief of exstrophy of the bladder, by turning down cutaneous flaps from the abdomen and groin over the hollow raw surface of the open bladder.

Dr. Pancoast was a voluminous contributor to the "American Journal of the Medical Sciences," the "American Intelligencer," and the "Medical Examiner;" and the author of path-

ological and surgical monographs; essays and introductory lectures to his classes, one of these being "Professional Glimpses Abroad" (1856). With J. P. Hopkinson he wrote on "Visceral Anatomy of the Python," in November, 1832. He edited "Manec on the Great Sympathetic Nerve," and on the "Cerebrospinal System in Man," and "Quain's Anatomical Plates;" and published an annotated translation from the Latin of Lobstein's "Treatise on the Structure, Functions and Diseases of the Human Sympathetic Nerve" (1831); "Treatise on Operative Surgery" (1844, third edition, 1852), his chief work; and a revised edition of Dr. Caspar Wistar's "System of Anatomy for the Use of Students" (1844). He was a member of the American Philosophical Society; the Medical Society of Pennsylvania, and other scientific organizations.

Dr. Pancoast was married at Philadelphia in 1829 to Rebecca, daughter of Timothy Abbott. He died in Philadelphia, Pennsylvania, March 7, 1882.

During the later years of his life Dr. Pancoast suffered greatly from ill-health, and after the resignation of his chair of anatomy in the Jefferson Medical College, in 1874, he gradually withdrew from the active duties of his profession. In May, 1877, the formal opening of the Jefferson College Hospital was, at the request of the trustees, inaugurated by him in an eloquent address, and this was his last official act in the school with which he was connected for more than forty years. At the time of his death March 7, 1882 Dr. Pancoast was the only survivor of the celebrated faculty of 1841 in the Jefferson Medical College.

CHARLES R. BARDEEN.

PANCOAST, Seth (1823-1889), physician and cabalist, was born in Darby, Pennsylvania, July 28, 1823, and died in Philadelphia, December 16, 1889. He was a descendant of one of three Pancoast brothers who came to this country with William Penn. His father was Stephen Pancoast, a paper manufacturer, and his mother Anna Stroud. The local schools of Darby gave him his primary education, and in 1843 he engaged in business. Matriculating in the medical department of the University of Pennsylvania in October, 1850, he received his M. D. in 1852, becoming professor of anatomy in the Woman's Medical College in Philadelphia the following year. Resigning this chair in 1854, he was professor in the Penn Medical College, Philadelphia, until 1859, when his private practice compelled him to relinquish the chair and accept the position of professor emeritus, and so he remained until the close of the college in 1862. In 1877 he wrote "The Cabala," the first book in the English language to explain the system of mystical interpretation of the Scriptures as embodied in the ten "sepheroths." Two years earlier he had calculated the return of the seventh cycle of Trithemius in 1878, announcing that if the calculation were correct, there would be a revival in theosophy and other occult studies at that time, as there was. He wrote a larger work that embodied twenty years' search and selection through ancient works in European libraries, but which presumably was never finished. Dr. Pancoast had the finest private collection of works on the occult sciences in the United States. His other books include: "An Original Treatise on the Curability of Consumption by Medical Inhalation and Adjunct Remedies," Philadelphia, 1855; "Ladies Medical Guide and Marriage Friend," Philadelphia, 1864, new ed. 1876; "Blue and Red Light as Mediums," Philadelphia, 1877; "The Kabbala; or, The True Science of Light," Philadelphia, 1878, new ed. New York, 1883; "What is Brights Disease? Its Curability," Philadelphia, 1882.

He was thrice married, his first wife being Sarah Saunders Osborn, the second Susan George Osborn, and the third Carrie Almena Fernald. The doctor had issue by each wife eight children in all. Professor Henry R. Pancoast, M. D., 1898, University of Pennsylvania, instructor of roentgenology, was a son by the second wife.

PANCOAST, William Henry (1835-1897), surgeon of Philadelphia, was the son of Joseph (q. v.) and Rebecca Abbott Pancoast. He was educated at Haverford College, Pennsylvania, where he graduated in 1853. Following in the footsteps of his father, a leading member of the medical profession of Philadelphia, he entered Jefferson Medical College, where he was graduated M. D. in 1856. He then studied two and a half years in London, Paris, Vienna and Berlin. Upon his return he settled in Philadelphia and soon acquired a reputation as a brilliant diagnostician, a bold and skilful, yet conservative operator. In 1859 he was elected visiting surgeon to the Charity Hospital, a position which he held for ten years, during which time he established a large surgical clinic. On resigning, he was elected consulting surgeon, and placed on

the board of trustees. During the Civil War he was appointed surgeon-in-chief and second officer in charge of the Military Hospital, Philadelphia. In 1862 he was appointed demonstrator of anatomy at Jefferson Medical College; this position he held until 1874, when he succeeded his father in the chair of anatomy. He was also a lecturer on surgical anatomy in the Summer School. In 1866 he was elected one of the visiting surgeons to the Philadelphia Hospital.

Dr. Pancoast was a fellow of the College of Physicians of Philadelphia; member of the Philadelphia College Medical Society (president in 1869), and a member of numerous other medical societies. From 1886 to the time of his death he was professor of general descriptive and surgical anatomy and clinical surgery in the Medico-Chirurgical College of Philadelphia, an institution which he helped to found. He published numerous papers on clinical and surgical subjects.

After the death of the Siamese twins he obtained their bodies and made an examination under the auspices of the College of Physicians and Surgeons of Philadelphia, and proved that the band could not safely have been cut, except in their childhood.

Dr. Pancoast died January 5, 1897.

CHARLES R. BARDEEN.

PARK, John Gray (1838-1905), alienist of Worcester, Massachusetts, was born in Groton, in the same state, January 3, 1838, the son of John G. and Maria Thayer Park. He was graduated at Harvard University with the degree of A. B. in 1858. While pursuing the study of medicine at the Harvard Medical School in 1861 he became an interne at the Massachusetts General Hospital. In February, 1862, he was appointed an acting assistant surgeon in the U. S. Navy and served as such until November, 1865, when he was honorably discharged. He resumed his medical studies and received the degree of M. D. in 1866, soon afterwards opening an office in Worcester, Mass. In 1871, he was appointed superintendent of the Worcester City Hospital, then just opened. In October, 1872, he married Elizabeth B., daughter of Hon. A. F. Lawrence of Groton, and in the same month received an appointment as assistant superintendent of the Worcester Insane Hospital, a position he filled until 1877, when he was made superintendent of this institution. Dr. Park served in this capacity until his retirement in 1890. He spent the summer of 1881 in Europe and devoted special attention to English methods of caring for the insane. Dr. Park perfected the superb institution over which he had been placed, and was ever a sagacious and prudent administrator. He was an excellent organizer, and a good man of business, and under his management the Worcester Lunatic Hospital enjoyed a deserved prosperity. After the failure of his health in 1890, he resigned from the hospital, and removed to his former home at Groton, Massachusetts, where he continued to reside until his death, although several winters were passed in California. In 1894 he was appointed by the Governor one of the commissioners to build the Medfield (Massachusetts) Insane Hospital, and later was chairman of the board of trustees, a position he held during the remainder of his life.

His health gradually failed and he finally entered the Worcester City Hospital for treatment, where he died of cirrhosis of the liver, August 29, 1905. One son, Lawrence Park, an architect of Boston, living in Groton, survived him, together with three grandchildren.

PARK, Roswell (1852-1914), surgeon of Buffalo, New York, was born in Pomfret, Connecticut, May 4, 1852. His father was descended from an old English and New England family, Sir Robert Park having come to Massachusetts in 1630 from Preston, England, later moving to Connecticut. From both father and mother, Dr. Park was descended from Elder Brewster. His father was born in Connecticut, educated at Union College (A. B., Phi Beta Kappa) and West Point; was a lieutenant in the engineer corps, U. S. A., and later professor in the University of Pennsylvania. Afterwards he took orders in the Episcopal Church and became president of Racine College, Wisconsin, which he founded, being well known as a writer and educator. Dr. Park's mother was Mary Brewster Baldwin, of a good New England family. One of her ancestors constructed the first dry dock in America for the U. S. Government. Dr. Park went to school in Connecticut and later in the Racine grammar school and Immanuel Hall in Chicago, and finally was graduated from Racine College (B. A., 1872; M. A., 1875). After his graduation he taught for one year in Immanuel Hall; he then entered the medical department of Northwestern University and after receiving his degree of M. D. (1876), served as interne in the Cook County Hospital. His medical teaching was begun in 1879, as demonstrator of anatomy in the Woman's Medical College

of Chicago. In 1880 he was appointed adjunct professor of anatomy in the Northwestern University and in 1883 he resigned in order that he might study in Europe.

While yet abroad he was made lecturer in surgery in the Rush Medical College, and attending surgeon to the Michael Reese Hospital, Chicago. In 1883 he was elected to the chair of surgery in the University of Buffalo and surgeon to the Buffalo General Hospital. He accepted and moved to Buffalo in the summer of that year, to fill these positions until his death. Dr. Charles G. Stockton in his extended memoir of Dr. Park says: "His advent in Buffalo was opportune. It was the transitional period from old to new concepts in pathology at the threshold of modern surgery. Together with Mann, he re-educated the local medical profession and advanced greatly, through his sound pathology, novel teaching, operative skill and spreading fame, the reputation of the medical school. Thousands, not only his pupils, but active practitioners, acknowledge, as due to his influence, a forward momentum hard to estimate. Dr. Park was most studious, and not alone did medical science occupy his time, but other especially cognate subjects received his attention. As a result he became a sort of living encyclopedia to whom every one turned. Some of this information he rearranged and made available in books and addresses. This was, in fact, one of his strongest points and in this way he added to his proficiency as a linguist and made useful to others much material which otherwise never would have been seen by the bulk of the profession."

A few years after coming to Buffalo he was urged to return to Chicago to be associated with Dr. Senn, in the chair of surgery in Rush Medical College. As a counter inducement he was strongly urged to remain in Buffalo by a large committee of the most influential citizens and a fund was raised to construct a new and first-class clinic for his needs. After due deliberation he decided to remain in Buffalo. He was appointed honorary professor in surgery in the Army Medical School at Washington and a visitor at West Point Academy. He was president of the New York State Medical Society and of the American Surgical Association and surgeon-in-chief to the Buffalo General Hospital. In 1895 Harvard University gave him the degree of A. M., and in 1902 Yale conferred on him the degree of LL. D. He was a member of many clubs and societies at home and of a number of foreign surgical societies.

In 1892 Dr. Park gave the Mütter Lectures on surgical pathology in Philadelphia. He wrote a monograph on surgery of the head and brain and a well-known text-book on the history of medicine. He was editor and principal contributor to the "Text-book on Surgery by American Authors," 1896, and a text-book on general surgery. He also wrote many medical papers and essays, some of them being collected in book form, entitled 'The Evil Eye" and other Essays.

In 1901 he was medical director of the Pan-American Exposition and was associated, with other physicians, in the care of President McKinley after he was shot, and he was instrumental in the establishment of the New York State Laboratory for the study of malignant diseases in Buffalo.

As a teacher he was noted for his lucidity of style and his capability of making clear the principles of his subject or case under discussion. In this capacity he achieved a great reputation and the enduring regard of his pupils. "A singularly forceful and graceful writer, a cogent speaker, a resourceful organizer, he was at the head and in the heart of most that was good in Buffalo, for it was understood that his aid meant success."

Doctor Park married in 1880 Martha P. Durkee and had two sons who survived him. His home was a center for social, artistic and musical cultivation.

He died, probably of heart trouble, February 15, 1914, after a very short illness.

MATTHEW D. MANN.

PARKER, Daniel McNeil (1822-1907), of Halifax, Nova Scotia, and of English and Scottish descent, was born at Windsor, Nova Scotia, April 28, 1822, and died at Dartmouth, in the same province, November 4, 1907. He had his general education at the Collegiate School, Windsor, and the Academy at Horton, Nova Scotia. In the late thirties he became an indentured student in medicine to Dr. William Bruce Almon, and in 1841 went to the medical school of Edinburgh University, in 1845 graduating M. D. from the University and also as L. R. C. S. (Edinburgh), taking a gold medal in surgery, the title of his thesis being "The Mechanism and Management of Parturition." He also held the D. C. L. of Acadia College, Wolfville. Dr. Parker was a member of the Medical Society of Nova Scotia, and its president in 1857 and 1877; a member of the Canadian Medical Association, and in 1870 its second president. He was consulting surgeon at the

Provincial and City hospitals, and, later, the Victoria General Hospital, Halifax. As a public-spirited citizen, he was identified with and a co-worker in most of the educational and philanthropic work of the city. Upon his return to Nova Scotia after graduation, he settled down to practice in Halifax, where he soon had a good reputation. In 1891 he gave up practice in Halifax, in order that he might acquaint himself at first hand with the new Listerian surgery, then in its earlier development and in full use at Edinburgh. The next two years were devoted to study and research at Edinburgh and Paris. Upon his return to Halifax in 1873, he limited his practice to that of a consultant in medicine and surgery, and in this he was highly successful. In 1895, after half a century of successful work, he retired.

Dr. Parker traveled considerably on both sides of the Atlantic and thus happened to be in position to witness several notable events, such as Dr. Chalmers leading out the Free Church Ministers in 1843, the bombardment of Fort Sumter in 1861, and the terrors of the Commune in Paris in 1871.

Though always very busy, Dr. Parker found time to deliver many addresses on professional subjects and to write some special papers. "Three Cases of Ruptured Perineum and Sphincter Ani Cured by Operation" ("Edinburgh Medical Journal," 1857, p. 448); "Fatal Cases Resulting from the Habit of Arsenic Eating" ("Edinburgh Medical Journal," 1864, p. 116); "Notes of Some Unusual Cases of Disease Involving Primarily the Skin Covering the Mammary Gland" ("Maritime Medical News," Halifax, vol. i, p. 131) may be mentioned.

Dr. Parker was married twice, first to Elizabeth Ritchie, daughter of the Hon. J. W. Johnston, attorney-general, their only child, James J. Parker, dying in Edinburgh while a medical student. His second wife was Fanny Holmes, daughter of the Hon. W. A. Black of Halifax. He was survived by a widow, three daughters and one son.

DONALD A. CAMPBELL.

PARKER, Edward Hazen (1823-1896), of Poughkeepsie, New York, editor, poet, was born in Boston, March 7, 1823, the son of Hon. Isaac and Sarah Ainsworth Parker. He was a graduate of Dartmouth College in 1846, and received his medical degree from Jefferson Medical College in 1848. After graduation, he was at once appointed lecturer on anatomy and physiology at Bowdoin Medical College, Maine, and there he undertook also the editorship of the "New Hampshire Medical Journal," which he conducted successfully for nine years. In 1853, on being called to the chair of physiology and pathology in the New York Medical College, Dr. Parker left Concord and established himself in practice in New York City, his confrères in the college being Peaslee and Barker (q. v.). During the three years that he held this professorship he established the "Medical Monthly" (1854), which he continued to edit personally for many years with great ability and success, and was co-editor of "The Journal of Medicine," Concord, in 1850. In 1854 he received the degree of A. M. from Trinity College, and in 1858, by the solicitation of many friends and patients, was induced to remove to Poughkeepsie, New York, where he practiced nearly up to the time of his death, a period of some forty years.

Dr. Parker was a physician and a surgeon of signal competency and skill. He was a man of extremely fine fiber, of unusual cultivation, and of high scholarly attainments. The following brief poem was written by him years ago. It has been copied and translated into several languages, including Greek and Latin, and the first stanza was inscribed on President Garfield's tomb.

Life's race well run,
Life's work all done,
Life's victory won;
Now cometh rest.

Sorrows are o'er,
Trials no more,
Ship reaches shore;
Now cometh rest.

Faith yields to sight,
Day follows night,
Jesus gives light;
Now cometh rest.

We a while wait,
But, soon or late,
Death opes the gate;
Then cometh rest.

Dr. Parker was elected president of the Medical Society of the State of New York in 1862; and held a commission in the corps of volunteer surgeons provided by the state under Governors Morgan and Seymour; and was also one of the medical board of Vassar Hospital. He died on November 9, 1896, at Poughkeepsie, New York.

JAMES E. SADLIER.

Parker, James Pleasant (1854-1896), ophthalmologist and otologist of Kansas City, Mo. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii, pp. 244 and 245.

PARKER, Willard (1800-1884), prominent New York surgeon and teacher, was born at North Lyndeborough, in southern New Hampshire, September 2, 1800. When he was five years old his parents moved to Chelmsford, Massachusetts, where their ancestors had settled early in 1600, and there the boy worked on the farm, taught school, and with his own earnings paid his way to and through Harvard College, graduating A. B. in 1826. It is related that he had intended to study for the ministry, but was so much impressed with the skill of Dr. John C. Warren (q. v.), who diagnosed and reduced a strangulated hernia in Parker's roommate, that he decided to study medicine. He received an appointment as interne at the Marine Hospital in Chelsea, getting the munificent sum of thirteen dollars a month for his services during the two years he remained. Harvard gave him an M. D. in 1830 and the Berkshire Medical Institution the same in 1831. His teaching of surgery began at once, for we find him holding these appointments, which gave a variety of experience: Professor of anatomy and surgery in Colby University, Me., 1830-1833; professor of surgery, Berkshire Medical Institution, 1833-1836; professor of anatomy, Geneva, 1834-1836; professor of surgery, Cincinnati, 1836-1837; finally professor of the principles and practice of surgery, College of Physicians and Surgeons, Columbia University, New York, 1839-1869. In 1856 he was appointed surgeon to the New York Hospital.

As an operator Dr. Parker was rated as most successful. He was ambidextrous, and even until the last operated without the aid of glasses. There are two operations which he may be said to have originated, cystotomy, for irritable bladder, first done at the Bellevue Hospital, New York, in 1850, and the operation for perityphilitic abscess, in 1864. Parker was not aware that Mr. Hancock, of London, had done the same operation successfully in 1848. It is curious that Parker's reasoning in favor of the operation was exactly the same as Hancock's. He tied the subclavian artery five times, once performing the operation within the scaleni muscles, also taking the precaution to apply a ligature to the common carotid and right vertebral arteries for the first time in this country.

As a lecturer Dr. Parker had a way of choosing the important from a mass of unimportant details, and by means of apt illustrations coupled with a fine personal presence and a courteous and affable manner won the attention and regard of his pupils. He loved to teach. Lyman Abbott says of him (Reminiscences, 1915, page 68): "He was an earnest Christian man and as much interested in preserving health as in curing disease. He was in this respect in advance of his times. He impressed me with the truth that the laws of health are as much the laws of God as are the Ten Commandments, and that it is as truly a sin to violate the laws of health as to violate the Ten Commandments."

One of Parker's special claims to public esteem was his untiring work for public hygiene and temperance. When Valentine Mott died in 1865, he became president of the New York State Inebriate Asylum. He resigned active practice and lecturing in 1870, and was made emeritus professor of surgery. Princeton College gave him her LL. D. that same year. He wrote articles for the medical journals, and these included: "Cases of Extensive Encephaloid Degeneration of Kidneys in Children;" "Some Rare Forms of Dislocation;" "Trephining the Cranium and Ligature of the Carotid in Epilepsy with Cure;" "Practical Remarks on Concussion of the Nerves;" "Ligature of Subclavian Artery for Axillary and Subclavian Aneurysm;" "Ligature of the Subclavian Inside the Scalenus together with Common Carotid and Vertebral Arteries for Subclavian Aneurysm."

On the establishment of St. Luke's, the Roosevelt and the Mt. Sinai hospitals he became one of the consulting surgeons and was for many years a most active member of the Pathological Society. He was also president of the Academy of Medicine in 1856. He died in harness, for although prevented from working by physical suffering from pyelitis during the last two years of his life, he was frequently consulted by old patients and professional friends. His death occurred from cerebral hemorrhage at his home in New York, April 25, 1884. The Willard Parker Hospital for Contagious Diseases in New York was erected and named in his honor and his library of over 4,000 volumes, especially rich in early American medical works, was presented to the library of the Medical Society of the County of Kings by his son in 1906.

PARKER, William W. (1824-1899), unique figure in the medical profession of Virginia, was born at Port Royal, Caroline County, Virginia, on May 5, 1824. His early education was obtained at Richmond Academy, his medical at the Medical College of Virginia, from which he was graduated in 1848, afterwards settling down to practice in Richmond, Virginia. He was a member of the Richmond Academy of Medicine and of the Medical Society of Virginia. In the Civil War he was captain and, later, major of artillery in the Confederate States Army; he was the founder of the Magdalen Home in Richmond; the Old Ladies' Home, and the Home for Foundlings. He served a term as president of the Academy of Medicine, and was elected president of the Medical Society of Virginia in 1890.

A contemporary says of him that "he was one of the most unique figures in the profession. He always rode on horseback and did an enormous practice, chiefly among the people in moderate circumstances; and perhaps no man ever did so much work for humanity in Richmond for such small remuneration. A man of great courage, both physical and moral, he served his country during the Civil War as commander of Parker's Battery of Artillery, winning great distinction by his daring and bravery as an officer. It has been told of him by old war comrades that after hard battles lasting all day, he was wont to lay off his coat and roll up his sleeves and work all night as a surgeon.

From an early period in his life he was an ardent and consistent Christian, carrying the same enthusiasm into his church as he did upon the field of battle. He possessed, too, a well-equipped and well-stored mind, to which was added the fiery enthusiasm of youth.

Dr. Parker married in January, 1862, Ellen J. Jordan, and had three sons and three daughters. One of his sons, Dr. William W. Parker, became a physician in Richmond. The father died at his home in Richmond, on August 5, 1899.

He was a prolific writer for the newspapers on whatever subject was at the time of public interest, and contributed some papers to the Medical Society of Virginia and some to the journals.

ROBERT M. SLAUGHTER.

PARKES, Charles Theodore (1842-1891), abdominal surgeon, of Chicago, had remarkable success as a teacher of anatomy, and a clear and concise method of demonstration which not only excited enthusiasm and love in all his students, but gained for him a wide reputation.

He was born August 19, 1842, at Troy, New York, the youngest of ten children. His father, Joseph Parkes, an Englishman by birth, moved to Chicago in 1860. At that time the son was a student in the University of Michigan, where he afterwards received his A. M. He enlisted in the army in 1862 as a private and was discharged three years later as captain. At the close of the war he returned to Chicago, and began to study medicine under Dr. Rae, professor of anatomy in Rush Medical College. He was graduated from this college in 1868, and was at once appointed demonstrator of anatomy, a position he held until his appointment as professor of anatomy in 1875.

His specialty was abdominal surgery, in which he was a pioneer investigator. The first to advocate uniting severed intestines, he in this antedated N. Senn (q. v.) and J. B. Murphy (q. v.). For the purpose of gaining a better knowledge of both the consequences and treatment of gunshot wounds of the intestine he made a series of experiments on forty dogs. The number of recoveries astounded the medical profession and led to further experiments in all parts of the world. He made his first report at a meeting of the American Medical Association in Washington, 1884. He took with him three specimens of intestine and a living dog from which he had removed five feet of intestine perforated by bullet wounds. His work in the surgery of the gall-bladder, which was then in its infancy, was no less conspicuous in influencing new lines of treatment. Preceding Parkes' operations, there were not twenty-five ideal cholecystotomies.

Always a student, he read much, loved old books and also kept in touch with the continental medical schools. For several years before his death he had been accumulating material for works on general and abdominal surgery, but his sudden death stopped the writing. The works he left were published under "Clinical Lectures," but there were some fifty or more in addition that appeared in the current medical journals. Of these a partial list can be seen in "Distinguished Physicians and Surgeons of Chicago," F. M. Sperry, 1904.

He married, in 1868, Isabella J. Gonterman and had two children, Charles Herbert and Irene Edna. The son, like his father,

became a surgeon. Dr. Parkes was described as a handsome man of splendid physique, over six feet, with a gentle, kindly face and a devotion to little children and outdoor sports.

Among his appointments he was: attending surgeon to the Presbyterian Hospital; surgeon-in-charge of St. Joseph's Hospital; surgeon-in-chief to the Augustana Hospital; consulting surgeon to the Hospital for Women and Children, and professor of surgery in the Chicago Polyclinic. He held also the presidency of the Chicago Medical Society and of the Chicago Gynecological Society. In 1887 he was elected professor of surgery—successor to Prof. Moses Gunn (q. v.)—and in this position he was gaining wide renown at the time of his death, which occurred after a short illness from pneumonia, March 28, 1891.

PARKHILL, Clayton (1860-1902), of Denver, Colorado, was born on a farm in Vanderbilt, Pennsylvania, April 18, 1860, and in 1881 entered Jefferson Medical College (Philadelphia) and was graduated in 1883. He was then appointed physician to the Philadelphia Hospital and served one year. In the meantime, he completed a course at the Pennsylvania School of Anatomy and Surgery under Dr. George McClellan (q. v.), and subsequently became his assistant. Leaving Philadelphia, he settled in Denver, Colorado, in 1885. He was demonstrator of anatomy in the University of Denver and, when the Gross Medical School was organized, was appointed to the same position and also to that of professor of clinical surgery. He resigned in order to take the chair of surgery in the University of Colorado at Boulder, where he was also dean. About this time he devised his apparatus for cleft palate, a jurymast for fractures of the maxilla and a clamp for the treatment of fractures of long bones ("Annals of Surgery," May, 1898). By the latter, a valuable apparatus, he is best known to the profession. In 1898 he was appointed surgeon-general of the National Guard by Gov. McIntire and was re-appointed by his successor, Gov. Adams. During the latter's administration, war broke out between the United States and Spain and Dr. Parkhill became surgeon to the First Colorado Regiment with rank of major. He went to San Francisco with the regiment, but not to the Philippines. He was promoted to the position of brigade-surgeon and was transferred to the camps in the South and in Porto Rico serving on Gen. Miles' staff in the latter place, where he rendered splendid service. After the close of the war, he was honorably discharged, returned to Denver and resumed work, though in impaired health. He was a man of splendid address, of genial nature, a fine teacher and brilliant surgeon, scrupulously neat, possessed mechanical ingenuity and had a faultless technique. He died in Denver, January 16, 1902, from acute appendicitis, complicated with nephritis and uremia. Though himself a surgeon, who never shrank from duty, yet, unlike most surgeons, he would not submit to the knife.

He married S. Effie Brown, of Redstone, Pennsylvania, April 28, 1886, and had two sons, Clayton, Jr. and Forbes.

A list of his writings may be found in the library of the Surgeon-General's office, Washington, D. C.

WILLIAM W. GRANT.

PARRISH, Isaac (1811-1852), of Philadelphia, was born March 19, 1811. His father was Dr. Joseph Parrish (q. v.), and his mother Susanne Coxe. He was educated in the Friends School, which had numbered among its pupils his father and Drs. James, Wistar, Physick and Dorsey. His medical studies were begun with his father in 1829, and were continued at the University of Pennsylvania, where he graduated in 1832, afterwards spending a year in Blockley Hospital. In February, 1834, a month before the institution was open for patients, Parrish was appointed a surgeon at Wills Hospital, where he served eighteen years until his death in 1852. Parrish's best piece of work is "Remarks on Spinal Irritation as Connected with Nervous Diseases," published in "The American Journal of the Medical Sciences," 1832, vol. x, pp. 294-314. It gives personal experience of cases in the Philadelphia Almshouse, and seeks to establish a rational basis for the classification of the various neuroses.

In 1834 he married Sarah Redwood Longstreth, daughter of Samuel Longstreth, a Philadelphia merchant.

Parrish died in his forty-second year, July 31, 1852.

PARRISH, Joseph (1779-1840), early private medical teacher of Philadelphia, was born in that city September 2, 1779, of Quaker parents, and started in life as a hatter, but when he became of age, turned to the study of medicine, and became a student under Dr.

Caspar Wistar (q. v.). He took his medical degree at the University of Pennsylvania in 1805, and in the same year, became resident physician at the yellow fever hospital. From 1806-12 he held the same post at the Philadelphia Dispensary; from 1816-22, at Philadelphia Almshouse, and during the years 1816-29, at Pennsylvania Hospital. He was associated in the establishment of the Wills Hospital, and was an active member of the College of Physicians. He was one of the foremost Philadelphia physicians who at that time took an active interest in natural history as well as in scientific medicine. Among other studies which led to considerable popular reputation, was his demonstration that the poplar worm is harmless. It had hitherto been supposed to be venomous and trees were being ruthlessly destroyed because a man was found dead with a worm beside him. In 1807 he gave what was then a novelty, a popular course of lectures on chemistry. This led some seven or eight years later to systematic courses of lectures on chemistry, anatomy and materia medica, and he had constantly from ten to thirty pupils with him until the year 1830, being one of the foremost private medical teachers of the time.

He was an editor of the "North American Medical and Surgical Journal." According to Dr. George B. Wood, "perhaps no one was known more extensively in the city or had connected himself by a greater number of beneficent services to every ramification of society." From 1806 to 1822 he was surgeon to the Philadelphia Almshouse, where he gave lectures that were well attended, and in 1816 he succeeded Dr. Physic as surgeon to the Pennsylvania Hospital, a position he filled with honor until 1829, when he resigned because of failing health. He wrote "Practical Observations on Strangulated Hernia and Some of the Diseases of the Urinary Organs," Philadelphia, 1805, and an appendix for the first American edition from the corrected London edition of Lawrence's "Treatise on Ruptures," Philadelphia, 1811.

In 1808 he married Susanna, daughter of John Coxe of Burlington, New Jersey.

He died in Philadelphia, March 18, 1840, leaving two sons, Dr. Isaac Parrish (q. v.) and Dr. Joseph Parrish (q. v.).

PARRISH, Joseph (1818-1891), Junior, of Philadelphia, who studied the care of inebriates, was born November 11, 1818, the son of Dr. Joseph Parrish (q. v.) and Susanna Coxe. He entered the College Department of the University of Pennsylvania, but left at the end of the freshman year and entered the Medical Department, and was graduated in 1844. He began to practice in Burlington, New Jersey, but returned to his native city in 1855, and the following year took the chair of obstetrics in the Philadelphia Medical College. Resigning soon after, he went abroad until 1857, when he returned and was made superintendent of the Pennsylvania School for Feeble Minded Children at Media. At the opening of the Civil War he was connected with the U. S. Sanitary Commission, and visited hospitals and camps in the interest of supplies and hospital stores. He was also active in organizing auxilary associations in various states. After the war he established the Maryland Sanitarium for Inebriates, near Baltimore, which he conducted for seven years. In 1875 he went back to Burlington and conducted a home for nervous patients. The energies of Dr. Parrish's life were largely devoted to the treatment and care of inebriates. He was instrumental in founding the American Association for the Cure of Inebriates, and was its president for many years. He was vice-president of the International Congress on Inebriety in England in 1882, and was a member of many home and foreign societies. He wrote a number of papers on this subject. In 1848 he established the New Jersey "Medical and Surgical Reporter," the forerunner of the "Medical and Surgical Reporter" of Philadelphia. During the war he edited the "Sanitary Commission Bulletin."

His wife was Lydia, the daughter of Caleb Gaskill of Burlington. He died January 15, 1891.

PARRY, Charles Christopher (1823-1890), of Iowa, botanist, was born in the hamlet of Admington, Gloucestershire, England, August 28, 1823, and was descended through a long line of clergymen of the Established Church. In 1832 the family removed to America, settling on a farm in Washington County, New York. He entered Union College at Schenectady, and was graduated with honors, in 1842, beginning the study of medical botany in his undergraduate years, and subsequently receiving his M. D. from Columbia College in 1846. Going west to Davenport, Iowa, in the fall of 1846, he began practice, but soon discovered that all his natural tastes and instincts led directly away to the unvexed, blossoming solitudes of nature. His earliest collecting had been

done in the attractive floral region about his home in Northeastern New York, in the summer of 1842 and the four years following; and now again, he employed much of the season of 1847 in making a collection of the wild flowers about Davenport, of which, with the dates of finding, he has left a manuscript list. Those of us who knew him well in after years can readily picture the brisk dark-complexioned, though blue-eyed youth, symmetrically but slightly built and somewhat below the medium height, in his solitary quest by riverside and deep ravine, over wooded bluff and prairie expanse, for the treasures which were more to him than gold —for such early friends as "the prairie primrose, the moccasin-flower, and the gentian," which in later years he complained had been quite driven out by "the blue-grass and white clover." In the course of that summer, also, he accompanied a United States surveying party, under Lieut. J. Morehead, on an excursion into Central Iowa, in the vicinity of the present state capital. From this time on (except for a short time while he was connected with the Mexican Boundary Survey, when discharging the duties of assistant surgeon) the physician was merged in the naturalist. He was almost continuously in the field collecting, but Davenport remained his home.

Dr. Parry gives in "Proc., Davenport Acad. of Sci., vol. ii," a succinct, chronological account of his work up to 1878. For more than thirty years the greater part of his time had been spent in observing and collecting. In 1880, as special agent of the Forestry Department of the United States Census Office, he accompanied Dr. Engelmann and Professor Sargent in an expedition to the valley of the Columbia and the far Northwest. Wintering in California he spent the following year in that state, making numerous collecting trips north and south, including a trip to the Yosemite in June. In January and February, 1883, he made two camping trips into Lower California; then, going to San Francisco, made numerous excursions from that point, and returned to Davenport in September. In June, 1884, he sailed a second time for England, returning in August of the following year, after spending much time at Kew, and visiting other herbaria and gardens on the Continent.

The summer of 1886 he spent partly with friends in Wisconsin, partly in the quiet enjoyment of his Iowa home. Dr. Parry had an active mind and conducted a voluminous correspondence filling in odd moments with the use of the microscope in determining the different species of his plants. Remaining in California, chiefly in the vicinity of San Francisco, until September, 1888, he was busily employed making special collections of Arctostaphylos and Ceanothus, and in the study of these and the genus Alnus. His last visit to California was made in the spring of 1889. Returning to Davenport in July, he made a trip to Canada and New England, visited New York and Philadelphia and returned to his home but a few weeks before his death. Parry was recognized as an authority by botanists everywhere; and this notwithstanding the fact that he never published a book. His writings, though sufficient to constitute volumes, and comprising much of great scientific value, are scattered in fragmentary form through various government and society reports, scientific journals, and the daily press.

In 1875 he was made a fellow of the American Association for the Advancement of Science, and kept up a corresponding membership in the Philadelphia, Buffalo, St. Louis, Chicago, and California Academies of Science. His name (bestowed by surveyor-general F. M. Chase) is borne by a peak of the Snowy Range, to the northwest of Empire City. Besides contributing largely to the collections of his botanical friends and of various societies at home and abroad, he made for himself one of the finest herbaria in the land, a collection, systematically classified and arranged, comprising over 18,000 determined specimens representative of nearly 6,800 specimens together with some 1,400 specimens determined only as far as the genus. His herbarium was purchased by the Iowa Agricultural College, of Ames, Iowa. While his greatest service has been rendered to botanical science, yet horticulturists will not soon forget that it was Dr. Parry who discovered Picea pungens, the beautiful blue spruce of our gardens; Pinus Engelmanni, Pinus Torreyana, Pinus Parryana, Pinus aristata, and a host of others of beauty and value. Through his zeal and enterprise many plants now familiar to American and European gardens were first cultivated. Zizyphus Parryi, Phacelia Parryi, Frasera Parryi, Lilium Parryi, Saxafraga Parryi, Dalea Parryi, Primula Parryi, and many other plants of great beauty or utility bear his name in commemoration of his labors and worthily do him honor. A tolerably full list

of his writings can be seen in the "Proc. of the Davenport Acad. of Science," vol. vi.

In 1853, he married Sarah M. Dalzell, who, dying five years later, left with him an only child, a daughter who died at an early age. In 1859 he married again, this time, Mrs. E. R. Preston of Westford, Connecticut, who through the more than thirty years of their union entered helpfully into all his works and plans, assisting him in his study and often accompanying him to the field.

Dr. Parry died February 20, 1890, at his home in Davenport.

CHARLES H. PRESTON.

PARRY, John Stubbs (1843-1876), of Philadelphia, the first to publish a systematic treatise on extrauterine pregnancy, the only son of Seneca and Priscilla S. Parry, was born January 4, 1843, in Drumore, Lancaster County, Pennsylvania. His mother, when widowed, worked her farm and educated her four children well. John was known when a boy as "the little doctor," and when seventeen studied medicine under Dr. I. M. Deaver, then matriculated at the University of Pennsylvania, and took his M. D. there in 1865. After he became a resident in the Philadelphia Hospital he had an opportunity to study an epidemic of puerperal fever and to gather notes for a valuable paper. On leaving the hospital in 1866, he married Rachel P., daughter of William and Annie Sharpless, of Philadelphia, and settled to practice in that town. He acted as visiting obstetrician to the Philadelphia Hospital, and with his colleague, Dr. E. L. Duer, re-organized the lying-in wards and utilized the valuable clinical material for the students. One result was his "Observations on Relapsing Fever in Philadelphia in 1869-70." As a member of the Pathological Society and of the College of Physicians and Surgeons he wrote many papers for the meetings, notably one on "Rachitis," his conclusions as to its equal prevalence in Philadelphia being supported by exhaustive statistics; another paper was on "Inherited Syphilis." Appointments and honors came rapidly; he was physician for women's diseases at the Presbyterian Hospital; counsellor of the College of Physicians; president of the Obstetrical Society, and surgeon to the State Hospital for Women and Infants, which he had helped to found. Although in bad health he made a big fight to complete his notable book—"Extrauterine Pregnancy" (1875)—and many remember how in his library, pale, haggard and racked with cough, he toiled day and night. He was persuaded on its completion to go to Florida, though but little hope was entertained of his return. This proved to be the case, for he died in Jacksonville, March 11, 1876, at the age of thirty-three.

His biographer, Dr. J. V. Ingham, describes him as a writer never idle, and gives a list of some thirty-five excellent articles, reviews, and his additions to the second American edition of "Leishman's System of Midwifery," notably those on "Forceps" and a whole chapter on "Diphtheritic Wounds of the Vagina."

Parsons, Joseph Addison (1815-1886), early practitioner of Maine. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii. pp, 252, 253.

PARSONS, Ralph Lyman (1828-1914), superintendent of the New York Lunatic Asylum, was born July 30, 1828, at Prattsburg, Steuben County, N. Y. He received his early education at the Franklin Academy of that town, subsequently continued his studies at Amherst College, where he graduated in 1853, and pursuing his medical studies in the New York Medical College, graduated M. D. from that institution in March, 1857. Until 1860 he was assistant physician at the New York City Lunatic Asylum, and from 1862 to 1865 in private practice in New York and visiting physician to Demilt Dispensary. From 1865, for twelve years he was superintendent of the New York City Lunatic Asylum. He served most faithfully during epidemics of typhus fever and cholera which destroyed the lives of many patients. During this trying period he had an overcrowded institution, untrained attendants and an inadequate number of medical assistants, deficiencies in diet and clothing and lack of facilities for proper classification. He utilized the pavilion system of building on Blackwell's Island and favored the isolation of epileptic patients, and his patients are said to have formed the nucleus of the first epileptic hospital in these pavilions under the charge of Dr. Echeverria. In 1877 and 1878 he was medical superintendent of Kings County Hospital for the Insane. Upon his retirement he was in private practice again in New York for two years. In 1880 he established a private sanitarium for mental diseases at Sing Sing, later Ossining, N. Y., where he died in February, 1914, at the age of eighty-six years. He re-

tained his mental and physical activity until his death.

PARSONS, Usher (1788-1868), illustrious for his extraordinary medical services on the United States Frigate "Lawrence," at the battle of Lake Erie under Commodore Oliver Hazard Perry, deserves perpetual rediscovery by the medical profession of the United States. For many years after that battle, people talked of "Usher Parsons," and cheers were given for him whenever he attended a medical meeting. "Who is that"? "Why, that is Dr. Parsons." "What! Usher! Let me know him at once," was another way in which he was mentioned.

He was born in Alfred, District of Maine, August 18, 1788, the youngest of the nine children of William and Abigail Frost Blunt Parsons. His father was descended from Joseph Parsons, who came from England and was living in Springfield, Massachusetts, in 1646. His mother was a daughter of the Rev. John Blunt, of New Castle, New Hampshire, and was connected with the celebrated Sir William Pepperell, who captured Louisburg in 1745.

Young Usher was named for a relative, the Hon. John Usher, once lieutenant-governor of the province of New Hampshire. He had an ordinary country school education, and was clerk for a while in shops in Portland and Kennebunk, Maine. It was at the latter place, when about twenty years of age, that he printed his first literary effort, in the shape of some verses entitled "A Pettifogger's Soliloquy." Having accumulated a little money he began to study medicine with Dr. Abiel Hall, of Alfred, and attended a course of lectures at Fryeburg under the direction of that eccentric yet talented anatomist, Alexander Ramsay (q. v.). After a few months his funds were so depleted that he was compelled to return home, to discover one night when tramping on the highway that he was an ignoramus and that without general knowledge he could not proceed in the study of medicine. He therefore devoted the next two years to Greek and Latin with the Rev. Moses Sweat, of Sanford, and then was graduated at Berwick Academy. Having now obtained a better understanding of the classics, he resumed medicine with Dr. Hall, continued with Dr. Joseph Kittredge, of Andover, Massachusetts, and finished his medical apprenticeship with Dr. John Warren (q. v.), of Boston. The catalogue of the Massachusetts Medical Society dates Dr. Usher Parsons as a fellow in 1818. He was a licentiate of the same society previously, as attested by a license authorizing him to practice medicine and surgery issued by this society, February 7, 1812, still extant. Leaving Boston, he tried for an opening at Exeter, and Dover, New Hampshire. Then he applied for service in the navy, for the War of 1812, declared on the eighteenth of June, and received notice that if he hastened back to Boston he could have the berth of surgeon's-mate on the United States Ship "John Adams." Although arriving post haste, he was mortified to find that the ship had sailed without him. He then walked to Salem, hoping for a similar appointment on a privateer then fitting out, but some one else had just forestalled him. He set off on foot for Dover, and soon received an appointment as surgeon's-mate in the navy. Curiously enough he was ordered to the "Adams," but knowing that she had sailed, he volunteered for a secret expedition to the Great Lakes, presumably to be under the command of Commodore Chauncey. Arriving in Buffalo in October, 1812, he found many people suffering from an epidemic of pleuro-pneumonia, and as a sort of graduating thesis, wrote for a local paper suggestions regarding its cause, treatment, and cure. The winter and spring of 1812-13 were passed in taking care of the sick and wounded in the neighborhood of Buffalo, and when Commodore Perry arrived in June, 1813, Usher Parsons was at once brought into unusual intimacy with him, owing to the fact that the other surgeons of superior rank were all on the sick list with a "bilious remittent fever."

Parsons had the fever but on the tenth of September when the battle of Lake Erie was fought, as fortune would have it, he was able to serve and was the only surgeon on the "Lawrence," against which the enemy concencrated its entire fire with the strategic view that if the Commodore's flagship were ruined the entire fleet would be obliged to surrender. Owing to the enormous damage to the "Lawrence," Perry, as is well known, was compelled to transfer his flag to the "Niagara." Nearly every one on the "Lawrence" was wounded, the ship seemed ready to sink, she actually surrendered. But when after another hour or two Commodore Perry returned victorious and once more hauled aloft his pennant, he was supported on that bloody deck by Dr. Usher Parsons, who had done phenomenal surgery during the famous fight.

The "Lawrence" being shallow built, the wounded were received in the ward room on the level with the water, with the result that the enemy's fire went straight through that improvised operating room measuring about twelve by eighteen feet. A midshipman with a tourniquet applied to his arm was moving away from Dr. Parsons when a cannon ball hit him in the breast and killed him. As Dr. Parsons was dressing a fractured arm another cannon ball injured both of the patient's legs. Almost all that he could do on that day with so many wounded was to give sedatives, check hemorrhage and apply the necessary dressings, but amidst that awful cannonading he performed six amputations of the thigh. On the next morning the wounded from the entire fleet, including those remaining over on the "Lawrence" from the day before, ninety-six in all, were brought to Dr. Parsons, and before nightfall everything necessary for their recovery was completed, the enemy's surgeons most humanely assisting.

Rewards for such extraordinary surgical work were soon showered upon Dr. Parsons in the shape of the thanks of Congress, a highly commendatory letter from Commodore Perry, a medal for skill and bravery in action, a commission as surgeon in the navy, and prize money, most of which went to liquidate debts incurred in obtaining his medical education. The next two years were spent in the Mediterranean on the "Java" with Commodore Perry. During a storm while on this ship Dr. Parsons had the misfortune to break a patella. He kept a diary during this voyage and never failed to visit the hospitals and the most celebrated surgeons whenever he happened on shore. Returning in March, 1817, he lectured at the medical school at Brown University, and finally after attending lectures at the Harvard Medical School got his degree in 1818, and his fellowship in the Massachusetts Medical Society.

His next sea service was in the "Guerrière," in which he sailed as far north as Russia and south into the Mediterranean. Paris was next visited, and from Dr. Parson's letters we hear of Dupuytren, then at the summit of his career and doing more surgery than all the other surgeons in Paris combined. Dupuytren was savage to his patients. Baron Larrey was overfond of the knife, but operated adroitly and gracefully. He had a clinic every Thursday for visiting medical men, and gave instruction which it was a pleasure to follow. Dr. Parsons was disgusted with the bad treatment of ulcers, and grew tired of seeing flaps stuffed with lint to prevent primary healing. He bought a stethoscope from Laennec, and with it a certificate in his handwriting that it was fit for service. When in London, Dr. Parsons saw all the leaders of the day and especially mentioned Abernethy as engaging, amusing, yet as impressive a lecturer as he ever had heard. Abernethy's quaint illustrative anecdotes were very instructive. Dr. Parsons made in London the acquaintance and obtained thereby the life-long friendship of Sir Richard Owen, the naturalist. Finally he mentioned as the three most quoted American medical books: Benjamin Rush, "On the mind;" Gorham's "Chemistry," and Cleveland's "Mineralogy."

Obtaining leave to return home owing to ill health, Dr. Parsons was on his arrival ordered to the Charlestown Navy Yard, where he lived some years. During this time he made a journey to New York, where he saw his old friend, Dr. Lyman Spalding (q. v.), the founder of the United States Pharmacopeia, and the veteran physician, Dr. David Hosack (q. v.). After his resignation from the navy in 1823 he lived in Providence, Rhode Island, for the remainder of his life. He married Miss Mary Jackson, daughter of the Rev. Abiel Holmes, of Cambridge, Massachusetts, and had one child, Dr. Charles W. Parsons. While living in Providence he was chosen to fill important medical chairs, among which may be mentioned the professorship of anatomy and surgery at the Dartmouth Medical School (1820-1822), and the same position at the Brown University Medical School (1823-1828). He was one of the founders of the Rhode Island Hospital. He also lectured on obstetrics at the Philadelphia Medical School in 1831-1832. Here, too, is the place to say that he was thrice elected president of the Rhode Island Medical Society (1837-1840). Dartmouth conferred her honorary M. D. in 1821 and Brown in 1825, the Berkshire Medical Institution doing the same in 1844.

As a physician Dr. Parsons was industrious and faithful. He was rather inclined to be strict in his orders, a habit presumably acquired during his service on shipboard. His judgment was sound, and his diagnostic skill excellent. As a surgeon he was cautious rather than dextrous or rapid. He was fond of pointing out the house in which he first operated successfully for strangulated hernia, an operation which, by the way, he

performed fifteen times with eleven successes. He did a good deal of ophthalmic surgery, and paid much attention to orthopedic surgery, at that time a specialty much neglected. His results in cleft palate were good. He ligated the common carotid for a brain tumor, and when he was at the age of seventy-four amputated an arm with perfect success. Before the days of ether, he relied on laudanum and brandy, and then by his presence infused his patients with steadiness and calmness equal to his own.

He was a member of various literary societies, and to their meetings contributed papers on the "Genealogy of the Frost and Parsons Families," an account of "The Battle of Lake Erie," and an essay on "Indian Names." He wrote an excellent "Life of Sir William Pepperell," for the completion of which he made the long journey to Louisburg, and he wrote sketches of Rhode Island Physicians, 1859. Finally he delivered the oration at the unveiling of the statue to Commodore Perry at Cleveland, in 1860. He was fond of novels, and wrote one called "The Avenger of Blood," based upon a story which he heard while on board the "Guerrière." He studied the Bible, at times, and thought that the Old Testament was our noblest literature. Dr. Parsons was prolific in medical writings, carrying off the Boylston prize four times and the Fiske prize once. His subjects were: "Periostitis;" "Cancer of the Breast;" "Cutaneous Diseases;" "Enuresis," and "Spinal Diseases." His excellent book, "Physician for Ships," went through five editions of two thousand each. Others of his papers bear such titles as "Gunshot Wounds Through the Thorax;" "Introduction of Medicine into the Veins;" "Anatomical Preparations," and "Removal of the Uterus." His style was as clear and forcible in his writings as in his spoken discourses. There is a complete bibliography of Dr. Parsons' writings, comprising 58 titles in the article by Capt. F. L. Pleadwill in the United States Naval Medical Bulletin, Sept. 1922, vol. 17, pp. 423-460.

Dr. Parsons was the founder of the Providence Medical Society, often its president, and in that position suggested the foundation of the Providence City Hospital. Taking him all in all it would be difficult to find a man of greater merit in American medicine, for he gave of his entire mind for over fifty years to the advance of medical science. October 18, 1868, he exhibited the first symptoms of his approaching end and died easily at the last, December 19, 1868. The post-mortem revealed cerebral degeneration and acute inflammation of the cerebellum. Portraits of Dr. Usher Parsons show a genial, handsome man with overhanging brows, deep set eyes, but a winning smile.

JAMES A. SPALDING.

Partridge, Oliver (1751-1848), of Stockbridge, Mass. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii. p. 256.

PARVIN, Theophilus (1829-1899), early teacher of obstetrics, son of Rev. Theophilus Parvin, a Presbyterian missionary, was born in Buenos Ayres, January 9, 1829. Dr. Parvin's mother, born in Philadelphia, was a daughter of Caesar Augustus Rodney, who was attorney-general of the United States in the cabinets of Jefferson and Madison, and afterwards minister to the Argentine Republic. Mrs. Parvin's father was a nephew of Caesar Rodney, one of the signers of the Declaration of Independence. Dr. Parvin was graduated at the State University of Indiana in 1847 and taught in the Lawrenceville, New Jersey, High School until 1850. He received his M. D. from the Medical Department of the University of Pennsylvania in 1852 and became resident physician at Wills Eye Hospital in Philadelphia. Soon after this he settled in Indianapolis and later still became surgeon on a line of sailing vessels between Philadelphia and Liverpool. He was elected professor of materia medica in the Medical College of Ohio in 1864, resigning in 1869, and accepting the chair of obstetrics and medical and surgical diseases of women in the University of Louisville, Kentucky. In 1876 he was elected professor of obstetrics and diseases of women and children in the College of Physicians and Surgeons of Indianapolis, and in 1878 he became professor of obstetrics and medical and surgical diseases of women and children in the Medical College of Indiana. In 1882 he was recalled to the chair in the University of Louisville previously held by him and in 1883 accepted the chair of obstetrics and diseases of women and children in Jefferson Medical College, Philadelphia.

Dr. Parvin received the degree of LL. D. from Lafayette College in 1872. For several years he was obstetrician to the Philadelphia Hospital, establishing there a department of obstetrics, one of the first in the country. He was co-editor of the "Cincinnati Journal of Medicine" in 1866-67; editor of the "West-

ern Journal of Medicine," Indianapolis, in 1867-69; and co-editor of the "American Practitioner," Louisville, from 1869 to 1883. The text-book written by him, "The Science and Art of Obstetrics," passed through three editions, and was adopted as a text-book by several colleges. It was his principal work. He translated Winckel's "Diseases of Women" and wrote an article on "Injuries and Diseases of the Female Sexual Organs" for Ashhurst's Encyclopedia of Surgery. He contributed to the "American Text-book of Obstetrics" and to the "American Text-book of Applied Therapeutics." He was at various times president of the State Medical Society of Indiana, of the American Journalists Association, of the American Medical Association, of the American Academy of Medicine, of the Philadelphia Obstetrical Society, and of the American Gynecological Society. He was an honorary member of the Washington Obstetrical and Gynecological Society; of the State Medical Society of Virginia; and of the Delaware State Medical Society. He was an honorary president of the Obstetrical Section of the International Medical Congress at Berlin in 1890; and of the International Medical Congress in Brussels in 1892. He was honorary fellow of the Edinburgh Obstetrical Society and of the Berlin Society of Obstetricians and Gynecologists, a fellow of the College of Physicians, Philadelphia. He was a member of the American Philosophical Society, and of the Sons of the Revolution.

Dr. Parvin married Rachel, daughter of Amos Butten of Hanover, Indiana, in June, 1853.

Dr. Parvin was a master obstetrician, an eloquent lecturer, an earnest teacher and was held in high regard by his pupils. In his writings, notably in "The Casuistry of Medicine" and "The Genius of Medicine," he developed a tendency to refer to the classicists and the philosophers, quoting from their works. He was rated as a prominent figure among the medical teachers of his time.

A. G. Drury.

PASCALIS-OUVIERE, Felix A. (1750?-1833), commonly called Pascalis, a Frenchman, born in Provence about 1750, and a graduate of Montpellier, France, went to St. Domingo, where he practiced until driven out by the Revolution of 1793. He then came to America and lived in Philadelphia and later for nearly thirty years in New York. He was co-editor of the "Medical Repository," and wrote on yellow fever in 1796; again in 1798 he wrote a book of 182 pages on the epidemic which prevailed in Philadelphia in 1797. He wrote about the "malignant yellow fever in the city of New York in the summer and autumnal months of 1819" (52 pp.), with a map and a careful study of the locations of the disease, with a view to ascertaining the method of its transmission. A work appeared in 1823 (167 pp.) on the dangers of interment in large cities, and customs, laws and regulations regarding burial.

In "The Philadelphia Medical Museum," conducted by John Redman Coxe (q. v.) in 1805, there are two papers from Pascalis' pen, one on "Syphilitic agonorrhoea," and the other an "Account of an abscess of the liver terminating favorably by evacuation through the lungs." After a clear description of the three stages of the disease, that of an inflammatory fever attended by symptomatic pulmonary inflammation, then of the cessation of all inflammatory symptoms, with those of an internal imposthume, followed finally by a fresh inflammation in the diaphragm and lungs with the discharge of the matter in large nauseous evacuations with cough and vomiting through the lungs, he remarks, in his closing paragraph, "Permit me to inform the reader that I was the patient alluded to;" Rush, Physic and Caldwell were his doctors. In the course of the disease he was bled fifteen times, while as to "mercury, although it is almost a specific in hepatitis, our patient received no benefit from it." He died in New York City, July 27, 1833.

Howard A. Kelly.

PATTERSON, David Nelson (1854-1908), the author of "Reminiscences of the Early Physicians of Lowell, Mass., and Vicinity," Lowell, 1883, was born in Lowell, August 9, 1854, and died in his native town, April 23, 1908, of chronic nephritis, after an illness of two years. He was a graduate of the medical class of 1877, Dartmouth College, and settled in practice in Lowell, his preliminary training having been obtained at the Lowell grammar and high schools. He was the son of George W. and Julia Woods Patterson, both of Henniker, New Hampshire. In 1879 he married Adeline S. Whitney, daughter of George T. and Charlotte B. Whitney of Lowell. They had no children. Dr. Patterson was a member of the local lodge of Odd Fellows, of the Masons, and he was a Knight of Pythias. Besides his book on the early physicians of Lowell, which showed considerable

research and a praiseworthy attempt to perpetuate the lives of physicians of note in his community, he wrote "Necrology of the Physicians of Lowell and Vicinity, 1826-1898," 121 pp., Lowell, 1899. This was his earlier book, with additions, making a total of fifty-nine biographies placed on record. Dr. Patterson, a good story teller and mixer, was exceedingly fond of his home and of entertaining his friends and relatives in it. Children gave him great pleasure and he was on intimate terms with many in his clientage, always regretting that he had none of his own.

PATTERSON, Henry Stuart (1815-1854), biographer and lecturer of Philadelphia, was born in Philadelphia, August 15, 1815. His father came from Ireland at the end of the eighteenth century and settled in Philadelphia as a merchant, and his mother was a daughter of Colonel Stuart, of the American Revolution. Patterson studied medicine with Joseph Parrish, (q. v.) and then at the University of Pennsylvania, where he received his medical degree in 1836. He began to practice, but receiving an appointment as resident physician to the Philadelphia Almshouse, he went there in 1839, resigning after two years to practice again, later, however, becoming physician to the Philadelphia Dispensary. From 1846 to 1848 he was physician to the Philadelphia Almshouse (Blockley) and during this time he wrote both medical and literary papers. For health reasons he went to Europe in 1852, but returned in the autumn unimproved, and after visiting Florida and Georgia, took to bed for six months and died April 27, 1854. His last work was the "Biography of Dr. Samuel G. Morton," written on slips of paper with a pencil, and without raising his head from the pillow. It was "the dying eulogizing the dead"; his last sentence was: "I conclude this notice, the preparation of which has been to me a labor of love, and the solace for a season of a bed of suffering."

Skilled in languages, Patterson was a gifted speaker, had a vigorous style, and knew well his medical history. The "Index Catalogue" credits him with seven valedictory addresses and introductory lectures. These are charming literary productions; the "ne plus ultra" of the old style flowery medical lecture, at the same time invaluable to the medical historian, throwing light on the aspirations and ideals and the medical theories of the time.

HOWARD A. KELLY.

PATTERSON, Richard John (1817-1893), alienist and medico-legal expert of Chicago, was born at Mount Washington, Massachusetts, September 14, 1817, and had his early education at the public schools. He received his M. D. from the Berkshire Medical Institution, at Pittsfield, Massachusetts, in 1842, and that same year became medical assistant to the Ohio State Insane Asylum at Columbus, a position he held until 1847. He then became medical superintendent of the Indiana Hospital for the Insane at Indianapolis, remaining in office for six years. From 1866 to 1874, he was professor of medical jurisprudence in the Chicago Medical College. Most of his time was occupied in teaching and practicing. He was clever at whittling and joining. To him was due almost entirely the clause in the Illinois law governing the commitment of the insane which provides for the appointment of a medical commission by a judge of court in lieu of a jury trial.

He was a large man, five feet ten inches high and of heavy build. His hair brown; his eyes hazel; in manner very quick. He was a good and ready talker, but seldom told stories. He was exceedingly fond of driving a fast horse. "I take my exercise," said he, "vicariously." He made friends quickly and was fond of children.

He married Lucy Clark, of Cincinnati, Ohio, in 1848.

He died of pneumonia at Batavia, Illinois, April 27, 1893, after a few days illness.

THOMAS HALL SHASTID.

PATTERSON, Robert Maskell (1787-1854), professor of natural philosophy in the University of Pennsylvania, was born in Philadelphia, March 23, 1787, son of Robert Patterson, LL.D., who came to this country from Ireland in 1743, acted as brigade major in the Revolutionary War, and was vice-provost of the University of Pennsylvania 1810-1813, and the fifth president of the American Philosophical Society. His mother was Aimé Hunter Ewing. Patterson received his A. B. from the University of Pennsylvania in 1804 and his A. M., in course; and in 1808 he received his medical degree, his graduating essay being on "Lunar Influence." After graduation he went to London and studied chemistry with Sir Humphry Davy; in 1809 he acted as consul general for the United States in Paris. He returned in 1812 and in 1814 succeeded his father as professor of natural philosophy, chemistry and mathematics in

the University of Pennsylvania, holding the position until 1828; he was vice-provost from 1813-1828. Dr. Patterson went to the University of Virginia in 1829 as professor of natural philosophy, where he remained until 1835, when he returned to Philadelphia as director of the United States Mint, an appointment his father had received in 1805. Because of ill health he resigned in 1853.

In 1809, in his twenty-second year, the earliest age at which anyone had been admitted, he had been elected to the American Philosophical Society, and was its president, 1845-1853. While he was vice-president of the Society he gave an address on its early history at its hundredth anniversary, May 25, 1843. Patterson was trustee of the University 1836-1854, was one of the founders of the Franklin Institute of Philadelphia, and one of its vice-presidents. He was one of the founders of the Musical Fund Society of Philadelphia; its president, 1838-1853. He became a member of the American Academy of Arts and Sciences in 1839.

Patterson married Helen Hamilton, daughter of Thomas Leiper, the Revolutionary soldier and patriot.

He died September 5, 1854.

PATTISON, Granville Sharp (1792-1851), of Philadelphia, according to his biographer, S. D. Gross (q. v.), was a noted teacher of visceral and surgical anatomy. The youngest son of John Pattison, of Kelvin Grove, Glasgow, he was educated at Glasgow, and at seventeen began to study medicine, being admitted as a member of the faculty of the Physicians and Surgeons of Glasgow in 1813. He acted, in 1818, as assistant to Allan Burns, the lecturer on anatomy, physiology, and surgery at the Andersonian Institute in that city, but only held the office for one year, and was succeeded by Dr. William McKenzie. He came to Philadelphia in 1818, and lectured privately on anatomy, but was disappointed in not obtaining the chair of anatomy which had been promised him by the University of Pennsylvania. In 1820 he was appointed to the chair of anatomy, physiology and surgery in the University of Maryland, in Baltimore, a position he filled for five years. He then resigned on the ground of ill-health. During this period he edited the second edition of Burns' "Observations on the Surgical Anatomy of the Head and Neck," which was published in 1823.

Pattison had a prolonged quarrel with Dr. Nathaniel Chapman (q. v.), of Philadelphia, culminating in 1822 in a duel between Gen. Thomas Cadwalader, Chapman's brother-in-law who had espoused his cause, and Pattison. They met somewhere in Delaware; Cadwalader received the ball from Pattison's pistol in his "pistol arm," which was thereby disabled during the remainder of his life. Pattison was uninjured, but "a ball passed through the skirt of his coat near the waist."

Pattison returned to England in 1826. In July, 1827, he was appointed and for a short time occupied the important post of professor of anatomy at the University of London (now University College), acting at the same time as surgeon to the University Dispensary, which preceded the foundation of the North London Hospital. This position he was compelled to relinquish in 1831 on account of a disagreement with the demonstrator of anatomy. In the same year he became professor of anatomy in the Jefferson Medical College, Philadelphia, where he received the M. D. degree. He was appointed professor of anatomy in the University of New York on the reorganization of its medical department in 1841, a position he retained until his death.

He was the author of "Experimental Observations on the Operation of Lithotomy" (Philadelphia, 1820), and of much controversial matter of ephemeral interest. With Eberle, Ducachet and Revere he edited in 1820 the "American Medical Recorder" and the "Register and Library of Medical and Chirurgical Science," Washington, 1833-36, and was co-editor of the "American Medical Library and Intelligencer," Philadelphia, 1836. He also translated Masse's "Anatomical Atlas," and edited Jean Cruveilhier's "Anatomy of the Human Body." Pattison brought to Baltimore the anatomical collection that had been bequeathed to him by his master, Allan Burns. The faculty of the University of Maryland bought it for $8,000. This was the beginning of the Museum of the University.

It is probable that no anatomical teacher of his time attained a higher reputation. His reputation lay in his knowledge of visceral and surgical anatomy, and in the practical application of this knowledge to the diagnosis and treatment of diseases, accidents and operations. His earnest manner and clever demonstrations made him very popular in the lecture room. He possessed a singularly attractive eloquence, that left a lasting impression upon the audience. Gross, who was a personal friend, said that he had a slight

lisp and a Scotch accent, which never entirely left him. He had little taste for surgery and abandoned it in his later years.

Pattison was actively interested in establishing the Grand Opera House in New York City. He was fond of music, hunting and fishing, and had a naturally, somewhat indolent nature and love of ease, or otherwise would probably have attained a much more lasting reputation as an anatomist.

He died of obstruction of the ductus communis choledochus in New York, November 12, 1851, leaving a widow, whose maiden name was Sharp, but no children.

PEABODY, George Livingston (1850-1914), professor of materia medica in the College of Physicians and Surgeons, New York, was the son of Charles Augustus Peabody, of a well-known New England family, and of Julia Livingston, of an equally distinguished family of New York. He was born in New York City, Aug. 27, 1850. He died of angina pectoris in Newport, Rhode Island, October 30, 1914, aged sixty-four years. Receiving his early education at the Columbia Grammar School in New York City, he was a graduate of Columbia University in the class of 1870, at which time he received the degree of A. B. Dr. Peabody was graduated from the Medical Department of Columbia University in the class of 1873, receiving the degree of M. D., and at the same time the degree of A. M. After graduation he served on the house-staff of Roosevelt Hospital for one and one-half years. He then went abroad to continue his medical education in Vienna, Strasburg, Paris, and London, returned to New York in 1878 and was appointed pathologist to the New York Hospital.

Appointed lecturer on medicine in the medical department of Columbia University, he held this position from 1884 to 1887 and was then appointed professor of materia medica and therapeutics, holding the professorship until 1903. In 1909 he retired from practice. He was attending physician to the New York Hospital from 1884 to 1909, and was then appointed consulting physician. He was attending physician to the Roosevelt, Bellevue, and St. Luke's Hospitals. He was elected a trustee of Columbia University in 1884, retaining this position until 1890, and was also a member of the university council from 1891 until 1895. Peabody was editor of the Supplement to Ziemssen's Cyclopedia, 1881, and wrote some half dozen other articles.

He was married to Jane dePeyster Huggins of New York City on April 18, 1833. They had one daughter.

FREDERIC S. DENNIS.

PEABODY, James H. (1833-1906), organizer of the Nebraska State Medical Society. James H. Peabody's ancestors on both sides were English, his first American antecedent was Lieut. Francis Peabody, who came to New England from St. Alban's, Hertfordshire, in 1865. George Peabody, the noted philanthropist, was a nephew and was reared in the family of John Peabody, the grandfather of the doctor. Dr. Peabody's mother was Amelia Humphries Cathcart, and he was born at Washington, District of Columbia, on the seventh of March, 1833. After having been a page in the National House of Representatives he was later, in 1852, given a clerkship in the Pension office. During his service there he completed a seven year's course of study in the University of Georgetown, receiving his M. D. in 1860. Towards the end of his course he practiced medicine before and after the regular hours of his other employment, then he entered the army. After being mustered out in 1865, he pursued some special medical study in Bellevue College, New York, and moved to Omaha in the spring of 1866. Here he served as acting assistant-surgeon in the army with special detail to attend the officers and their families in Omaha, and was eventually made brevet lieutenant-colonel by President Johnson. He also engaged in general practice at that time.

Dr. Peabody occupied many important and influential positions in Omaha and in Nebraska. In his office in May, 1868, the Nebraska State Medical Association was organized and he became its second president. He was professor of surgery for many years in Creighton Medical College and attending physician to St. Joseph's Hospital. In the early years of the State Medical Association he contributed interesting accounts of important surgical cases.

He married, on May 26, 1859, Mary Virginia Dent, of Louisville, Kentucky, and a second time, in 1867, Jennie Yates, of Omaha. His death occurred in Omaha, September 9, 1906.

H. WINNETT ORR.

PEASLEE, Edmund Randolph (1814-1878), of the Dartmouth Medical School and of New York, was one of the important personages in the history of American medicine.

To him the profession owes a debt of gratitude for his pioneer work in abdominal and pelvic surgery. The son of Hon. James and Abigail Chase Peaslee, the eldest of four children, he was born in Newton, Rockingham County, New Hampshire, January 22, 1914. His father died when Edmund was seven years old. His preliminary education was meagre. He attended school at the New Hampton and Atkinson academies, where he prepared for Dartmouth College, which he entered when he was eighteen years of age, in 1832. There are no data of his boyhood days and little is known of his life previous to his entering college. He was graduated with distinguished honors in the class of 1836, having as a classmate Samuel C. Bartlett, D. D., LL. D., who later became president of Dartmouth College, and with whom he shared equal honors at the head of his class. During the year subsequent to his graduation he taught school at Lebanon, New Hampshire, after which he was called to Dartmouth College to become tutor, a position he filled from 1837 to 1839. During these two years he studied medicine and attended lectures in the Dartmouth Medical School and became a private pupil of Dr. Noah Worcester and also of Dr. Dixi Crosby (q. v.) of Hanover, New Hampshire, and later of Dr. Jonathan Knight (q. v.) of New Haven, Conn. In 1839 he entered the Yale Medical School and received his degree of M. D. in the class of 1840. After his graduation he went abroad to pursue his medical studies, and in the following year was summoned home to give the course on anatomy and physiology at the Dartmouth Medical School to succeed Dr. Oliver Wendell Holmes (q. v.).

Edmund Randolph Peaslee began his first course of lectures at Dartmouth College in 1841 and continued as a lecturer in the medical school for about thirty-seven years and up to the time of his death, which occurred in New York, January 21, 1878. In 1843 he received the appointment of lecturer and later of professor of anatomy and surgery in Bowdoin College, Maine. This professorship he held about fifteen years. In 1851 he was appointed professor of anatomy and physiology in the New York Medical College, and in 1853 he was transferred to the chair of physiology and general pathology, and subsequently he was again transferred to the chair of obstetrics and diseases of women; the last professorship he held until 1860, when this medical school was closed. In 1858 he moved to New York City and resigned his professorship in the medical school in Maine. From this period on he gave up his entire time to the practice of medicine and surgery, which became very extensive and lucrative. He still retained his professorship at Dartmouth until his death, giving his lectures, often two each day, during the summer and autumn months. In 1859 Dartmouth College conferred upon him the degree of doctor of laws, and in 1869 he was elected a trustee of the college. In 1872 he delivered a course of lectures on diseases of women at Hanover, and also about this time a course of lectures at the Albany Medical College, and in 1874 he was appointed professor of gynecology in the Bellevue Hospital Medical College, New York City, a position which he held at the time of his death in 1878. From 1858 to 1865 he was attending physician for diseases of women in the Demilt Dispensary in New York City, and during the Civil War he was surgeon to the New England Hospital, and also to the New York State Hospital. In 1872 he was appointed attending surgeon to the Woman's Hospital in the State of New York.

Edmund Randolph Peaslee was noted as a teacher, a writer, an operator, and a scholar. He excelled in each of these fields and has left an impression upon the medical profession as a man of strong character, of erudite learning and of great surgical skill. As a teacher he was clear, concise, practical and earnest. He always commanded the greatest respect from medical students. He was an instructor in all the departments of medicine with the exception of chemistry. In this respect his career as a teacher is similar to that of his predecessor, Nathan Smith, the founder of the Dartmouth Medical School. His record for regular attendance upon his lectures was most phenomenal, since he seldom if ever missed a lecture in his whole life. He believed that a teacher should never absent himself from his class except in cases of illness in his family, and never for a lucrative fee. His standard of duty was a feature in his character. There are few medical men in this country who have had such a wonderful record for punctuality and regularity in the discharge of duty in its relation to teaching and lecturing to medical classes. To have lectured for about thirty-seven years without interruption is a record which of itself demonstrates the highest ideal of a teacher. As a writer he was well known. In 1848 he published "A Synopsis of the Course of Lectures on General and Human Physiology." In 1849 he contributed a paper

on Rupture of the Bladder. In 1851 he published a paper entitled "Necroscopic Tables for Post-mortem Examinations," a contribution of great value in those early days of pathological work. In 1851 he published an address delivered before the class of the medical school in Maine on "The Comparative Intellectual Standing of the Medical Profession." In 1852 he gave an address to the New York Medical College. In 1853 he contributed to medical literature a report of a case of amputation at the shoulder joint which is found in the New York "Journal of Medicine" for that year. In 1854 he made a great contribution to medicine in the form of a book on Human Histology which consisted of 616 pages. This book is said to be the first systematic work on normal histology printed in the English language. It was a comprehensive treatise translated from Robin and Verbeil with original additions, and was the outgrowth of his knowledge and study in histology. Dr. Fordyce Barker states that in 1845 there were but few in this country who could be called microscopists, and Edmund Randolph Peaslee was among the number. He was among the first to systematically apply the microscope in teaching physiology, pathology, and histology. This fact alone distinguishes him as a man far in advance of his day and generation.

In 1858 he delivered the anniversary address before the New York Academy of Medicine. In 1860 he published a most important paper on "Uterine Displacements." This contribution consisted of eight lectures and attracted great interest in the new field of gynecology, a science at that time more or less new to the profession. In 1865 he published a paper on the statistics of one hundred and fifty (collected) cases of ovariotomy, and the same year another article on "Retro-flexion of the Unimpregnated Uterus." In 1870 he published an article on intra-uterine medication; in this same year a monograph on the fetal circulation, and his publication was followed by general articles on the treatment of ovarian tumors. In one of these contributions he advocated washing out the peritoneal cavity. He also published various papers on gynecological surgery. In 1872 he published the great literary work of his life, which consisted of a book on "Ovarian Tumors, Their Pathology, Diagnosis and Treatment, Especially by Ovariotomy." This book was the first great contribution to ovariotomy and contained up to this time all the scientific knowledge upon the subject. It embraces all the literature, the author's personal experience, which was very large and of great value to the medical profession. In this book he established the claim of Ephraim McDowell of Kentucky as the first ovariotomist and likewise that America was the country in which this great discovery was made, a discovery that as far back as 1878 is said to have added, according to Dr. Fordyce Barker, at least 40,000 years to the lives of women. He performed his first ovariotomy in 1850, and in the same year a double ovariotomy, the first double ovariotomy in New England and the second one of its kind in America. Dr. T. Gaillard Thomas (q. v.), the brilliant ovariotomist, in speaking in 1878 of Peaslee's reputation as a pioneer in abdominal surgery, said: "Up to fifteen years ago in New York he stood alone, an arbiter in this department of surgery." Peaslee assisted Thomas by special request in his first ovariotomy, and Thomas graciously acknowledged the valuable assistance. In 1851 he removed the entire uterus with subsequent death. Hysterectomy was seldom performed in those days. As a scholar he was thorough and erudite and even late in life kept up his interest in the classics. He was a linguist, reading French, German, Spanish and Italian. He was also a fine mathematician, and during his life kept up his studies in this science.

Edmund Randolph Peaslee was honored by the presidency of many medical societies, among which may be mentioned the New York Pathological Society in 1858, the New York County Medical Society in 1867, the New York Academy of Medicine in 1871, the New York Medical Journal Association in 1875, the New York Obstetrical Society in 1875, the American Gynecological Society in 1877. He was a corresponding fellow of the Obstetrical Society of Berlin and of the London Obstetrical Society. He was an honorary fellow of the Louisville, Boston and Philadelphia Obstetrical Societies. Of the various social clubs in which he had membership were the Century, Union League, and New England Society. He was a member of the American Geographical Society, the New York Academy of Science and the American Social Science Association, the New York Historical Society and many others. He possessed many accomplishments, among which may be mentioned his talents as a musician, both vocal and instrumental. He was leader of the choir during his college days at Dartmouth. He has left his impress upon medical and surgi-

cal literature and has established principles in the technique of surgery which today are accepted by all.

In 1841 he married Martha, the oldest daughter of Stephen Kendrick of Lebanon, New Hampshire, and settled in Hanover to teach and practice medicine. He had two children, a daughter and a son, Edward H., who was graduated in arts at Yale University in 1872 and in medicine at the College of Physicians and Surgeons, New York, in 1875. He practiced medicine for a few years and retired to assume the duties and responsibilities of mercantile life, for which he seemed to be peculiarly fitted and in which he made for himself a distinguished name in the financial world.

FREDERIC S. DENNIS.

Peck, William Dandridge (1763-1822), professor of natural history in Harvard University. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, pages 900-901.

PEIRCE, David (1740-1803). The simple facts of the life of this old-time country practitioner are that he was born in Newbury, Massachusetts, in 1740, settled at Spruce Creek, in Kittery, Maine, about 1760, and practiced there until his death in 1803. He wrote no medical papers, for there was no magazine in those days in which to print them. He was an ordinary country doctor of an age forgotten and of which few traces remain. He is nevertheless worthy of being mentioned in every historical work on "American Medicine," because in his three large account books, "leigers" he called them, still extant, we can trace his medical career day by day for nearly forty years in a manner almost unique in the annals of medicine. Arriving in Kittery about 1760, he studied medicine, possibly with Dr. Sargent, of New Castle, or with some of the Portsmouth practitioners, compounded and sold drugs, practiced medicine and did minor surgery extensively. He opened a country store and sold merchandise of every sort, acted as legal adviser to many patients, was town physician, town agent during the Revolution, and at one time postmaster. Turning now to his books it is an agreeable task to sift from their thousand entertaining facts a few that will bring before us the work of one of our early American physicians.

Dr. Peirce was chiefly a physician. It is doubtful if he ever performed any capital operations. On one occasion he consulted with Dr. Hall Jackson (q. v.) and Dr. Ammi Ruhamah Cutter (q. v.), both of Portsmouth, in a case of compound comminuted fracture. He was present and assisted at the operation performed, as he quaintly informs us, by "The Gentlemen of the Faculty." He once charged a patient: "For making a large hole in your leg," thirteen shillings. One old scrap of paper gives the names of fourteen patients whom he visited in one day, a good record for a country doctor considering the miles between their homes, and the bad roads to travel. He inoculated patients for the smallpox and "carried them through," as was the phrase, for eight shillings. He had an excellent reputation as an obstetrician. His usual charge for such cases was one pound and four shillings sterling. In entering these cases on his books he mentioned the sex of the child and the hour of its birth. If a child were born out of wedlock he wrote distinctly: "To delivering your daughter, of a bastard infant." In a few rare instances he called in as consultant in a tedious labor Dr. Hall Jackson across the river. Twins are rarely mentioned in his books, but if they arrived the sex and the birth hour of each was mentioned.

Peirce was of good standing with his medical brethren, for he consulted as needed with the two Portsmouth physicians before mentioned, as well as with Dr. Gilman, Dr. Little and Dr. Lyman of whom we find no trace elsewhere than in Pierce's books. Although he used many medicines, he did not use much at a time. He bled a good deal less than most physicians of his day. His first cases were simply treated with phlebotomy. He salivated his patients but little, if any. He used a "Small" purge and a "Large" purge. Emetics were daily employed in his practice. His charges were moderate. He mentions three sorts of visits, one when called definitely to go at a distance, a second as he was "passing" by, and a third which he calls "accidental."

During the Revolution he was an active patriot, scouring the country for ammunition and supplies for the Kittery militia. At one time he rode to Concord, Massachusetts, on this service and for the hire of a horse he paid in the debased currency of those days the sum of ninety-five dollars. He also acted as surgeon for the Massachusetts Bay Colony Troops, stationed near Kittery.

He was a man of considerable property for those days, owning, for instance, shares in a privateer and in two fishing schooners which

sailed in and out of the Piscataqua river. Whenever the fishermen came in with a cargo of fish, he would superintend the unloading, charge for his time and skill, as well as for food and rum for the captain and crew. He also owned a farm, which seems to have been tilled almost wholly by his patients in return for medical services. He owned wood lots from which the wood was cut by patients every spring and piled into his barns every fall. His cattle and sheep were "pastured out" on the fields of patients, at so much a month. In a word, for years he carried on an enormous business in medicine, merchandise and produce on a basis of barter, he being the physician-in-charge and his patients paying him in produce, labor, merchandise, but rarely in cash. Scattered along the thousand pages of his old books we read many old charges, a few of which may here find insertion. A widow with the surname of Philadelphia always has visits to herself charged to "Your Ladyship," but the rank thus suggested diminishes when on the credit side we see these visits paid "by washing," or "by the son digging potatoes" in the doctor's fields. On the one side we read of the attentions given at the birth of a son, and on the credit "by your shingling my porch and mending the garden fence."

Dr. Peirce was a forgetful man, and for months at times his books would remain unposted. As a speller he was dreadfully defective, though spelling was then at a low ebb. But what can we think of "Spinin, Howin, Halin, Sain, digin, Spinin TOE, spinin Linnen"? The nearest he ever got to the name of "Chisholm," was plain "Chism." "Duzzen, Hetters (heaters), biscates, macrel," and so on were frequent humorous blunders on his books. Here is something queer, "To a quart of rum and to a pint of rum which your wife pretended to BORROW but never paid any attention to."

Pierce was published to Olive, daughter of Rishworth and Abigail Gerrish Jordan, September 20, 1765, and we assume married her soon after. On her death he married Ruth, daughter or widow, of Dr. Sargent, of New Castle. He had nine children who were well brought up. They wore home-spun suits and occasionally were treated to leather "britches." Their schooling was paid for by patients, and only once in their lives did one of them go to a "Summer Camp" and even that was at the expense of some otherwise unpaying patient. Pierce was a devout man. When his parents or relations died he noted down their departure for a better land and emphasized their decent burial. When his wife died, he mentions the sad fact simply yet bravely. As for himself when his time came he died suddenly, August 25, 1803, and let us hope that after his years of medical practice he received that same decent burial which he had given to his relations gone before him.

JAMES A. SPALDING.

PEIRCE, George (1883-1919), chemist, of Baltimore, the son of Harold and Charlotte Converse Peirce, was born in Bristol, Pennsylvania, May 7, 1883. He prepared for college at the Germantown Academy, graduated from Haverford College in 1903, and entered the Johns Hopkins Medical School from which he received his M. D. in 1907. While still an undergraduate at Haverford, he published a short paper on "A Curious Approximate Construction for π" (Bull. Am. Math. Soc., 2d Ser., 1901, vii), and before completing his medical studies, he engaged in a research on lipase with Dr. Lovenhart. After graduation, Dr. Peirce was put in charge of St. Anthony's Hospital, Newfoundland (Wilfred Grenfell's). He was next an intern in the Pennsylvania Hospital, Philadelphia, for two years. In 1910, he married Ethel Girdwood of West Orange, New Jersey, who had also been a student of the Johns Hopkins Medical School, and together they went to Germany where Dr. Peirce continued his chemical studies at the University of Berlin under Emil Fischer and Leuchs, while Mrs. Pierce was a voluntary assistant at the Kinderklinick of Dr. Hübner. Two years later, he received his Ph. D. from the University with a thesis on "The Alkaloids of the Brucin Group." Returning to America, he was appointed assistant in physiology in the University of Wisconsin, and the following year, instructor in Pharmacology. During this time, he conducted researches and published results of the ferments and some of the higher monosaccharides. Returning to the Johns Hopkins Medical School in 1914, he became instructor in urology, in the Brady Institute where he organized and equipped the chemical laboratory and worked on the excretion of sugar by the kidneys, probably his best piece of work (J. J. Abel). He formulated the law, "If the kidney is permeable for a sugar, when and only when its concentration in the blood rises beyond a certain level, that sugar is oxidized by the kidney." In 1916, he accepted a post with Colgate and Company for organic chemical research work in the terpene and related fields. While thus

occupied, he died February 4, 1919, from extensive burns received following an explosion of ether vapor. His three sons with their mother survived him.

Dr. Abel noted particularly Pierce's open-mindedness and his capacity for seizing upon the salient points of problems.

PEIRSON, Abel Lawrence (1794-1853), for many years the leading surgeon of Essex County, Massachusetts, and the first to publish a "Report of Private Surgical Operations Performed with Ether Anesthesia," was a descendant of John Pearson, or Peirson, who settled in Rowley, Massachusetts, in 1643, and the son of Samuel Peirson, of Biddeford, Maine, being born in that town, November 25, 1794. Entering Harvard College as a sophomore in 1809, he was graduated in 1812, and at once began to study medicine with Dr. James Jackson (q. v.), four years later taking his M. D. from Harvard. Vassalboro, Maine, was the place of his early practice, but he remained there less than a year and a half, removing to Salem, Massachusetts, early in 1818, for a larger field and to be in closer touch with the leading members of his profession with whom he had many ties of friendship.

He married his cousin, Harriet Lawrence, in 1819, and in 1832 went abroad and studied medicine in Paris and elsewhere, being among the first of the Americans to become acquainted with Laennec's method of exploring the chest for the physical signs of disease. With J. B. Flint, Elisha Bartlett and A. A. Gould (q. v. to all) he edited the "Medical Magazine," Boston, an independent periodical that had an existence from July, 1832, to July, 1835. In his practice he gave chief attention to surgery and acquired a high reputation. From a conversation he had with Dr. Charles T. Jackson (q. v.) in October, 1846, he learned of the properties of sulphuric ether. He was present at the Massachusetts General Hospital on the occasion of the first use of that anesthetic, October 16, having been a consulting surgeon to the hospital since 1839, and November 14, 1846, he made trial of etherization in the removal of a fatty tumor, with complete success. Again, on November 19, he did an amputation of the arm without the patient experiencing pain, and in the next few days did an amputation of the leg and removed a large fatty tumor of the shoulder under ether anesthesia, the ether being administered in each case by a dentist named Fisk. Reports of these cases were sent to the "Boston Medical and Surgical Journal". (See Journal of December 2, 1846, vol. xxv, p. 362.) This is the first published report of surgical operations performed with the aid of ether anesthesia—the "New Gas"—outside the Massachusetts General Hospital.

Peirson was an active fellow of the Massachusetts Medical Society, was on important committees and was at one time president of the Essex South District branch of the society; he was also a member of the American Academy of Arts and Sciences.

While returning from a meeting of the American Medical Association he was killed in a railway wreck at Norwalk, Connecticut, May 6, 1853. His wife and five children survived him, the oldest son, Edward Brooks, and his grandson Edward Lawrence Peirson and great grandson Edward Lawrence Jr., becoming physicians in Salem.

Among his writings are to be mentioned: "Some Account of the Measles Epidemic in Salem in 1821"; "The Boylston Prize Essay on Chin-cough in 1824"; "Operation for Hare-Lip," 1836, and "A Dissertation on Fractures," 1840 ("Communications Massachusetts Medical Society." vol. vi, p. 261).

WALTER L. BURRAGE.

PENDLETON, Lewis Warrington (1844-1898), practitioner of Belfast and of Portland, Maine, was named after Commodore Warrington, of the navy, his father having been a secretary to that officer for some years. He was born in Camden, Maine, March 18, 1844. At the age of ten his parents moved to Gorham, Maine, in order that their children might have the benefit of instruction at the local academy. When he was seventeen, young Pendleton returned to Belfast and began to study with Dr. Nahum Parker Monroe (q. v.). When the war broke out, he became a hospital steward, and after his return, on account of poor health, renewed his medical studies and was graduated at the Albany Medical College, New York, in 1865. To that institution he always had great allegiance, and ten years later delivered before its graduating class an oration on the "Loneliness of the Physician." He practiced in Belfast for fourteen years very successfully and then moved to Portland in 1880, where he at once obtained a good clientage and much personal favor, so that upon his death he was greatly mourned. At the death of William Warren Green (q. v.) he was elected a surgeon to the Maine General Hospital. In that position he did excellent and conscientious work until

his resignation in 1895, owing to poor health. He was twice elected president of the Maine Medical Association, and on each occasion delivered an excellent address.

Besides the orations above mentioned, he read papers on "Nephrectomy" and on "Transmitted Tendencies," which were of literary and medical value. The death of two children in early married life had apparently been compensated for by the birth of a fine boy, but he also was suddenly taken away when ready for college. This was a double shock, and although the doctor attended to his practice in Portland, and even went to the South for vacations, it was plain to his friends that the end could not be very far away. For all that, the news of his death in Florida, January 13, 1898, from a hopeless disease with which he had been suffering for years, came with a sense of profound grief to his large body of friends.

JAMES A. SPALDING.

PENNOCK, Caspar Wistar (1799-1867), of Philadelphia, who helped to differentiate typhus from typhoid fevers, was the son of George Pennock and Sarah Wistar, and was born in Philadelphia, Pennsylvania, July 2, 1799. He entered the University of Pennsylvania in October, 1826, and received his M. D. March 27, 1828, presenting the thesis "Experimental Researches on the Efficacy and Modus Operandi of Cupping Glasses in Poisoned Wounds." Before taking the University work he had attended some courses by Godman on anatomy and by Keating on chemistry, having early been interested in medicine. In the autumn of 1828 he entered the Almshouse Hospital and remained there a year. In the spring of 1830 he went to Europe, studying medicine in Paris, giving time particularly to diseases of the heart and of the skin. He returned in 1833 and practiced in Philadelphia. He was one of the Physicians to the Philadelphia Dispensary, and in 1835 became an attending physician to the Almshouse (Blockley) or, Philadelphia Hospital; here he was the colleague of William W. Gerhard (q. v.), and with him studied the symptoms and pathological anatomy of typhus fever, differentiating it from typhoid fever. He had before collaborated with Gerhard in "Observations on the Cholera of Paris," Philadelphia, 1832. A treatise on diseases of the heart by Bouillaud, with many notes by Pennock, was published in 1837.

In 1833 he married Caroline, daughter of Caspar Wistar Morris; they had one child, Sarah Wistar, who married William H. Morris of Media, Pennsylvania.

Pennock suffered from a progressive paralysis, complicated with tuberculosis, for twenty years; he died April 16, 1867, at Howellville, Pennsylvania. See a full account of his illness and the autopsy in Trans. Coll. Phys., Phila., 1868, n. s., 222-228.

EWING JORDAN.

PENROSE, Richard Alexander Fullerton (1827-1908), Philadelphia obstetrician, was the son of Charles Bingham and Valeria Fullerton Biddle Penrose, and was born March 24, 1827. He was a graduate of Dickinson College in 1846 and took his M. D. from the University of Pennsylvania in 1849. For three years before he began to practice in Philadelphia he was resident physician at the Pennsylvania Hospital. In 1854, partly through his efforts, the wards of the Philadelphia Hospital were opened to medical instruction and he was soon after made consulting surgeon there. He was one of the founders of the Children's Hospital and of the Gynecean Hospital, and was elected professor of obstetrics and diseases of women and children in 1863 in the University of Pennsylvania. He resigned in 1889 with the title of emeritus professor. Dickinson College gave him her LL. D. in 1875. He retired from practice entirely in 1889 and died in 1908.

Penrose wrote very little. His greatest claim to distinction was his brilliant career as a didactic teacher. Before the days of the obstetric clinic and its inspiration to the teacher, Penrose, with his manikin, Mrs. O'Flaherty, of blessed memory to the classes of a quarter of a century ago, actually gave clinical instruction of the highest order, and enacted a drama of labor and its complications with the accomplishments of the trained actor and skilled orator. His dramatic conversations with his padded manikin, his wit, humor, and profound knowledge of human nature, especially as found in the lying-in chamber, his climaxes in oratory that sent a thrill and carried a pointed lesson in practical obstetrics to his student classes—who among those classes ever could forget them!

PEPPER, George (1841-1872), Philadelphia obstetrician and gynecologist, eldest son of William Pepper (1810-1864) (q.v.), and elder brother, by two years, of William Pepper (1843-1898) (q.v.), was born in Philadelphia, April 1, 1841. His mother was Sarah, daugh-

ter of William Platt. He entered the University of Pennsylvania in 1858, graduated in July, 1862, and began the study of medicine with his father; but in two months he enlisted as a private in the Sixth Pennsylvania Cavalry (Rush's Lancers). His ability soon secured promotion to a lieutenancy; he saw hard fighting and was in the Battle of Fredericksburg. In the spring of 1863 a fall with his horse on the ice dislocated his left clavicle, and being disabled from active service, he was honorably discharged in May, 1863. He returned to Philadelphia and at once took up his interrupted medical studies, and in October, 1863, entered the University of Pennsylvania as a medical student, graduating in March, 1865, with a thesis on "Typhus Fever." The same month he married Hitty Marko, daughter of George Mifflin Wharton, noted lawyer of Philadelphia, and a trustee of the University.

George Pepper was physician to the Magdalen Home, and while an assistant physician to the Nurses' Home, gave clinical instruction there on diseases of women; he lectured on the same subject at the Jayne Street Medical Institute. He was assistant to J. Forsyth Meigs (q. v.) at the Pennsylvania Hospital, and in 1868 contributed to the Hospital Reports a paper on "Retroversion of the Womb, Complicated by a Large Fibroid." He was a manager of the Philadelphia "Lying-in and Nurse Charity" in 1866. Pepper was largely responsible for the founding of the Philadelphia Obstetrical Society (1868), was its first secretary and was elected annually until he resigned because of his long illness. Two papers contributed to the Transactions were: "Adipose Deposits in the Omentum and Abdominal Walls of Women as a Source of Error in Diagnosis" and "The Mechanical Treatment of Displacements of the Unpregnant Uterus." William Goodell said of him: "Had it not been for his untimely death . . . he would have become as famous in obstetrics and gynecology as his brother, William Pepper, was in other lines, for he possessed the same remarkable executive and mental abilities and the same tireless industry that is called genius." ("American Journal of Obstetrics," 1918, lxxviii, 602). He had suffered from attacks of pleurisy and nephritis, and in the spring of 1871 had typhoid fever; in the autumn an inflammation of the left lung developed, and after being ill ten months, he died at Chestnut Hill, September 14, 1872, and was buried in Laurel Hill Cemetery.

George Wharton Pepper, distinguished lawyer of Philadelphia, was his son.

PEPPER, William (1810-1864), Philadelphia writer and eminent teacher, was born in that city, January 21, 1810. When a lad of nine years he was sent to a boarding school at Holmesburg and from there went to Princeton University, where he was graduated with the highest honors in 1828. He began to study medicine under Thomas T. Hewson (q. v.), then entered the University of Pennsylvania in 1829, graduating M. D. in 1832, with a thesis on "Apoplexy."

In the summer of 1832 Asiatic cholera appeared in Philadelphia, and hospitals were established in different parts of the city; Pepper gave valuable service at the hospital at Bush Hill. In the autumn of 1832 he went to Europe, remaining there two years in study, in Paris under Louis and Dupuytren. In 1834 he returned to Philadelphia and began to practice, as well as to take charge for three years of one of the districts of the Philadelphia Dispensary. In 1839 he became a physician to the Wills Eye Hospital, and in 1841 a physician to the Pennsylvania Institution for the Instruction of the Blind. In 1842 he was elected a visiting physician to the Pennsylvania Hospital, resigning in 1858, because of ill health and his other engagements. He became professor of the theory and practice of medicine at the University of Pennsylvania in 1860, succeeding George B. Wood (q. v.). "As a didactic lecturer, he was clear, concise, and yet complete" . . . Thoroughly familiar with medical literature, he had also studied disease in the great book of nature, at the bedside in private practice and in the wards of the hospitals." (T. S. Kirkbride.)

He contributed largely to medical journals and Kirkbride says that his writings were "distinguished by brevity, clearness of expression, and an eminently practical character," naming among his important writings: "Chronic Hydrocephalus" (1850); "Scrofulous Inflammation of the Lungs and Pulmonary Condensation" (1852); "Poisonous Effects Produced by Pork"; "Cases of Diseased Gall-Bladder." Henry in his "Standard History of the Medical Profession in Philadelphia" (1897) calls attention to an article by Pepper on "Pleuritic Effusions" as "among the best contributions to this important subject that can be found in medical literature."

Pepper was a member of the Philadelphia Medical Society; the Philadelphia Academy

of Natural Sciences; and was a Fellow of the College of Physicians.

In 1840 he married Sarah, daughter of William Platt; they had seven children, two of whom were physicians, George (q. v.) and William (q. v.). Dr. Pepper had a slight cough for years and suffered also from attacks of dyspnea. An acute bronchitis followed what seemed to be improvement; hemorrhage occurred and he died on October 15, 1864.

PEPPER, William (1843-1898). The establishment of the hospital of the University of Pennsylvania, a reorganization of the medical curriculum of the University and the found of a great commercial museum and free library are deeds whose fruit is long enjoyed but the author soon forgotten. William Pepper, enthusiastic, persistent, set out in life with a breezy determination to effect necessary changes and accomplished his purpose. He was born in Philadelphia, August 21, 1843, being the son of Dr. William (q. v.) and Sarah Platt Pepper, of Philadelphia, who gave the boy a good education at the University of Pennsylvania, whence he was graduated A. B., in 1862, and took his M. D. in 1864. Four months after this his father died, but he had left the son an ineradicable heritage of thinking and working. In 1865 the son was elected a resident physician at the Pennsylvania Hospital and on completion of service was appointed pathologist and museum curator, a position held for four years. Morbid anatomy became his special study and in 1868 he was appointed lecturer to the University and brought to the work rare skill and untiring energy; the descriptive catalogue of the Pathological Museum issued in 1869 by Dr. Pepper and Dr. Morton, gives good evidence of this. But much-needed reforms equally engaged Pepper's attention. How much he was instrumental in the removal of the hospital to new buildings in West Philadelphia was shown when the vice-provost, at the inauguration of Pepper as provost in 1881, said: "To him who has pleaded for mercy to the helpless sick as a lover would plead his own cause, who has touched with a master hand the springs of influence, to him public esteem has given the wreath as the moral architect of our hospital." "It is gratifying to think he lived to see it placed on a solid basis of success, with the maternity department splendidly organized, the Pepper Clinical Laboratory, given in memory of his father, and the new Nurses' Home and the Agnew Wing in full operation. The plan of reorganization was not carried on without much bitterness; indeed, it looked at one time as though the faculty would split." "Then there was the long and painful controversy lasting almost five years over the proposition to elevate again the standard of medical education." But Pepper's plans were crowned with success, also further efforts in the organization of the Association of American Physicians and the first Pan-American Medical Congress, of which he was president. He also interested the governments of the South American states in his commercial museum.

When in 1894 he resigned the provostship it was only to return to his first love, the scientific management and promotion of museums. In 1891 he had undertaken to establish the Archeological and Paleontological Museums and the Commercial and Economic Museum, his desire being to see in Pennsylvania "a great group which would serve to illustrate the past and present history of man in every one of his relations." "I prefer the life of the salmon to that of the turtle," he said once to Prof. Osler, but an arduous life of thirty years began to tell on him in 1898, when he had signs of dilatation of the heart with bronchitis and dyspnea. A visit to the Pacific coast was contemplated. Then came the news of his death in Oakland, California, July 28. "He died," wrote his physician, "at eight in the evening with a copy of Stevenson's 'Treasure Island' in his hands. At seven I had left him gazing upon Mt. Diabolo shadowed in the gathering darkness. I was called at eight and found him in the attitude and with the expression of 'angor animi,' from which he never roused. I have never seen so beautiful a nature in sickness; his conduct and disposition were worthy of Marcus Aurelius."

"As a man," said Osler, his biographer, "he formed a most interesting study. In Athens he would have been called a Sophist, and I do not deny that he could when the occasion demanded play old Belial and make the worse appear the better cause to perplex and darken maturest counsel, but how artistically he could do it. He was human, and to the faults of a man he added those of a college president . . . but a man engaged in vast schemes with many clashing interests is sure to be misunderstood and to arouse sharp hostility in many quarters."

Besides the appointments named he was Physician to the Pennsylvania Hospital and

to the Children's Hospital; lecturer on clinical medicine, University of Pennsylvania; professor of theory and practice of medicine, University of Pennsylvania; member of the College of Physicians, of the Pathological Society of Philadelphia; honorary member of the New Jersey Medical Society; founder and for one year editor of "The Philadelphia Medical Times;" LL.D. of Lafayette in 1881 and of Princeton in 1888.

His writings comprise among others: "Lectures on Clinical Medicine"; "The Fluorescence of Tissues (with Dr. E. Rhoads)"; Meigs and Pepper on "Diseases of Children"; "Trephining in Cerebral Diseases"; and the "System of Medicine, by American Authors," 1886.

DAVINA WATERSON.

PERCIVAL, James Gates (1795-1856), whose fame as a poet and a scientist eclipses his reputation as a physician, was born in Berlin, Connecticut, September 15, 1795. His father, James Percival, was a physician. Young James graduated at Yale University in 1815, when a tragedy, "Zamor," which he had written, formed part of the commencement exercises. He studied medicine, graduating at Yale Medical School in 1820. In 1824 he was appointed assistant surgeon in the United States Army and detailed to the West Point Military Academy as professor of chemistry. He resigned in a few months and was appointed a surgeon with the recruiting service at Boston, Massachusetts; in 1827 he settled in New Haven, Connecticut. In 1835, with Charles Upham Shepard (q. v.), he made a mineralogical and geographical survey of the state of Connecticut, the report of which was published in 1842. The American Mining Company engaged him to survey their lead-mining region in Wisconsin; in 1854 he was appointed state geologist of Wisconsin. He had unusual linguistic attainments and enjoyed imitating in English "all known metres in all accessible languages from the sanskrit downwards."

As early as 1821 he published a volume of poems, which contained the first part of "Prometheus"; in 1822 the second part of Prometheus and the first part of "Clio" appeared; in 1823 he published a volume of poems (republished the next year in London in two volumes). He contributed largely to periodicals and in 1859 his poetical works were brought together and published in two volumes. His work was widely reviewed and he was regarded as a poet of a high order.

Percival never married, cared little for society and was said never to be so happy as when "with a book in his library, or the geologist's hammer in his hand," he set about acquiring knowledge. He accumulated a large store of books, offered by his executor for $20,000, and sold in 1860. He died in Hazel Green, Wisconsin, May 2, 1856. A "Biographical Sketch" of Percival from the MSS. of Erasmus North, M. D., was published in the collection of Percival's works; another biography is, "The Life of James Gates Percival," by Julius H. Ward (1866).

HOWARD A. KELLY.

PERKINS, Elisha (1741-1799), son of Dr. Joseph Perkins, was born in Norwich, Connecticut, January 16, 1741. He was the apostle of one of those epochs of credulity which seize men from time to time when any exceedingly novel cure is proclaimed. The terms, "Perkinism," "Tractorism," were known both in America and abroad and the wonderful metallic rods which Perkins said and believed to be curative of almost every ill in men (and horses) certainly wrought psychotherapeutic wonders.

Perkins himself was a magnetic person, handsome, over six feet tall, of wonderful endurance and self-control. He was educated by his father. He had felt a curious magnetic power in himself in touching anyone and set about finding some combination of metals which might have the same effect in healing disease. These he found in 1796 and named "tractors," two small rods, about three inches long, one of brass, one of steel, which had to be drawn downward for twenty minutes over the affected parts. A patent was obtained; doctors and philosophers gravely approved, and professors of three American universities said they believed in Perkinism. The tractors came to be used in Copenhagen where twelve well-known physicians reported so favorably on them that the records were printed in an octavo volume. In 1803 Benjamin Perkins, the son, established the Perkinean Institution in London with the Right Hon. Lord Rivers as president and Sir William Barker as vice-president, and five thousand cases were treated. There is reason to think Elisha Perkins was self-deceived or really perceived the real efficacy to lie in the imagination and so kept up the outward therapeutic symbols. An imaginative, restless, inquiring man, he introduced another remedy for dysentery and low fever "consisting of the vegetable with the muriatic acid in the form of common vinegar

saturated with muriate of soda." Believing this to be antiseptic in yellow fever he went to New York during the epidemic in 1799, and after four weeks' unremitting care of the sick he fell ill of the fever and died, aged fifty-nine, September 6.

It was owing to the exertions of one Dr. Haygarth of Bath, England, that the idea of any healing power resident in the tractors themselves was refuted, for he and a colleague effected many cures with tractors made of painted wood, and T. G. F. Fessenden, dealt the idea a final blow in his "Terrible Tractoration by Christopher Caustic," London, 1800.

James Thacher stoutly maintains that Perkins had no intention of deceiving, but perhaps the large fortune made through tractoration hurried on the following act duly registered in the "Archives of the Medical Society of the state of Connecticut, 1800," "that Dr. Elisha Perkins be expelled from the society as a patentee and user of nostrums."

Perkins' daughter is said to have married J. L. Arnold, Dartmouth 1788, the author of poems.

DAVINA WATERSON.

Perkins, Joseph (1798-1872), practitioner of Castleton, Vt. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii. p. 267.

PERRINE, Henry (1797-1840), a botanist who introduced tropical plants into the United States, was born April 5, 1797, at New Brunswick, New Jersey. As a youth, he taught a school at Rocky Hill, New Jersey, later studying medicine at Philadelphia. From 1819 to 1824, he practiced in Ripley, Illinois, then moved to Natchez, Mississippi. In 1827, he was appointed United States Consul at Campeche, Yucatan, where he devoted himself with great singleness of purpose to securing for transportation to the United States various plants of economic value. This was peculiarly difficult, because the local officials were very much opposed to the export of living plants of economic value, and it was only by Perrine's influence as the most popular physician in the region that he was able to overcome the obstacles placed in his way. Upon his return to the United States in 1837, he spent six months at Washington pressing his claims for congressional assistance in his schemes for the introduction and propagation of tropical plants in the United States. In 1838, he received a grant of a township of land on Biscayne Bay, Florida, but the disturbances occasioned by the Seminole War then in progress prevented him from occupying his grant. He did settle, however, upon the neighboring island, Indian Key, where he was killed by a band of marauding natives, August 7, 1840. After murdering him, the Indians burned his house, destroying all his manuscripts and collections. His family escaped as he might have done if he had not attempted to dissuade the Indians from doing harm.

JOHN HENDLEY BARNHART.

PETER, Robert (1805-1894), of Kentucky, was of good southern English stock and related to the Bathurst Peters. Born January 21, 1805, this future scientist and eager student of research, came over from Cornwall when twelve years old with his parents, Robert and Johanna. Six other children came with them and the family settled first in Baltimore, then in Pittsburgh, Pennsylvania, where the children soon had to make each a share of the family expenses. Robert went into a drug store and developed a bent for chemistry and medicine, eventually graduating M. D. from Transylvania University in 1834. But after practicing for a while in Lexington, he turned his attention wholly to natural sciences, and, being a real amateur (lover), was able as a lecturer and writer to arouse the enthusiasm of his students. His chemical work while on the Kentucky Geological Survey made him known as a delicate and exact analyst and he acquired a local reputation as a toxicologist. When on a summer tour in England in 1839, with his friend, Dr. O. J. M. Bush, he energetically collected books and apparatus for his class teaching and came home the proud owner of a Daguerre photographic outfit—the first in the West. Doubtless his wife, Frances Paca, daughter of Maj. William Dallam, whom he had married four years previously, and his children, Johanna and Alfred, had their "likenesses" taken in every possible position.

After this return he also experimented with the then novel guncotton and with pyroxyline; electricity also gaining his delighted attention. He had an ear always alert for new ideas, a trait strikingly displayed even in old age, and would sweep cheerfully aside his most cherished theories when they were shaded by dawning scientific facts. This energetic physician and Dr. C. W. Short (q. v.) made some good botanical researches,

welcoming in addition anything fresh in zoology or mineralogy which they came across in their travels and cultivating such a fine herbarium at home as to enable them to exchange specimens with European botanists. The year 1846 saw Peter's memorial in his "Report on the Relation of Forms of Disease to the Geological Formation of a Region," with a map of his own designing.

Among his appointments we find: lecturer on natural science at the Rensselaer Scientific School, Troy, New York; chemical lecturer in the Western University of Pennsylvania; professor of chemistry, Morrison College, Transylvania University; dean of the faculty, Transylvania University medical department; professor of chemistry, Kentucky School of Medicine.

His writings were chiefly in the way of pamphlets of a scientific turn. The catalogue of the Surgeon-General's Library has ten titles. Among them should be noted "The Chemical Examination of the Urinary Calculi in the Museum of Transylvania University," Lexington, 1846; "On the Application of Galvanic Electricity to Medicine," Lexington, 1836; also "A Brief Sketch of the History of Lexington, Kentucky, and Transylvania Universities," 1854.

Peter's whole life was one of self-effacement and the advancement of science. His interest was in all that concerned the Kentucky School of Medicine. When the end came he had his great desire fulfilled—to wear rather than rust out; to preserve his intellect to the last. He had seen eighty-nine years when, at Minton, near Lexington, he died on April 26, 1894.

VERNON ROBINS.

PETERS, George A. (1859-1907), of Toronto, Canada, clever anatomist, surgeon and teacher, ended an all too short life March 13, 1907, at the age of forty-seven. He was born July 10, 1859, in Eramosa, Wellington County, Ontario, and his boyhood was spent on his father's farm. Losing his father and mother at the age of fourteen, it fell to him, as the eldest of four children, not only to make his own living, but to care for two half-brothers and a half-sister. This he did with such success that they all had a high school education, and his brothers and he became graduates in medicine at the University of Toronto. By hard work in 1881-2, George succeeded in taking the three-year course at St. Catherine's Collegiate Institute in one year and entered the University of Toronto, where he received the degree of M. B. and a Starr gold medal in 1886. After serving for a year as house surgeon in the Toronto General Hospital and acting for several months as medical superintendent of this institution, he was appointed demonstrator of anatomy in the recently organized faculty of medicine of the University of Toronto, and at the same time began practice. In 1889-90 he spent eight months in England and passed two examinations for fellowship in the Royal College of Surgeons, being for several years the only Canadian who possessed this qualification.

In 1890 Dr. Peters returned to Canada and was appointed associate professor of clinical surgery in his alma mater, not confining his practice solely to surgery, however, until 1900. Quite the best appreciation of his abilities in this line is that conveyed in the words of Professor I. H. Cameron, formerly one of his teachers of surgery, and subsequently his colleague as the head of the surgical department in the University: "His surgical alertness and inventiveness were attested by his various modifications of the usual operations of plastic surgery (in which he excelled), by the coat-sleeve amputation of the appendix, which he was the first to do, by the transplantation of the ureters into the rectum in cases of ectopia vesicae which he made his own, and by the method of proctoplasty and suspension in cases of procidentia recti. His mechanical ingenuity was shown by his modification of Aikin's splint for fracture of the upper arm, his wrench for club-foot, his device for making plaster casts of the living head and neck by a preliminary spray of paraffin."

Brilliant as a surgeon, he was not less so as a teacher. Extremely lucid in his ideas, with a remarkable capacity for seizing the general principle in a mass of facts, and with a terseness of speech that was his own, he never failed to win and keep the attention of students whether in the lecture room or at the bedside clinic. It was his great efficiency as a teacher, as well as his standing as a scientific surgeon, that led to his appointment as professor of surgery and clinical surgery when the amalgamation of the faculty of Trinity Medical College with that of the University of Toronto took place. Very soon thereafter, however, the indication of the condition, which ultimately cut short his life, manifested itself and he was unable to continue his life work.

Dr. Peters was not a ready or voluminous contributor to the literature of surgery, and

one reason for this was his rather exacting taste for clearness and terseness of language, and he, therefore, often recast completely a manuscript before it finally left his hands. Every statement that he made was carefully thought out. Amongst the more notable articles which he prepared are those on "Surgery of the Rectum and Anus," in the "International Text-Book of Surgery," edited by Gould and Warren, and "Inflammatory Affections of Bone" in Bryant and Buck's System of Surgery.

In 1899 he married Constance, the youngest daughter of the Honorable Sir William R. Meredith, Chancellor of the University. She and two children survived him.

PETERS, John Charles (1819-1893), New York homeopathic physician and author was born in New York City, July 6, 1819. His early education was at Nazareth Hall, Pa., and he began to study homeopathy in 1837, and five years later visited Europe, working under Schoenlein, Rokitansky and Skoda, at Berlin and Vienna, and devoting especial attention to pathology, at that time a subject but little familiar to the medical profession. On his return to New York he joined with Dr. A. S. Wotherspoon in publishing a translation of Rokitansky's Pathological Anatomy in 1849, and practiced homeopathy while introducing innovations in the methods of practice then in vogue. A treatise on "Diseases of the Head" was published, 1850, also between 1853 and 1856: "Apoplexy," "Nervous Derangements and Mental Disorders," "Diseases of Married Females," and "Diseases of the Eye." With Dr. F. G. Snelling he issued a "Materia Medica," 1856-1860; he also edited the "North American Journal of Homeopathy." Dr. Peters was one of the three original founders of the New York Pathological Society, and in 1859 he was president of the College of Medical Sciences and professor of materia medica and therapeutics in this institution. He was the physician and personal friend of Washington Irving. He was associated with Dr. Edmund C. Wendt in preparing a treatise on cholera, and in 1866 wrote Peter's "Notes on Asiatic Cholera." This was one of his favorite subjects, also the routes by which the diseases traveled from Asia to Europe. The Index Catalogue credits him with some ten works on this subject out of a total of twenty-seven titles. In 1873 he traveled through the South and Southwest to study this disease, and afterwards assisted in preparing a report, published by order of Congress. At one time he was president of the Medical Society of the County of New York, and he held a similar office in the New York Neurological Society in 1876-77.

He married Georgina, daughter of Andrew Snelling, May 16, 1849.

Paralysis carried him off, October 21, 1893, at his home on Long Island, at the age of seventy-four.

Peterson, Robert Evans (1812-1894), publisher and lawyer of Philadelphia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 910.

PHARES, David Lewis (1817-1892), of Mississippi, introducer of viburnum and gelsemium. William and Elizabeth Starnes Phares came to West Feliciana, Louisiana, from Virginia, and their son was born there, January 14, 1817. In 1832 he entered the Louisiana State College at Jackson, Louisiana, now Centenary College, was graduated from the Louisiana State College in 1837, and in April, 1839, from the medical department of Louisiana University. "The day he graduated he was elected a member of the faculty without his knowledge or consent and Dr. Barton introduced him to the other members of the faculty as one of their number." This position he declined and returned home to West Feliciana, and from there moved to Whitestown, now Newtonia, Wilkinson County, Mississippi, where he practiced until 1880. In 1840 the degree of A. M. was conferred upon him by the University of Kentucky.

In 1842 he erected buildings for and opened Newton Female Institute and in 1852 was largely instrumental in building Newton College. During the Civil War, Dr. Phares continued in private work; in 1863 he was thrown from his buggy and received injuries from which he suffered for the remainder of his life. In 1878, by request of the State Association, he prepared a report on the medical plants of the state, some seven hundred in number. He was one of the leading spirits in the founding and building of the Mississippi Agricultural and Mechanical College and at its opening in 1880 he was assigned the chair of biology, which he filled until 1889.

In 1836, during a college vacation, he married Mary Armstrong Nesmith, of Amite County, and had three sons and five daughters. In 1881, after the death of his first wife, he married Mrs. Laura Blanche Duquercron,

of Starkville, Mississippi, and by her had two sons who died in infancy.

In 1889 he moved to Madison Station, Mississippi, but on May 3, 1891, was stricken with paralysis, had a second attack October 13, 1891, and died September 18, 1892. "A constant student, an accurate observer, a painstaking physician, temperate in all things save work, a conscientious Christian. He was also recognized as an authority on the medical virtues of indigenous plants of the South. When he discovered and promulgated the value of viburnum prunifolium and gelsemium his name became imperishable and he proved himself greater than the chieftain of many battles by placing in the hands of his comrades two weapons to wage war against the foes of flesh."

J. A. Richardson.

PHELPS, Charles (1834-1913), of New York City, Navy surgeon, born at Milford, Mass., December 12, 1834, was descended from William Phelps, who came to this country with his family in 1630, and settled in Connecticut, of which (then the Colony of New Haven) he was a member of the first Commission of Government. Edward Holyoke, president of Harvard College, and Jonathan Walcott, of Salem, Mass., were also among his ancestors, all of whom for eight generations were of New England. The son of a physician, after graduating from Brown University in 1855, he followed in his father's footsteps and entered the College of Physicians and Surgeons, New York, and was graduated in 1858. Shortly after, he entered the service of the old New York and Havre Steamship Company, and was surgeon of the "Arago" at the outbreak of the war in 1861, when he took a place under Government as "contract surgeon." When the "Merrimac" sank the federal ships "Cumberland" and "Congress" and before the "Monitor" had been tested, the government hastily fitted out and strengthened three transports, of which the "Arago" was one, to attempt to sink the "Merrimac" by ramming, and Dr. Phelps volunteered and was accepted for that service, but the "Monitor" arrived before the transports got into action. Returning to New York, Phelps next had charge of the Government Hospital, in the northern part of Central Park.

During the war he married Isabel Marguerite, daughter of Theodore A. James, of New Orleans, and after the war settled down to practice in the City of New York, where he resided until his death, from pneumonia, on December 30, 1913.

He was always a student, and in middle age and later life wrote much on various professional subjects, devoting himself to that which might be widely useful. Dr. Phelps was twice nominated by the Governor for the office of health officer of New York, but was not confirmed. At the time of the celebrated encounter between James Gordon Bennett and Fred May, it was generally understood that he accompanied them as surgeon when they were supposed to have fought a duel, but he would never admit it. As visiting surgeon, Dr. Phelps was on the staff of both Bellevue and St. Vincent's Hospitals for almost thirty-five years, and it was only during the last six years of his life that he gave up his active hospital work to become a member of the consulting staff of both of these institutions. As a member of the Board of Police Surgeons of New York City, he early became interested in the treatment of varicose veins, then, as now, an important cause of disability of members of the police force, and he devised an operation, multiple ligature ("N. Y. Med. Jour"., 1889) for the radical cure of this condition. He was among the first in this country to employ the open method in the treatment of fracture of the patella ("N. Y. Med. Jour"., 1898), an operation he performed many times; the modern operation of suture of the patella also owes much of its success to his earlier work. He wrote on the relation of trauma to cancer ("Annals of Surgery," 1910, p. 609). In his later years he devoted himself especially to the study of injuries of the brain following fractures of the skull and of pistol shot wounds of the head, and his book, "Traumatic Injuries of the Brain," remains today a standard work.

Thomas Smith.

PHELPS, Edward Elisha (1803-1880), medical botanist of Windsor, Connecticut, was born in Peacham, Vermont, April 24, 1803; his father was Dr. Elisha Phelps who moved to Windsor soon after the son's birth. The boy was educated at Norwich University; his first course of medical lectures being taken at the Dartmouth Medical School and his course completed under Professor Nathan Smith (q. v.), at New Haven, Connecticut, graduation in medicine at Yale following after this in 1825. Dr. Phelps' health being poor, he spent some time in the South, assist-

ing in a survey of the Dismal Swamp canals, and devoting himself incidentally to botanical studies. He seems always to have been a student of plant life. In 1828 he began to practice at Windsor, making his home there throughout his life. He soon made a reputation for himself in the profession, and was elected professor of anatomy and surgery in the medical department of the University of Vermont, occupying the position for two years. In 1841 he was appointed lecturer on materia medica, medical botany and medical jurisprudence in Dartmouth Medical School, and held the chair of materia medica and therapeutics and lectured on botany until 1849, during this time collecting a very complete museum of medical botany for the college. In 1849 he was transferred to the chair of theory and practice of medicine which he occupied until 1871, when he retired from active college work and became professor emeritus. Afterwards, he collected for the college a museum of pathological anatomy with money furnished him by his friend, Hon. E. M. Stoughton. The years 1851 and 1852 saw him traveling in Europe. The honorary A. M. was conferred on him by the University of Vermont in 1835 and that of LL. D. by the same institution in 1857. During the Civil War he was a member of the State Board of Examining Surgeons and in this position earned a high reputation for strict and impartial judgment. In the fall of 1861 he was given active duty on the staff of the commander of the Vermont Brigade, serving during the spring and summer of 1862 in the Peninsula. On account of impaired health, he returned to Vermont and was put in charge of the Military Hospital and Camp at Brattleboro. This camp attained a wide reputation for the percentage of recoveries which took place there and the credit for this was chiefly due to Dr. Phelps. During the closing months of the war, he was transferred to a Kentucky hospital from which he returned to his home and practice at Windsor.

Dr. Phelps was one of the founders of the Connecticut Valley Medical Society and also its president. He was also a member of the Vermont State Medical Society. To both of these organizations he presented valuable papers. He was a genuine, sincere man, who hated hypocrisy and quackery of any form.

He married, in 1821, Phoebe Foxcroft Lynn, of Boston, and had one daughter. Phelps died November 26, 1880.

CHARLES S. SHELDON.

PHYSICK, Philip Syng (1768-1837), "Father of American Surgery," was born in Philadelphia, July 7, 1768, of Edmund and Abigail Syng Physick, daughter of a silversmith. His father was receiver-general of the Province of Pennsylvania and after the Revolution agent for the Penn estates. He intended his son to be a physician and made him one in spite of the boy's expressed objection to studying medicine. From the Friends' School, kept by Robert Proud, the local historian, he went to Pennsylvania University and was graduated A. B. in 1785, studying afterwards with Dr. Adam Kuhn (q. v.). He was, to quote Gross, "a faithful, scrupulous toiling soul, something of a prig and not popular with his mates but readily devouring any mental pabulum offered him, notably when, advised to read Cullen's first lines on the 'Practice of Physic' he learnt by heart all the dreary stuff." His father was determined to give the son every opportunity of learning his profession, so sent him in 1789 to London, where he was fortunate enough to live with John Hunter and to gain his esteem for his skilful dissections, and Hunter's influence to obtain the post of house-surgeon to St. George's Hospital, where he stayed a year. On leaving he was made a member of the Royal College of Surgeons. Five testimonials as to "medical qualifications and correct deportment" were given young Physick when he left St. Georges, and Hunter offered him a partnership. Why he refused the honor of this collaboration and the opportunity of working with Astley Cooper, Abernethy, and Home, Physick, reticent always, does not state. He went instead to Edinburgh and took his M. D. there when twenty-four, in 1792.

Everything seemed to point to rapid success when the young doctor, fresh from John Hunter and Edinburgh and armed with good recommendations, landed in Philadelphia in 1792, but perhaps for want of "push" he was some three years with scarcely any practice. A terrible epidemic of yellow fever, however, broke out in 1793, and volunteering help, he was elected physician to the fever hospital, at Bush Hill, a work which would have brought him more in contact with those who could be useful to him, only he resigned the next day owing, so it was said, to his objection to serve with one Devèze, a Frenchman. But he did faithful work among the yellow-fever patients, always following his master, making careful notes and frequent autopsies and making a living by taking care of several families

for a small annual sum, and in 1794, Devèze being no longer at Bush Hill, he took service there; this, with his surgeoncy at the Pennsylvania Hospital, brought him into prominence. The year 1800 saw him lecturing on surgery in the University School to certain students, lectures which Rush himself attended and applauded. During thirteen years he was professor of surgery and during that period made his great reputation. "For the first time here students heard something more than theory and a mere setting forth of operations and technic; they were taken to the root of things and made to observe, deduce and record." In the operating-room his deftness and precision were remarkable and as a lithotomist he was probably without equal in skill or number of operations performed. One of his last was upon the aged Chief Justice John Marshall, a remarkable case, nearly a thousand calculi, in size varying from a partridge shot to a pea were removed and the patient made a good recovery.

Dr. Physick was one of the first in this country to employ the stomach tube for washing out the stomach, an invention of Dr. Alexander Monro of Edinburgh in 1797. Physick reported cases in the "Eclectic Repertory and Analytical Review" in October, 1812. In orthopedic surgery his facility and inventive mechanism brought him wide fame, and his treatment of coxalgia is well known, most of the appliances today being modifications of his methods. His modification of Desault's splint for fractured thigh is still in use and his appliance for outward displacement of the foot in "Pott's fracture" seems to have anticipated that of Dupuytren. Like Hunter his surgery was conservative—a conversatism often carried to excess. As to general practice he went by the light of experience of common sense and was intolerant in his practice and teaching of the theories of others. He had great faith in venesection and Dr. Charles D. Meigs (q. v.) tells of a patient of his for whom he consulted Physick. She had a violent attack of conjunctivitis; great pain and threatened destruction of the eye. "She was duly bled, today, tomorrow, the next and next morning, and so on until at last she fainted so badly that terror laid hold on us both and we fled for succor to Dr. Physick. He came the next day at ten o'clock, looked at the eye and asked 'Who is your bleeder? Send for him and tell him to take twelve ounces of blood from the arm and request him to meet you in the morning and repeat the operation if necessary.' Although I was horrified I complied with the request and the next day on looking into the eye could discover only the faintest trace of inflammation. In fact, the woman was virtually cured."

Physick was not a great reader even on his own subject. A bound volume of Physick's lectures as delivered by him in 1808-09, annotated in his own handwriting, was presented to the University of Pennsylvania by Dr. John Welsh Croskey. His lectures, often written at four o'clock in the morning, were as carefully written as if for publication, he deeming it wrong to trust to memory and to instruct others upon subjects he did not clearly understand. One of his biographers, S. D. Gross, describes him as a cold, dyspeptic, pessimistic, unsociable man, but full of sympathy for suffering humanity; strikingly erect and handsome but pallid, his face was as if chiselled out of marble, the eyes black and his hair powdered and worn in a queue. Fond of money but never claiming high fees, he yet left nothing of his large fortune to the advancement of medicine. His mind was much troubled on theological matters but what conclusions he came to in the end his reserved nature did not allow him to disclose. The "Father of American Surgery," a title well deserved because well earned, died in Philadelphia, December 15, 1837.

In 1800 he married Elizabeth Emlen of Philadelphia, daughter of an eminent minister of the Society of Friends, and they had four children. Physick was "a faithful domestic character," allowing his daughters to entertain as much as they liked and only allowing himself recreation towards the end of his life when he loved to go with them to his summer house in Cecil County, Maryland.

He was professor of surgery, University of Pennsylvania, 1805-19; professor of anatomy, 1819-31; president of The Philadelphia Medical Society, 1824; emeritus professor of anatomy and surgery, University of Pennsylvania, 1831-37; member of the Academy of Medicine of France, 1825; honorary fellow, Royal Medical and Chirurgical Society, London, 1856.

PICKERING, Charles (1805-1878), known to the scientific world as an anthropologist, and botanist, was of good New England stock, being a grandson of Col. Timothy Pickering, a member of Washington's military family and of his first cabinet. He was born on Starucca Creek, Upper Susquehanna, Pennsylvania, on a grant of land owned by his grandfather, November 10, 1805. His father, Tim-

othy Pickering, died when 30, leaving Charles and his brother Edward to the care of their mother. He left Harvard before graduation, but was given his A. B. out of course in 1849 and A. M. in 1850. He received his M. D. there in 1826. In his earlier years he used to make botanical expeditions with William Oakes, and when he settled in Philadelphia in 1829, he had a strong bent towards natural science, very soon being appointed one of the curators at the Academy of Natural Sciences. During this time he published a brief essay on "The Geographical Distribution and Leading Characters of the United States Flora." When the United States Exploring Expedition was organized in the autumn of 1838 to sail for the South Seas, Pickering was elected as the principal zoologist, and the fame of that expedition rests chiefly on the work he then did with Professor Dana. Although Pickering retained the ichthyology, he went keenly into the geographical distribution of animals and plants; to the latter especially as affected by the operations and movements of the races of man. A year after the expedition, and at his own expense, he visited Egypt, Arabia, Eastern Africa and Western and Northern India, publishing in 1848 his volume, "The Races of Men and Their Geographical Distribution" (vol. ix, Wilkes' "Exploring Expedition Report"). In the fifteenth volume appeared his "Geographical Distribution of Animals and Plants." He had no better luck than many a scientist, for, in the course of printing, Congressional appropriations stopped and therefore the publication of further Reports. He brought out in 1854 a small edition of the first part of his essay and in 1876 a more bulky one "On Plants and Animals in Their Wild State." These writings and some contributions to scientific journals, notably to the "Smithsonian Contributions to Knowledge," constituted his no mean help to the study of natural science, but he had been long and lovingly working on a book yet unfinished when he died, a book edited afterwards by his wife, Sarah S. Pickering, and appearing in 1879 entitled, "Chronological History of Plants, or Man's Record of His Own Existence."

Professor Harshberger says he was singularly retiring and reticent, dry in ordinary intercourse, but to those who knew him well, communicative and genial. He was a member of the American Philosophical Society and a Fellow of the American Academy of Arts and Sciences, to both of which he made contributions. HOWARD A. KELLY.

Picton, John Moore White (1804-1858), surgeon of New Orleans. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 914.

PIERSOL, George Arthur (1856-1924), Philadelphia anatomist, was born in that city, May 17, 1856; his father, Jeremiah Morris Piersol, was a physician, and his mother, Minna Elliger Piersol, was one of the first graduates from the Woman's Medical College of Philadelphia. George took the degree of C. E. from the Polytechnic College of Philadelphia in 1874 and after graduating from the medical department of the University of Pennsylvania in 1877, was assistant demonstrator of histology in his medical alma mater until his appointment as demonstrator of embryology in 1882. In 1886, he went to the University of Berlin for graduate work and during the next two years studied at the University of Würzburg. In 1891, he succeeded Joseph Leidy (q. v.) as professor of anatomy, a post he held until poor health brought about his retirement in 1921. From that time he was ill until his death, August 7, 1924.

In 1910-11, he was president of the Association of American Anatomists and for fourteen years was on the board of editors of the "American Journal of Anatomy." He was a fellow of the College of Physicians of Philadelphia.

Among Dr. Piersol's writings are a "Text book of Normal Histology," including an account of the development of the tissues and of the organs, 1893 (fourth edition, 1896), and "Human Anatomy," 1907. He was co-editor of the "American Journal of Anatomy," 1901-02. He also translated Emil Verligger's "Brain and Spinal Cord," on a revision of which he was working just before his death.

He married Florence Lukens Reeder in 1898.

Dr. Piersol was short of stature and rotund. He had a bustling manner and a bright interested face. He was always responsive, never irritable, and was generous in his appreciation of the work of others. He had many warm friends.

PIFFARD, Henry Granger (1842-1910), of New York, author of the first systematic treatise on dermatology in America, was born in Piffard, Livingston County, New York, on September 10, 1842, his paternal ancestors coming from Dauphiné, France, and his

mother's being of Dutch extraction. He was educated at the Churchill Military Academy at Ling and at the University of the City of New York, where he took his A. B. 1862, A. M. 1865 and his M. D. at the College of Physicians and Surgeons, New York, in 1865, serving as interne at Bellevue Hospital. He specialized in skin diseases. He married, in 1868, Helen H., daughter of Gen. William K. Strong, of New York.

One of his best contributions to medical literature was the translation, from the French of A. Hardy, of the "Dartrous Diathesis" (1868). Following this came "A Guide to Urinary Analysis" (1873); "An Elementary Treatise on Diseases of the Skin" (1871); "Practical Treatise on Diseases of the Skin" (1891). His appointments included: surgeon to the New York Dispensary for Diseases of the Skin, and professor of dermatology in the University of the City of New York. In 1862 he served for a short time with the Sanitary Commission on the James River, Virginia. He won distinction as a microscopist, pathologist and electrotherapeutist and had inventive capacity as well as mechanical ingenuity.

His memberships included the Medical Society of the County of New York; the New York Academy of Medicine; the New York Dermatological Society, of which he was president in 1876.

Dr. George Henry Fox of New York, in the "Journal of Cutaneous Diseases," for February, 1911, gives some reminiscences of Henry Granger Piffard. Dr. Piffard began to collect foreign works on skin diseases. He was a fair German and a better French scholar, but knew very little of Italian. To supply this deficiency he subscribed for one or two Italian medical journals, selected a teacher, and attacked the language with his customary vigor. Happening to run across an advertisement of a book, entitled something like "Trattato della Pelle et cetera," he gave his bookdealer an order for it. The bookdealer, in a polite note, informed him that this was an expensive work, published by the Italian Government, and that it would take several weeks to import it. Piffard replied in language more vigorous than polite —"Expense be damned"; when he wanted a book he expected his dealer not to talk about it but to get it. In about two months, during which time his knowledge of Italian had rapidly increased, the book arrived and with it a bill for about $60. To his surprise and dismay he discovered at first glance that it was not a strictly dermatological work, but an elegantly bound and elaborate treatise on the tanning of hides.

Dr. Piffard died of pneumonia in New York, June 8, 1910.

PILCHER, James Evelyn (1857-1911), military surgeon, editor, author, teacher, was born in Adrian, Michigan, on March 18, 1857; son of Elijah Holmes and Phebe Maria Fiske Pilcher. He was graduated A. B. from the University of Michigan in 1879, and at once took up the further study of medicine under the direction of his brother, Dr. Lewis Stephen Pilcher, in Brooklyn, New York, and took his M. D. from the Long Island College Hospital in 1880. He received the degree of A. M. and Ph. D. from the Illinois Wesleyan University in 1887 and L. H. D. from Allegheny College in 1902. He was commissioned as an assistant surgeon in the United States Army in 1883 and became major and brigade surgeon, U. S. V., in 1898. He was retired on account of ill health in 1900. He died April 8, 1911, at Savannah, Georgia, from the effects of a diabetic carbuncle of the face. For a number of years he had been the subject of gradual failure of vision, consequent upon the retinal hemorrhages of chronic diabetes, and for the two years previous to his death had been nearly totally blind.

From boyhood Dr. Pilcher was interested in typographical and journalistic work, and throughout his life continued to display his interest in that branch of effort, and to give to his colleagues the benefit of his unusual abilities in that direction. In the very beginning of his medical career he was an important factor in the establishment of the "Annals of Anatomy and Surgery," the publication of which ceased upon his appointment as a military officer in the Army. It was due to the work of that journal that in the following year the "Annals of Surgery" was instituted under the direction of his brother, Dr. Lewis S. Pilcher. As secretary of the Association of Military Surgeons of the United States he organized and carried on, as a monthly publication from 1901 to 1906, the "Journal of the Association of Military Surgeons," which in 1907 became the "Military Surgeon," of which he continued to be editor until he was compelled by his increasing blindness to give up all such work in 1909.

During his early army career he was transferred from army post to army post in the usual manner. In 1890 he was on duty at

Fort Ringgold, Texas, near the Mexican Border. During his term of service there an epidemic of Dengue fever, of a severe type, spread throughout all that region, and he was the only physician within a radius of 100 miles. The entire responsibility and labor of giving medical advice throughout this whole region, both to the members of his garrison and the civilians, fell upon him. To this work he devoted himself most assiduously. Near the close of the epidemic he himself suffered from the disease, and those that were with him at the time relate with admiration the manner in which, while sick, he had himself carried to his carriage and made long journeys to give advice to those who were dependent upon him, returning in a state of utter exhaustion to his own quarters. From the effects of this labor and disease-attack he never fully recovered. From that time began the train of digestive disturbances which culminated in the frankly expressed diabetes which ultimately cut short his career. He summoned all his energies together, however, for the performance of the duties attending his work as a brigade surgeon of volunteers during the Spanish-American War, during which in connection with the seventh Army Corps he was in command of the army medical supply depot at Savannah, Georgia. He threw himself with his customary ardor into the duties of his position, notwithstanding his poor health, but when the special demand for his services ceased, by reason of the close of the war, he collapsed and it became manifest that he never could again assume the burdens of the active list.

Doctor James Evelyn Pilcher had in a high degree an unusual combination of abilities; he had fine executive talents added to great industry and an active interest in many fields of activity. In the earlier years of his military service he was the author of the first system of drill for the United States Army Hospital Corps published in the United States, which was crowned as highly meritorious by the War Department. During this period, also, he compiled his work on "First Aid in Illness and Injury," the first edition of which published by the Scribners, was issued in 1892. It has since gone through many editions, and has maintained its position as the principal text-book for the instruction of the Hospital Corps.

To relieve the monotony of a winter's duties at Fort Custer, Montana, he devoted himself to the translation into English of the famous book of Mundinus, "de Anathomia Humani Corporis Interioribus Membris," which remains in manuscript as a monument to his patience and classical knowledge. During the term of his service at the army post of Columbus, Ohio, he filled the chairs of military surgery in three of the medical schools of that city, and after his retirement filled the chairs of sociology and political economy in Dickinson College, and that of professor of medical jurisprudence in the Dickinson School of Law at Carlisle, Pennsylvania, where he made his home during the later years of his life.

He contributed many articles both to the medical and general press. By his versatility and breadth of mental horizon he took an interest in many things and enjoyed the friendship of many men. Upon the reorganization of the National Volunteer Emergency Relief Corps he was made director general of the corps, but his failing health prevented him from giving to the work the measure of attention which he had hoped to be able to give.

He was married in 1883 to Mina Adela Parker of Brooklyn, who survived him.

LEWIS S. PILCHER.

PILCHER, Paul Monroe (1876-1917), Brooklyn surgeon and urologist, was born April 11, 1876, in Brooklyn, New York, the son of Lewis Stephen Pilcher, distinguished surgeon and erudite editor of the "Annals of Surgery," and of Martha S. Phillips. After his early training in the Brooklyn Polytechnic Institute he received an A. B. from the University of Michigan in 1898. From the College of Physicians and Surgeons in New York he received the degree of Doctor of Medicine in 1900, and at the same time an A. M. from Columbia University. After two years' residence in the Seney Hospital with his father as the senior surgeon he went abroad to come in contact with Nitze and von Fritsch, and to get that poise in a life-work best secured by an intimate comparison of the old world with the new. He studied for a year in Goettingen, Vienna and Berlin, and returning home received appointments in the Seney, German, St. John's and Jewish Hospitals, later he resigned these to devote his energies to the development of a private hospital which he conducted with his father and his brothers. His work here was notable, and along other than strictly surgical lines. His methods of working up cases and his hospital reports and his follow-up work remains as models. His strong bent was toward urology with a splendid ex-

perience in general surgery as a background.

He issued the translation of Rovsing's Abdominal Surgery from the Danish, and he was the author of many scientific papers. From 1907 to 1911 he edited the "Long Island Medical Journal." In 1911 he published an admirable text-book on "Practical Cystoscopy and the Diagnosis of Surgical Diseases of the Kidney and Urinary Bladder," a beautifully illustrated, fresh, lucid exposition of the new science of cystoscopy, a possession of permanent value which perhaps constitutes his most important claim to recognition as a pioneer. To Hugh Cabot's Textbook of Modern Urology he contributed the chapter on Prostatic Obstructions, in which are embodied important original studies and methods. This was his last work, fatal illness overtaking him shortly after the completion of the manuscript.

Pilcher was operating surgeon at the Eastern Long Island Hospital at Greenport, and a member of the American Surgical and American Urological Associations and other medical societies.

In 1905 he married Mary Finlay of Montclair, New Jersey, who survived him with two sons, Lewis Stephen, 2nd, and Paul Monroe.

Of medium height with slight, spare figure and with keen, bright, expressive eyes, Pilcher had an attractive personality and was the embodiment of scientific and incessant application to professional work.

He died of pneumonia in Brooklyn, January 4, 1917.

HOWARD A. KELLY.

PINKNEY, Ninian (1811-1877), surgeon in the United States Navy, was graduated from St. John's College in 1830, and began to study medicine with Dr. Edward Sparks. In 1833 he was graduated from the Jefferson Medical College, Pennsylvania, and the following year entered the United States Navy as assistant surgeon and continued on active duty until retired as medical director with rank of commodore in 1873. In 1848 he received the vote of thanks of the General Assembly of Maryland, for gallant and meritorious services in the Mexican War. He prepared and delivered a series of lectures, some of which were published. Among the best are: "On the Nerves of the Brain and Organs of Sense" (1839); "Life and Character of Admiral Collingwood" (1848); "A Treatise on Asiatic Cholera" (1849); "Home and Foreign Policy of the Government of the United States" (1854). In the same year he also delivered the commencement oration at St. John's College, and made the presentation address at the Naval Academy on the occasion of Commodore Perry's presenting the flag that had been raised on the soil of Japan. Surg. Pinkney was persistent in his advocacy for increased and definite rank for the medical officers in the Navy, and, in 1870, was chairman of a delegation which proposed the medical staff rank and grade for the United States Navy which later, after slight modifications, became the law. He died at his home near Easton, Maryland, in 1877, leaving his widow and a daughter.

CHARLES A. PFENDER.

PIPER, Richard Upton (1816-1897), physician, author and artist, of Portland, Maine, Boston and Chicago, was born April 3, 1816, in Stratham, New Hampshire. He was graduated in medicine at Dartmouth Medical School in 1840 and was a member of the Massachusetts Medical Society from 1843 to 1876, living in Boston. Then he went to Chicago, where he practiced medicine. He was the author of the following works: "Operative Surgery," illustrated with about 2,000 drawings by himself (Boston, 1852); "Trees of America" (1857); and he drew illustrations for Maclise's Surgical Anatomy. He wrote a "Report on Diseased Milk and the Flesh of Animals Used for Human Food" (Chicago, 1879), and contributed to "The New Orleans Medical and Surgical Journal" and the "New York Evening Post." He was said to have "the eye of an artist, the hand of a draughtsman and the spirit of an enthusiast."

He died in Newport, Maine, August, 1897.

PITCHER, Zina (1797-1872), army surgeon, botanist, mayor of Detroit, was the son of Nathaniel Pitcher and Margaret Stevenson. He was born April 12, 1797, on a farm in Washington County, New York. When five years old his father died, leaving the mother with four young sons and an unattractive farm. Being Scotch, she had learned the value of education and determined to provide the best possible for her children. Zina worked hard during spring, summer and fall that he might study during the winter in common school or academy. He began to study medicine at the age of twenty-one with private practitioners and at Castleton Medical College, graduating M. D. from Middlebury College, Vt., in 1822. While studying medicine he tutored in Latin, Greek and natural sciences—the latter with Prof. Eaton, of

Rensselaer Polytechnic Institute at Troy, New York. Soon after graduating, the Secretary of War, John C. Calhoun, sent him a commission as assistant surgeon, United States Army. The responsibility of this position rapidly developed his self-reliance, so that he was soon made surgeon. During his fifteen years of army service he was stationed at different points on the Northern Lakes (then a savage frontier), on the tributaries of the Arkansas, among the Creeks, Cherokees, Choctaws and Osages, and at Fortress Monroe. At these places his leisure hours were spent in study of nature about him, observation of the habits of the Indians, their diseases and the means used for their recovery. The results of these studies may be seen in works on botany, in plants named after him, on fossils bearing his name, and in a letter to Dr. Morton on the existence of consumption among aborigines, and in his article on "Indian Therapeutics," printed in the fourth volume of Schoolcraft's history of the "Conditions and Prospects of the Indian Tribes." In 1835 he was president of the Army Medical Board.

In 1836 Dr. Pitcher resigned his commission and settled in Detroit. From 1837 to 1852 he was regent of the University and probably planned most details respecting the medical department. With the appointment of the medical faculty he was made emeritus professor. He was mayor of Detroit in 1840-41-43. Long dissatisfied with the educational facilities of the frontier town, he made an exhaustive study of its schools and laid the results before the Common Council and persuaded it to join him in asking the Legislature to enact a law authorizing the establishment of free public schools in Detroit; the petition was granted. He was county physician, 1845; city physician, 1847; and during Buchanan's administration, surgeon of the Marine Hospital in Detroit. He was elected president of the American Medical Association at its meeting in Detroit, 1856, and was editor of the "Peninsular Medical Journal," 1855-56-58. He was president of the Old Territorial Medical Society during fourteeen years; president of the Michigan State Medical Society, 1855-56; a founder of the Sydenham Society; a founder of the Detroit Medical Society, 1852-58.

Zina Pitcher was versed in the habits of beasts and birds; his contributions to Indian materia medica were classic. His perception of scientific facts was unusually quick and his memory tenacious. In driving through the country he at once detected an unfamiliar plant or animal, secured a specimen and determined its place. While in Texas he collected many fossils and forwarded them to the Philadelphia Academy of Natural Sciences. Studies of these and allied collections were the basis of Dr. S. G. Morton's (q. v.) work entitled "Cretaceous System of the United States." One of the specimens is known as "Gryphœa Pitcheri." In "Gray and Torrey's Flora of the United States" several new species are named after Dr. Pitcher in acknowledgment of his service to botany. He was a frequent contributor to medical literature, treating a wide variety of subjects. His home was at the service of the sick; he was known to have taken a stranger suffering from small-pox into his home, and to both nurse and doctor him to recovery. Moreover, to him the Bible was a guide, a counsellor and inspiration.

In 1824 Zina Pitcher married Ann Sheldon, of Kalamazoo, Michigan, and had a son (Nathaniel) and daughter (Rose), the mother dying in 1864. In 1867 he married Emily Backus, granddaughter of Col. Nathaniel Rochester, of Virginia, the founder of Rochester, New York, and on the death of DeWitt Clinton, acting governor of New York.

Dr. Pitcher died April 5, 1872, from unoperated stone in the bladder.

LEARTUS CONNOR.

PLANT, William Tomlinson (1836-1898), of Syracuse, N. Y., Navy surgeon and writer, was born at Marcellus, New York, July 27, 1836, of English ancestry, taking his medical degree at the University of Michigan, at Ann Arbor, in 1860. At first he settled at Ithaca, New York, later, however, he removed to Susquehanna, Pennsylvania, and, in 1861, joined the United States Navy, holding the positions of assistant and past-assistant surgeon. Resigning in 1865, he settled in Syracuse.

For some years he was professor of clinical and forensic medicine and diseases of children in the medical department of Syracuse University and wrote repeatedly on a variety of topics, some of his work possessing enduring value. He was the author of a "Succinct History of Medicine of the Last Century."

In 1866 he married Frances C. Walrath, of Chittenango, New York.

POLLAK, Simon (1816-1903), organizer of the first eye and ear clinic of St. Louis, was born near Prague, Bohemia, April 14, 1816,

and received his M. D. there in 1835, and certificates for surgery and obstetrics in Vienna, 1836. Arriving in New York in 1838, he spent a short time in New Orleans and in other southern towns, and in March, 1845, settled in St. Louis, Missouri, where he was one of the founders of the Missouri Institute for the Blind in 1850. In 1859 he went to Europe and spent almost two years in study in Paris, Vienna, Berlin, and London, returning to St. Louis in 1861. On account of the Civil War he removed to New York and aided in the founding of the United States Sanitary Commission. On behalf of this society he returned to St. Louis, where he joined the Western Sanitary Commission. About this time he organized the first eye and ear clinic west of the Mississippi, in St. Louis. He invented a scleral puncture in painful glaucomatous eyes that, being properly performed, saved many a disfiguring enucleation. In 1863 he was appointed general hospital inspector United States Sanitary Commission at a salary of two hundred and fifty dollars a month, a position he accepted, but declined the salary.

One of the early members of the American Ophthalmological Society, he was known as a prominent oculist and teacher, active and very popular throughout his unusually long life. At his last birthday his friends and colleagues tendered him a great ovation at a dinner.

He married in 1863 a daughter of Samuel Perry, of Cincinnati, and had two sons.

He died October 31, 1903.

HARRY FRIEDENWALD.

POLK, William Mecklenburg (1844-1918), gynecologist of New York, son of Leonidas and Frances Devereux Polk, was born in Ashwood, Maury County, Tennessee, August 15, 1844. His early education was obtained in Marion, Alabama, and at St. James College, Maryland, where he prepared for admission to the Military Institute of Lexington, Virginia, then conducted under the personal direction of General Stonewall Jackson. There he pursued the mathematic and scientific course of study preparatory to entering West Point Military Academy. When the war between the states began, he was in his seventeenth year, but physically well equipped and with a knowledge of military tactics that enabled him at once to be of assistance to the Confederacy. He began service in 1861 under General Jackson in Richmond, as drill master of Virginia state troops, and later, while attached to the staff of General Zollikoffer, served as drill master of Tennessee state troops. From April, 1861, to May, 1865, Polk was continually in active service and it is doubtful if any soldier under either flag took part in more battles and skirmishes. In May, 1863, he was appointed assistant chief of artillery in Polk's Corps, and subsequently captain in the adjutant general's department, Army of the Tennessee, on the staff of General Joseph E. Johnston.

At the close of the war Dr. Polk accepted a position as superintendent of the outdoor department of the Brierfield (Alabama) Iron Works, and while thus employed became interested in medicine, beginning its study at that time under the direction of Dr. E. W. C. Bailey. He then attended the medical department of the University of Louisiana (now Tulane University). In 1868 he came to New York, where he continued his studies in the College of Physicians and Surgeons, from which he was graduated in 1869. Immediately thereafter he entered Bellevue Hospital as interne on the medical side and served the required eighteen months, during which time he was brought into close relations with the physicians: John S. Metcalfe, Alonzo Clark, Austin Flint, James R. Wood and Alfred L. Loomis (q. v. to Clark, Flint, Wood and Loomis). At the close of his service he received an appointment as one of the curators to the pathological department of the hospital, in which capacity he served for one and one-half years. Later he was assistant demonstrator of anatomy in Bellevue Hospital Medical College and was then advanced to the position of professor of materia medica, therapeutics and clinical medicine in the same institution. After filling this position for four years, in 1879 he accepted the appointment to the professorship of obstetrics and diseases of women in the medical department of the University of the City of New York. Meanwhile, in 1874, he had been appointed visiting physician to Bellevue Hospital, and in 1878 visiting physician to St. Luke's Hospital.

After accepting the position of professor of obstetrics and diseases of women in the University, Dr. Polk resigned from the staff of St. Luke's Hospital in order to concentrate his attention upon gynecological work in Bellevue, where in conjunction with Dr. W. Gill Wylie (q. v.) and Dr. W. T. Lusk (q. v.), he devoted himself to the creation of the large gynecological service which sprang up in that institution under the combined efforts of these three men. Dr. Polk continued to devote himself mainly to surgical gynecology

and gradually withdrew from the teaching of obstetrics, being succeeded in that department by Dr. J. Clifton Edgar, Dr. Polk having the title of professor of diseases of women. In 1898, when, through the interest of Colonel Oliver H. Payne in higher medical education, the medical department of Cornell University was inaugurated, Dr. Polk was honored by the appointment as dean of the faculty and also filled the chair of diseases of women in the same institution. Upon him, as well as on Dr. Lewis A. Stimson (q. v.), devolved the arduous labor of successfully organizing this department. He threw himself vigorously into the work of perfecting the school, and being surrounded with associates who ably assisted in executing his plans, at the end of the fourth year had succeeded in establishing a medical college which is now recognized as one of the leading institutions in America. To the medical department of Cornell University and to special surgical work in diseases of women, Dr. Polk subsequently gave all of his time and attention. He was thoroughly interested in the problems of higher medical education throughout his career and one might meet him in attendance at the Congresses on this subject held yearly by the American Medical Association at Chicago. He was at various periods, president of the American Gynecological Society, of the New York Obstetrical Society, of the New York Academy of Medicine, a member of the county medical society, the Medical Society of the State of New York, the American College of Surgeons, the New York Academy of Medicine, the Medical and Surgical Society, Practitioners' Society, the Pathological Society, and corresponding fellow of the Société Obstétricale et Gynécologique of Paris, France, and of many other foreign medical societies. He was also a member of the Century and Metropolitan Clubs and a vestryman of Trinity Corporation of the City of New York. In 1893 the University of the South conferred upon him the honorary degree of Doctor of Laws. Dr. Polk held for many years the position of consulting gynecologist to St. Luke's, St. Vincent's, the General Memorial and the Lying-In Hospitals of New York.

He was a frequent contributor to the "American Journal of Obstetrics," and to the proceedings of the American Gynecological Society, and was also the author of a biographical work, "Leonidas Polk, Bishop and General," his well-known father, who met his end in 1864, while in the service of the Confederacy.

Dr. Polk was married, November 14, 1866, to Ida Ashe Lyon of Alabama, who died a number of years before him. Subsequently he was married to Maria H. Dehon of New York. Of the two sons by his first marriage, the elder, Frank L. Polk, a prominent member of the bar, was Counsellor of the Department of State; the younger, Dr. John M. Polk, died several years before his father who passed away aged seventy-three, at Atlantic City, N. J., June 23, 1918.

Of a fine presence and delightful charm of manner he was an eloquent speaker. Dr. Polk was one of the honored names in the group of eminent medical men of the past generation, a scholar and a gentleman, loved and respected by his pupils, patients and associates, whose life and works constitute his most enduring monument.

POMEROY, Charles G. (1817-1887), one of the founders of the New York State Medical Society, was born in Madison County, February 22, 1817. Shortly after his birth his parents took him to Ontario County, where they settled on a farm, near the village of Canandaigua. In this village and in Rochester, young Pomeroy attended school until he was seventeen, then studied under Dr. Post. Four years later the censors of Ontario Medical Society granted him a license to practice, then followed a few months' experience in Monroe County, before forming a partnership with Dr. Alexander McIntyre, of Palmyra. Dr. Pomeroy again changed his home to practice for eight years in Fairville; then moved to Newark, Wayne County, New York, where he founded the State Medical Society and was an organizer of the Wayne County Medical Society and many times elected as its president. He was also president of the Medical Association of Central New York. As governor, trustee and resident physician of the New York State Custodial Asylum for Feeble-minded Women Dr. Pomeroy worked until his impaired health obliged him to resign.

He married twice. His first wife dying in early life, he married a second time in 1850.

Dr. Pomeroy died of granular disease of the kidneys with cardiac complications, in Newark, December 14, 1887.

MARGARET K. KELLY.

POMEROY, Oren Day (1834-1902), otologist and ophthalmologist of New York, was born

in Somers, Connecticut, October 11, 1834, and died of apolexy at Whitestone, Long Island, March 19, 1902. He was educated at a boarding-school in Ballston, New York, at the high school in Somers, Connecticut, and at Monson Academy, Massachusetts; he studied medicine at the Berkshire Medical Institution, Pittsfield, the University of the City of New York and at the College of Physicians and Surgeons, New York, where he took his M. D. in 1860. Settling in practice in New York City he devoted himself to diseases of the eye and ear; through Dr. C. R. Agnew (q. v.) he was appointed assistant and chief of clinic of the eye and ear department in his alma mater at the organization of the department in 1866; he was assistant surgeon in the Manhattan Eye and Ear Hospital from its foundation until 1873, when he was elected a surgeon and director, holding the positions until his death. Other positions he occupied were: consulting physician to the New York Foundling Asylum, the Paterson (N. J.) Eye and Ear Infirmary; professor of ophthalmology at the Northern and Demilt dispensaries; professor of otology at the New York Polyclinic. He was a charter member of the American Otological Society, being president of the latter society in 1872.

Dr. Pomeroy was the author of a text-book on "Diseases of the Ear," a book that marked the transition between the old school and the modern school of treatment. His contributions to the medical literature on the surgery of the eye and ear were numerous, many of them appearing in the transactions of the American Ophthalmological Society and of the American Otological Society and in the New York Medical journals.

In 1865 he married Hannah M., daughter of Abial Miles of New York.

For several years previous to his death he had been in poor health and had retired from practice.

POPE, Charles Alexander (1818-1870), surgeon of St. Louis, was born in Huntsville, Alabama, March 15, 1818. He was educated at Greene Academy, in his native town and at the University of Alabama, then beginning the study of law. Finding that the sedentary life of a lawyer did not suit his delicate constitution he began the study of medicine under Dr. Fearn and Dr. Erskine of Huntsville. After attending lectures at the Cincinnati Medical College under Dr. Drake, he enrolled as a student in the medical department of the University of Pennsylvania and received his degree in medicine from that institution in 1839, his thesis being "Pathology of the Arteries."

Dr. Pope went abroad and spent nearly two years, studying surgery in Paris, settling in St. Louis, Missouri, January 1, 1842. The following year he was chosen professor of anatomy and physiology in the medical department of St. Louis University. In 1841 he again visited Europe and sent from there communications to the "St. Louis Medical and Surgical Journal." In 1847 he was transferred to the chair of surgery and the next year was dean of the faculty. He was visiting surgeon to the St. Louis Hospital and to the City Hospital and devoted himself exclusively to teaching and to the practice of surgery. His devotion to St. Louis University did much to build up the medical department. He had a gift of rapid, clear and concise delivery as a lecturer and left a deep impression on the minds of the students of the Mississippi Valley. His writings were not numerous, there being only seven in the catalogue of the Surgeon General's Library, his reputation resting rather on his work as a skilful surgeon and a teacher. In 1853 he was president of the American Medical Association. He died in Paris, Missouri, July 6, 1870.

POPE, John Hunter (1845-1915), Texas physician, writer and public health officer, was born in Washington, Wilkes County, Georgia, February 12, 1845. His father, Alexander Pope, a prominent lawyer, was a friend of Alexander Stephens, and his mother was Sallie Willie. An uncle was Chief Justice James Willie, of the Supreme Court of Texas. In 1858 young Pope with his parents moved to Marshall, Texas. When eighteen he enlisted in the Confederate Army and fought until the close of the War, being wounded at the Battle of Chickamauga. He entered the University of Virginia and was graduated M. D. in 1868; in 1869 he received the same degree from the University of Louisiana. Dr. Pope settled at Milford, Ellis County, Texas, and practiced until 1871 when he returned to Marshall and formed a partnership with B. F. Eads. In 1879 he was elected president of the State Medical Association, and was a member of the National Board of Health. After spending two years in Mexico for his health he established a sanitorium for the treatment of nervous diseases at Lithia Springs, Georgia; in 1892 he opened a similar institution at Marshall, but his health failing this was relinquished in 1896.

Among his writings were: the "History of the Yellow Fever Epidemic at Marshall, Texas" (1873); "Report of Climatology and Epidemics of Texas" (1874); "Report on the Science and Progress of Medicine" (1875); and "The Menace of Mexico to the Public Health of the United States."

Dr. Pope was twice married, first, 1872, to Hattie J., daughter of Dr. James F. Starr, former treasurer of the Republic of Texas; she died in less than a year. His second wife died in 1890 and a young son died soon after. His own death occurred as a result of pneumonia at Marshall, September 20, 1915.

Two brothers were physicians, Irvin Pope, of Tyler, who survived him, and Asa Pope of Marshall. Three other brothers were lawyers: Judge W. H. Pope, Judge James W. Pope, and Alexander Pope, who died in 1913, 1911, and 1899 respectively.

HOWARD A. KELLY.

PORCHER, Francis Peyre (1825-1895), physician, writer and botanist of South Carolina, was born December 14, 1825, and was descended from Isaac Porcher, a French Huguenot who emigrated from France at the time of the persecution of the Huguenots by the Romish Church. He was graduated from the South Carolina College in 1844 with the degree of A. B. and took his M. D. from the Medical College of the State of South Carolina in 1847. His thesis, entitled: "A Medico-botanical Catalogue of the Plants and Ferns of St. Johns, Berkeley, South Carolina," was published by the faculty of the college. This work proved to be the forerunner and groundwork of a very remarkable series of books, as follows: "Sketch of the Medical Botany of South Carolina," 1849; "The Medicinal, Poisonous, and Dietetic Properties of the Cryptogamic Plants of the United States," being a report made to the American Medical Association at its sessions held at Richmond, Virginia, 1852, and St. Louis, Missouri, 1854; "Resources of the Southern Fields and Forests" (war volume), 1863; second edition, 1869. In addition to these large works he wrote, in 1860, a prize essay entitled "Illustrations of Disease with the Microscope: Clinical Investigations," with upwards of five hundred original drawings from nature and one hundred and ten illustrations on wood. For this, a prize of $100 offered by the South Carolina Medical Association was awarded to him. The first edition of "The Resources of the Southern Fields and Forests" was published by order of the surgeon-general of the Confederacy. It was a medical botany of the Confederate States. After graduating in medicine he spent two years in France and Italy, perfecting himself in the refinement of his profession. Dr. Porcher returned to Charleston, South Carolina, and assisted in establishing the Charleston Preparatory Medical School. He was subsequently elected professor in the chairs of clinical medicine and of materia medica and therapeutics in the Medical College of the State of South Carolina. He was for five years one of the editors of the "Charleston Medical Journal and Review," and also assisted in editing and publishing four volumes "new series" after the War between the states.

Dr. Porcher, with his two brothers, served throughout the War. A third brother was killed in 1862. He was surgeon to the Holcombe Legion; to the Naval Hospital at Fort Nelson, Norfolk Harbor, and to the South Carolina Hospital at Petersburg, Virginia. His contributions to medical literature have been numerous and valuable. Some of his most important contributions have been upon "Yellow Fever," "Diseases of the Heart" ("Wood's Hand-book of the Medical Sciences"), reports of sixty-nine cases of paracentisis of the chest walls in case of effusion, on the medical and edible properties of the cryptogamic plants and on gastric remittent fevers. A partial list will be found in the "Index Medicus" of the surgeon-general's office in Washington.

Some of the offices he held were: ex-president of the South Carolina Medical Association and of the Medical Society of South Carolina, ex-vice-president of the American Medical Association, member of the Association of American Physicians, and an associate fellow of the College of Physicians of Philadelphia. The degree of LL. D. was conferred upon him in 1891 by the University of South Carolina.

He was first married to Virginia, daughter of the Hon. Benjamin Watkins Leigh, of Richmond, Virginia. His second wife was Margaret, daughter of the Hon. J. J. Ward, of Georgetown, South Carolina. He had five children by his first wife and four by his second wife. One of his sons became a physician. Dr. Porcher was a man of wonderful capacity for work. He had no higher ambition than the advancement of his profession. It may truthfully be said of him that he "scorned delights and lived laborious days."

During a long illness from paralysis a plant was brought to him which he immediately detected to be a specimen of "Trillium Pumilum," and he announced that it had not been seen before in one hundred years. He was supported in this statement by the most distinguished authorities. So great was his ambition to excel as a physician that he almost gave up botany in his latter years fearing that his reputation as a botanist might excel his reputation as a physician.

He died November 19, 1895, leaving to his children that great heritage, a name untarnished.

W. Peyre Porcher.

PORTER, Charles Burnham (1840-1909), Boston surgeon, came of a long line of medical men, being a descendant of Daniel Porter, who in the first half of the seventeenth century practiced in Connecticut. His father was James Burnham Porter (q. v.) Born in Rutland, Vermont, January 19, 1840, Charles Burnham took his A. B. and M. D. at Harvard University in 1862 and 1865 respectively, and was surgical interne at the Massachusetts General Hospital, Boston, from 1864 to 1865. In April, 1865, he was appointed acting assistant surgeon in the army and served at the Armory Square Hospital in Washington until mustered out. At one time he had the care there of seventy-four compound fractures. He was assistant demonstrator of anatomy at Harvard Medical School in 1867; demonstrator in 1868. This latter position he held for eleven years. In 1868 and in 1870 he visited Europe, doing post-graduate work in Berlin, London and Vienna. In 1879 he was made instructor in surgery; in 1882 he became assistant professor of surgery; in 1887 professor of clinical surgery. His connection with the staff of the Massachusetts General Hospital began as surgeon to out-patients in 1866. He was appointed surgeon in 1875, and served in this capacity until 1903 when he was retired under the age limit, going on the consulting board. He also resigned his professorship in the medical school. Dr. Porter's professional career began before the revolution in surgery started by Lister. His activity began when surgery was always risky and extended into the time when it became nearly always safe, provided it was clean. He early won renown as an unusually skilful technician. He taught operative surgery on the cadaver and his rapid and precise operating in the surgical amphitheatre was the delight of the medical students. His counsel was much sought, and for many years his physical endurance seemed unlimited. In his last term of hospital service he operated on a policeman for an extremely complicated intestinal obstruction with innumerable adhesions, requiring multiple resections. The patient was under ether six and one-half hours. When at last the operation was finished the assisting house-officers were exhausted and Dr. Porter was fresh. The patient recovered and continued his customary work.

After his retirement from active service, Dr. Porter failed in health progressively. His work seemed to be finished. The end came as one thinks he would have wished, May 21, 1909. He was visiting a patient, a warm, personal friend, when he was stricken, soon became unconscious and died in less than twenty-four hours. He left a widow, who was Miss Harriet A. Allen, three daughters (one the wife of Dr. Percy Musgrave of Washington, D. C.), and a son, Charles Allen Porter, whose appointment as assistant professor of surgery in the Harvard Medical School was one of the closing joys of his father's life.

PORTER, Charles Hogeboom (1834-1903), chemist and medico-legal expert of Albany, N. Y., was born of Dutch and English ancestry at Ghent, Columbus County, New York, November 11, 1834. His degree in arts was from Yale in 1857, his medical degree from the Albany Medical College in 1861. Settling in Albany, he devoted especial attention to legal medicine, but throughout the Civil War was assistant surgeon of the Sixth New York volunteer heavy artillery. In 1855-6 he was professor of chemistry at the Vermont Medical College, and from 1859 till 1864 professor of chemistry and medical jurisprudence in the Albany Medical College.

He contributed largely to the literature of medical jurisprudence. Among his more important articles are: "Arsenic in Common Life" ("Berkshire Medical Journal," 1856); "Arsenic, and Cases" ("Transactions, Medical Society of New York," 1861); "A Statement of the Case of the People vs. Fere" ("Journal of Psychological Medicine," New York, 1870).

Dr. Porter was of medium height and thickly set. His skin was dark, his hair thin and black, and his eyes a deep brown. These eyes were very expressive. A former student of the doctor relates that, once, after a lec-

ture, he went to Dr. Porter to ask him some trivial question, not at all in an earnest way but only to "annoy the professor." Dr. Porter fixed his quiet, steady eyes upon the student, and kept them there for some time without uttering a word. "I slunk away," relates the former student, "most thoroughly ashamed." Dr. Porter was slow and deliberate in speech and action, always weighing his words most carefully. On the witness stand he was admirable, chiefly for the exactness and care of his utterances. He did not have "a host of friends," but to the few he did possess he was just and loyal.

He died after a lingering illness at Canandaigua, New York, November 21, 1903.

THOMAS HALL SHASTID.

PORTER, James Burnham (1806-1879). "Dr. Jim," as he was familiarly known over a wide territory, was one of a medical family famous in Vermont for a century, and greatly missed when he died in 1879. His father, James Porter, was one of four brothers, all medical men, and was long a Vermont practitioner. James B. Porter was educated at Middlebury College, and had his medical education at Castleton and Woodstock, graduating at the latter institution. He was long a member of the Vermont Medical Society. He was one of the best types of the country doctor, and widely sought in consultation.

He was called to attend the man injured in the construction of the Rutland Railroad, who became the famous "crow bar case." This case was reported by John M. Harlow (q. v.) in the "Boston Medical and Surgical Journal," in November, 1848, and had a wide circulation in medical literature. The patient who had an iron bar driven through his skull, lived many years, and his skull is still preserved in the Warren Museum at Harvard Medical School.

Dr. Porter married, in 1834, Harriet Griggs, of Brookline, Massachusetts. Of his four children, one, Charles Burnham (q. v.) (1840-1909), became a surgeon and was professor of clinical surgery at Harvard from 1887 to 1903. CHARLES S. CAVERLY.

PORTER, John Addison (1822-1866), physician and chemist, who placed agriculture on a scientific basis, was born in Catskill, New York, March 15, 1822. He was graduated at Yale University in 1842, became professor of rhetoric and ancient and modern languages at Delaware College, and in 1847 went abroad to study agricultural chemistry under Liebig at the University of Giessen. Returning to the United States he was assistant at the Lawrence Scientific School, Cambridge, Massachusetts, and in 1850 accepted the chair of applied chemistry at Brown University, Providence, Rhode Island; in 1852 he succeeded John P. Norton as professor of analytical and agricultural chemistry at Yale University, serving until 1856 when he became professor of organic chemistry, resigning in 1864 because of ill health. His M. D. was received at Yale University in 1855.

In 1854 Dr. Porter married a daughter of Joseph Earl Sheffield who established and endowed the Sheffield Scientific School.

"The movement toward the establishment of agriculture on a scientific basis received its greatest impulse" from the labors of Porter. He wrote: "Principles of Chemistry" (1856); "First Book of Chemistry and Allied Sciences" (1857). In 1868 he published "Selections from the Kalevala," translated by himself. During the Civil War he conducted the "Connecticut War Record" giving news of Connecticut regiments. He was a founder of the "Scroll and Key Society," at Yale, which after his death established in his memory a prize of two hundred and fifty dollars to be given to the student of Yale University writing the best essay on a given subject.

Dr. Porter died at New Haven, August 25, 1866.

PORTER, Joshua (1730-1825), pioneer physician of Salisbury, Connecticut, the younger son of Nathaniel Porter and Eunice Horton, was born in Lebanon, in that state, June 26, 1730. At the age of fourteen, as his father had died and his mother had married again, he chose his great uncle, Peter Buell of Coventry, Connecticut, as his guardian and spent the next five years on a farm in that town. There he was prepared for Yale College, in a year, by his brother and graduated in 1754. After graduation he taught for a year in Newbern, North Carolina, then returned to Connecticut to study medicine with Dr. Josiah Rose of Coventry. He began the practice of medicine in Lebanon, but in November, 1757, moved to Salisbury, where there was a greater opening, and there spent the remainder of his life. He was one of the incorporators of the Connecticut Medical Society and became very eminent in his profession. He was also prominent in civil affairs,

serving as a selectman of Salisbury for about twenty years and as a representative from that town to the general assembly for over fifty sessions between 1764 and 1801. In 1766 he was appointed justice of the peace and from 1778 to 1791 as justice of the Quorum, sat on the bench of the County Court of which he was chief judge for the succeeding seventeen years. He was likewise judge of probate for the Sharon district from 1774-1812. In 1774 he was appointed lieutenant-colonel of the 17th regiment of militia and commanded one of the State regiments in the campaign against General Burgoyne in 1777. In that year he also served in the repulse of the British after their Danbury raid. Resigning his commission in 1780, he served under a commission from state authorities as the manager of the iron works in Salisbury and thus superintended the manufacture of the first home-made cannon balls that were used during the war. In 1778 he was appointed a member of the Council of Safety. Retaining full possession of his faculties, he died in Salisbury on April 2, 1825, aged 94 years and three-quarters.

He was three times married, his first wife being Abigail, daughter of his former guardian, Deacon Peter Buell and Martha Huntington Grant Buell. She died on October 7, 1797, leaving three sons and three daughters, all of whom lived to maturity. He next married on December 31, 1799, Jerusha, youngest daughter of Col. Andrew and Sarah Sturges Burr, and widow of Hezekiah Fitch of Salisbury. She died in February, 1808, and in the following August he married Jane, daughter of Col. John Ashley of Sheffield, Massachusetts. She had been previously twice married. WALTER R. STEINER.

Porter, Robert Robinson (1811-1876), alienist of Wilmington, Delaware. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 925.

POST, Alfred Charles (1806-1886), New York surgeon. This clever nephew of a clever uncle—Wright Post (q. v.)—began his classical education in Columbia College when only fourteen. He was born in New York City, January 13, 1806, of Joel H. and Elizabeth Browne Post; his father was a successful merchant. The boy held his A. B. from Columbia, 1822, and worked under his uncle in 1823, but he took at the same time courses of lectures at the College of Physicians and Surgeons. He had smallpox which laid him up for some time when he was able to set to work with new vigor and get his M. D. in 1827. Like most young men of the time, he went to Europe, flitting about from England to Paris and Berlin and Italy. In 1829 he returned to New York and became house surgeon to the New York Hospital and in 1836 visiting surgeon, a position held until 1853. When in 1851 he became professor of surgery in the University of the City of New York, his lectures were very popular, particularly those on ophthalmic, aural, orthopedic and plastic surgery. In 1840 he published a small treatise on "Strabismus," having operated for this affection at an earlier period than any other American surgeon. That same year he devised a new method for doing bilateral lithotomy, employing, to divide the prostate, a canula sliding over a rod and armed with two knives one of which projected on each side. No operation was for him too great or too small; he did extirpation of the thyroid, parotid and cervical glands, made an artificial anus, and performed tracheotomy. As an aside from his surgical duties he was keen on missionary work and said, not irreverently, that the two things he most enjoyed were a good operation and a good prayer meeting. His colleagues say he could not be said to have passed middle life until he was eighty. During the last ten years of his life he performed some of his most delicate operations in plastic surgery and four months before his death did a difficult ovariotomy in forty-five minutes. He died in New York City, February 7, 1886. He had a benevolent countenance, a full beard and moustache under a head that was bereft of hair in later years.

He held among other appointments the professorship of surgery in the medical department of the University of the City of New York, 1851 to 1875; president of the medical faculty there; member of the Berliner Königliche Medizinisch-chirurgishe Gesellschaft. His writings were chiefly papers for medical journals and included, among others, "A Case of Blepharoplasty"; "Club Foot"; "Cicatricial Contractions"; "Contractions of Palmar Fascia."

In 1831 he married Harriet, daughter of Cyrenius Beers, of New York, and had eleven children, one of whom was Dr. George Edward Post (1838-1909), a medical missionary, scientist and author, who was graduated in medicine at the University of the City of New York in 1860 and spent his life at Beirut, Syria.

Post, George Edward (1838-1909), a medical missionary at Beirut, Syria. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila., 1912, vol. ii. pages 280-281.

POST, Martin Hayward (1851-1914), ophthalmologist of St. Louis, was born in that city, March 31, 1851, the youngest son of the eminent divine, Dr. Truman Marcellus Post, founder and for nearly forty years pastor of the First Congregational Church at St. Louis, and of Frances Henshaw Post. The subject of this sketch received the degree of Bachelor of Arts at Washington University in 1872, as honor man of his class. After a brief period of teaching in the public schools, he proceeded to study medicine at the St. Louis Medical College, where he was graduated in 1877. He was then for a time student of general surgery with Dr. John T. Hodgen (q. v.), but later studied ophthalmology with Dr. John Green (q. v.), with whom he very shortly became associated in practice. Some years later he made further investigations of ophthalmology under Donders at Utrecht and under Nettleship in London. Returning to St. Louis, he continued the association with Dr. John Green, and was soon known as one of the great operators and writers.

Dr. Post was a Fellow of the American College of Surgeons, a member of the American Academy of Medicine, of the St. Louis Academy of Science, the American Ophthalmological Society, and the Medical Society of the St. Louis City Hospital Alumni. He was recording secretary of the St. Louis Medical Society in 1880 and 1881. He was once chairman of the Ophthalmological Section of the St. Louis Medical Society, and was president of the American Ophthalmological Society at the time of his death. He was an honorary member of the Phi Beta Kappa. Dr. Post was long a member of the Board of Managers of the Missouri School for the Blind, "being appointed and reappointed by Democratic governors though himself an outspoken Republican in politics."

In personal appearance he was large, neither lean nor stout, of a clear and fair complexion, and with brown hair and eyes. He was rather deliberate in manner, but could, on occasion, be as swift as lightning. He was an earnest Christian. A member of the Congregational church, he was regular in attendance, and never suffered to pass unheeded an opportunity to perform his duty as he saw it, or (in the words of Ian Maclaren) "to say a good word for Christ." And he was always stricter with himself than with any others.

The doctor was twice married: first, on May 6, 1885, to Mary Laurence Tyler, of Louisville, Kentucky, who died January 2, 1888; and on January 4, 1906, to Mary Brown Tanner, of Jacksonville, Illinois, who survived him. Martin Hayward Post, Jr., ophthalmologist of St. Louis, was his son.

The good and skilful doctor passed away in Castle Park, Michigan, his summer home, whither he had gone in search of health and rest, on the first day of September, 1914, the cause of death being angina pectoris.

THOMAS HALL SHASTID.

POST, Minturn (1808-1869), of New York, sanitarian and expert in diseases of the chest, was born in New York, June 28, 1808. After graduation at Columbia College in 1827, he studied medicine under Valentine Mott (q. v), and received his medical degree from the University of Pennsylvania in 1832, offering a thesis on "Tetanus." He travelled and continued his studies in Paris under Louis and Broussais, and returning from Europe began to practice in New York, becoming distinguished as an expert in diseases of the chest. In 1842 he was appointed medical examiner of the New York Life Insurance Company, and the same year served on a committee with Alexander E. Hosack (q. v.) and J. R. Chilton, appointed by the Board of Aldermen of New York City to examine into and report upon the effects of poisonous smoked beef. An exhaustive report, printed in full by the Committee of Arts, Sciences and Schools, suggested the building of abattoirs like those erected by the French government in 1809; also the appointment by the Common Council of a committee to inspect all animals slaughtered in the city, and the removal of the buildings then used for slaughter-houses as unsanitary and a menace to the community. The suggestions were adopted, although Post died before the plans were fully carried out.

In the latter part of his life he was largely interested in life insurance and inaugurated a system of questions and answers that were widely used.

He translated Rociborski's "Auscultation and Percussion" (New York, 1839), making some valuable additions.

Post died in New York, April 26, 1869.

FREDERIC S. DENNIS.

POST, Philip Wright (1766-1828), pioneer New York surgeon, was born at North Hempstead, Long Island, on the nineteenth of February, 1766, and was educated at home under a private tutor, Dr. David Bailey, at the age of fifteen beginning his medical studies with the celebrated surgeon, Dr. Richard Bailey (q. v.). After four years of hard work, he went to London to continue preparation under Dr. John Sheldon, a celebrated teacher of anatomy and surgery, with whom he lived two years, attending lectures and working in the London Hospital. In 1786 he returned to New York and began to practice, and in 1787 delivered a course of lectures on anatomy in a spare room of the New York Hospital in which Dr. Richard Bailey (q.v.) was teaching classes in surgery. This course was interrupted by the "doctor's mob," which, excited by some scandalous reports concerning "body snatching," broke into the building and destroyed a valuable collection of anatomical and pathological specimens. In 1792 the professorship of anatomy and surgery in the college medical school, then held by Dr. Bailey, was divided into two parts, and Dr. Post was made professor of surgery. Meanwhile he visited Europe and collected materials for a museum. For half a century this remained one of the largest anatomical cabinets in America. Dr. Post performed several important surgical operations, the most distinguished of these was the tying of the subclavian artery above the clavicle. In 1793 Dr. Bailey exchanged chairs with Dr. Post, who remained professor of anatomy till 1813.

Post received an honorary M. D. from Columbia University, New York, in 1814. His reputation lies almost entirely in his surgical achievements, for he published few papers of importance. He held a surgeoncy to the New York Hospital; was an active officer of the New York County Medical Society; and from 1820-26 was president of the College of Physicians and Surgeons. The following account of him by Valentine Mott gives some idea of the character of the man:

"Wright Post was at that time (1811) a man of about forty years of age, tall, handsome, and of fashionable exterior, wore long whiskers and his hair powdered and tied back in a queue. Those who recollect his thin worn figure in later years, wrapped in a furred surtout, could scarcely have recognized in him the elegant gentleman of my early days. Dr. Post had at this time attained to the very highest rank in his profession, both as a physician and surgeon, and although equalled in the extent and renown of his surgical practice by his distinguished colleague in the New York Hospital, Dr. R. S. Kissam (q. v), he stood, perhaps, alone in its lucrative practice and in the estimation and confidence of the higher walks of society. He was unrivalled as an anatomist, a most beautiful dissector, and one of the most luminous and perspicuous teachers I have ever listened to, either at home or abroad. His manners were grave and dignified; he seldom smiled, and never trifled with the serious and responsible duties in which he was engaged, and which no man ever more solemnly respected. His delivery was precise, slow and clear, qualities inestimable in a teacher, and peculiarly adapting his instructions to the advancement of the junior portion of the class. He was one of the first American pupils (preceding Dr. Physick) of the celebrated John Hunter, of London, from whose lips and those of Mr. Sheldon, he imbibed those principles of practice which he afterwards so ably and usefully applied."

"Two great achievements are on record to attest his powers. He was the first in this country to tie, successfully, on the Hunterian principle, the femoral artery for popliteal aneurysm [1796]. On the second memorable occasion, I had the honor to assist him; it was a case of ligature of the subclavian artery above the clavicle, without the scaleni muscles, for an aneurysm of the brachial, involving the axilla. [Vide. Trans. Phys. Med. Soc. N. Y. 1817. 1, 387.] The patient came to me from New Haven, in company with an intimate professional friend of mine, the late Dr. Gilbert; the aneurysm was cracked and oozing, and supported by layers of adhesive plaster, by which its rupture was prevented, and life maintained until the time of the operation. The brother of the patient, a merchant of New York, whose family Dr. Post attended, naturally preferred that he should perform the operation, as I was then quite young. To this wish I cheerfully acceded, but lost thus the chance of gaining a surgical laurel for my brow—the operation never having been performed in this country before, and but once in Europe, and then unsuccessfully, by its first projector, Mr. Ramsden, of St. Bartholomew's Hospital, London. This is now, happily, a well recognized surgical procedure, which six times I have successfully performed. In this operation, the American needle for the ligature of deep-

seated arteries was first used in New York, and it belonged to me."

Dr. Post married Miss Bailey, daughter of Dr. Richard Bailey, his associate, of New York in 1790. After a career of forty years as a professor of anatomy, he retired into private professional life, in which he continued active, with occasional intervals of ill health, until his death, in the fifty-third year of his age. He died on the fourteenth of June, 1828, at Throg's Neck, New York, universally esteemed, deeply regretted, and leaving a good posterity.

CHARLES R. BARDEEN.

POTT, John (——1652), second physician-general of the Colony of Virginia, being ordained by the London Court to succeed Lawrence Bohune (q. v.), sailed with his wife Elizabeth on the "George" and landed at Jamestown in 1620. Having succeeded to the Council in Virginia it seems natural that Pott should covet the former official's station and emoluments—that of physician-general to the Colony, with five hundred acres of land and twenty tenants. The minutes of the London Company for the sixteenth of July, 1621, show that he was recommended for the position by Dr. William Gulston: "For so much as the physician's place to the company was now become voyde by reason of the untimely death of Dr. Bohune, slain in the fight with two Spanish shipps of Warr the nineteenth of March last, Dr. Gulstone did now take occasion to recommend unto the company for the said place one Mr. Potts, a Mr. of Artes, well practiced in Chirurgerie and Physique, and expert also in distillinge of waters, and that he had many other ingenious devices so as he supposed his service would be of great use unto the colony in Virginia." The Council ordered that "If Mr. Pott would accept of the place upon the same conditions as Dr. Bohune did, he should be entertained and for his better content should be specially recommended to the Governor to be well accommodated and should have a chest of Physique £20 charge unto the company, and all things thereunto apertaining together with £10 in books of Physique which should always belonge unto the company, which chest of Physique and Books Dr. Gulstone was desired to by, and seeing he intended to carry over with him his wife a man and a maid they should have their transporte freed, and if one or more Chirurgions could be got they likewise should have their passage freed which conditions Mr. Pott having accepted of was refferred to the committees to be further treated and concluded with."

Dr. Pott became a member of the Council by royal selection on May 24, 1625, and governor by election of the Council on March 5, 1628. After little more than a year as chief executive he was succeeded by Sir John Harvey. Hardly had the latter assumed the reins of government before Dr. Pott's enemies sought his disgrace, charging him with having pardoned and restored the privileges of a wilful murderer, and with holding some cattle not his own. Harvey confiscated his property and ordered him to remain under arrest at his home until the General Court of July 9, 1630, when he was arraigned before a jury of thirteen on the charge of "felony." The doctor declared the evidence against him hypocritical and unreliable but the jury found against him. Gov. Harvey withheld sentence until he could learn the wishes of the King, writing him that the prisoner "was the only physician in the Colony skilled in epidemical diseases," pleaded for his pardon, and the restoration of his estate because of his lengthy residence and valuable service. Mrs. Pott took ship for England to importune the King in person. Charles appointed a commission to determine the matter, which reported that the condemning of Dr. Pott "for felony" upon superficial evidence was drastic and very erroneous. The King signed his pardon restoring all rights and privileges on July 25, 1631, most particularly for the reason that he was "the only physician in the Colony." After his pardon by the King, Dr. Pott retired from public life and devoted his time to his profession. He had acquired a grant of three acres on Jamestown Island in 1624, which was increased to twelve acres in 1628, but the unhealthiness of the Island drove him inland. In 1632 he purchased a plantation and erected the first home in Middle Plantation, seven miles from James City, which he called "Harop." The fact that the "Surgeon of the Colony" had moved to Middle Plantation was a convincing argument in favor of its healthfulness. Surveys were quickly made and new homes erected so that there grew up around "Harop" a village which was later given the name of Williamsburg, where in 1693 the College of William and Mary was founded under royal patronage. Williamsburg, first the habitation of Dr. Pott, became the capital of Virginia in 1698, and here her lawmakers assembled until the exigencies of the

Revolution made it advisable to transfer the seat of government to Richmond, in 1779.

It is not known when Dr. Pott died, but his death probably occurred in Virginia, and certainly after March 25, 1651, at which time his son John, styled Jr., signed the test of fealty to the Commonwealth as a citizen of Northampton County.

CALEB CLARK MAGRUDER, JR.

POTTER, Frank Hamilton (1860-1891), laryngologist of Buffalo, N. Y., was the only son and eldest child of Dr. William Warren Potter (q. v.), and was born in Cowlesville, Wyoming County, New York, January 8, 1860. Descended from a long line of American physicians, he early directed his attention to medicine and was graduated at the Buffalo Medical College in the class of 1882. Prior to his graduation, he served in the Rochester City Hospital for two years. After receiving his degree he settled in Buffalo, and, on the organization of the Medical Department of Niagara University in 1883, was appointed clinical assistant in surgery. He subsequently held the lectureship of descriptive anatomy, in 1884; demonstrator in surgery, and lecturer on botany in 1884-8; lecturer on materia medica from 1885 to 1888, and lecturer on laryngology from 1888 to May, 1891. In recognition of his active efforts and conspicuous ability, the Niagara University conferred upon him, in 1885, the "ad eundem" degree of M. D. At the close of the session of 1891, he severed his connection with the school with which from its organization he had labored successfully, and accepted the position of clinical professor of laryngology in the Buffalo University Medical College. At one time he was a member of the surgical staff of the Sisters of Charity and Emergency hospitals. He was a member of the Buffalo Medical and Surgical Association, and the Medical Society of the State of New York.

He was a frequent contributor to the medical and literary societies of which he was member, and had clearness of expression as well as beauty of style and diction. Among the instruments he devised may be mentioned nasal scissors, mechanical nasal saw, self-retaining nasal speculum.

In 1887, after returning from Europe, whither he went for study and travel, he married Eva, daughter of Lars G. Sellstedt, the famous artist, and had two sons. The widow and three children survived him.

THOMAS LOTHROP.

POTTER, Hazard Arnold (1810-1869), was one of our bold and original pioneer surgeons who lived in New York state about the middle of the last century. He was born in Potter township, Ontario (now Yates) County, New York, December 22, 1810, and died in Geneva, New York, December 3, 1869. He was graduated in medicine at Bowdoin in 1835 and began practice in Rhode Island, but soon returned to his native town, where he followed his profession from 1835 to 1853. He settled in Geneva in the latter year and passed the rest of his life in that town. In 1837 he called attention to the presence of arterial blood in the veins of parts paralyzed by injury to the spinal cord; he trephined the spine for depressed fracture of the arches of the fifth and sixth vertebrae, in 1844, and did the same operation four times subsequently, twice with success. He ligated the carotid artery five times, with a favorable outcome four times, he removed the upper jaw six times and the lower five. He advocated abdominal operations and did a gastrotomy in 1843 to relieve intussusception, with a good result. He operated upon fibroid tumors through the abdomen five times, with three successes; and did twenty-two ovariotomies, fourteen being successful, one of them what was known at that time as a double ovariotomy. Again he did a second operation on the same patient within seventeen months. He was regimental surgeon of the 59th New York Volunteers in 1862.

He had the reputation of being a clever and capable surgeon, very profane, and a fairly hard drinker. He had two daughters and two sons, and is remembered by his townsmen as being a one-legged man.

HOWARD A. KELLY.

POTTER, Jared (1742-1810), army surgeon during the Revolution and a physician of eminence in his day, was born in East Haven, Connecticut, September 25, 1742; fifth in descent from John Potter, an original settler of New Haven, who signed the "Plantation Covenant." In 1760 he received an A. B. from Yale College, and immediately after began to study medicine. He devoted the next three years of his life to this, dividing the time equally between Dr. Harpin of Melford and the renowned Rev. Jared Eliot of Killingworth. Then he returned to East Haven

and soon acquired an extensive practice. Yielding to some pressing invitations he removed, about 1770, to New Haven, where his "business and popularity as a physician rapidly increased." The ominous signs of an impending struggle between Great Britain and the colonies led him, apprehensive of danger, to remove, in 1772, to Wallingford, because further inland.

He was one of the founders and incorporators of the Connecticut Medical Society in 1792, serving as its first secretary and later, in 1804-05, as its vice-president. He was also a fellow from New Haven County for eleven years and acted as a member of important committees. He declined to become a candidate for the presidency. In 1798 the society conferred upon him the honorary degree of M. D. During the first year of the Revolution he served as surgeon to the first of the six regiments raised by order of the General Assembly of Connecticut, and in this capacity took part in the expedition against Quebec. In subsequent years he used to describe those terrible times, and the torture he endured on account of his helplessness in the midst of so much misery. At the expiration of two years' service in July, 1776, he became surgeon to Col. William Douglas' regiment, and was present through the campaign around New York City. He was mustered out with the regiment, on December 29, 1776, and then returned home to resume practice. His health, however, was much impaired during the next two years, by what he had undergone.

He was greatly interested in politics, and was a member of the Lower House of the General Assembly for eighteen sessions (1780-1809). On one occasion he was nominated for the upper house, but was defeated. In his political views he strongly allied himself with the Jeffersonian Democracy, while in his religious belief he was a Universalist. This attitude in politics and religion placed him at variance with the prevailing sentiments of his alma mater, and caused him to speak derogatory words against her.

In the zenith of his fame he was probably the most celebrated and popular physician in the state. And rightly, for he strove by buying the latest books on medicine to keep himself well abreast of the times. This helped, also, to make him a famous medical teacher. The celebrated Dr. Lemuel Hopkins (q. v.) of Hartford was his first student. His consultation practice was very extensive and carried him over most of the state. For "he was an excellent judge of symptoms and specially skilled in diagnosis." "In practice he was particularly fond of alkalies and alkaline earths. The famous 'Porter's powder,' as used by him, was composed of chalk, carbonate of ammonia, camphor and charcoal. He used it largely in dyspeptic and other gastric complaints."

He married Sarah Forbes, on April 19, 1764, and had two daughters. These daughters married two brothers, the younger girl was the mother of Jared P. Kirtland (q. v.) a physician of Ohio.

His death, which occurred on July 30, 1810, was due to a peculiar accident. As he passed a field of rye on his farm he plucked a head of ripe grain and, on shelling it, threw the kernels into his mouth. Unfortunately, a beard lodged on the uvula, causing inflammatory gangrene and, shortly after, death.

WALTER R. STEINER.

POTTER, Nathaniel (1770-1843), author and teacher, founder of the University of Maryland and for thirty-six years professor of medicine there, was born at Easton, Talbot County, Maryland, in 1770; his ancestors came from Rhode Island, and his father, Dr. Zabdiel Potter, served as surgeon in the Revolutionary Army. He was educated at a college in New Jersey and studied medicine under Dr. Benjamin Rush (q. v.) of Philadelphia. He was graduated M. D. at the University of Pennsylvania in 1796, his thesis being "On the Medicinal and Deleterious Effects of Arsenic." In 1797 he settled in practice in Baltimore and continued in active professional work until his last illness. On the organization of the College of Medicine of Maryland (later the University of Maryland), December 28, 1807, he became professor of the principles and practice of medicine and continued in the occupancy of this chair until he died. The other positions which he held were: dean of the College of Medicine, 1812, 1814; president, Baltimore Medical Society, 1812; president, Medical Society of Maryland, 1817; one of the editors of "The Maryland Medical and Surgical Journal," 1840-1843. Among his more important writings were: "An Account of the Rise and Progress of the University of Maryland," 1838; "Memoir on Contagion," 1818; "On the Locusta Septentrionalis," 1839; American editions of Armstrong on "Typhus Fever," 1821, and (with S. Calhoun) "Gregory's Practice," two volumes, 1826 and 1829 (two editions).

Professor Potter was of medium height, full figure and ruddy complexion. There is an oil painting of him at the University of Maryland, pronounced a faithful likeness. He was an implicit believer in the resources of medicine; and relied especially upon calomel and the lancet, carrying the use of both far beyond what would be considered allowable at this day. He did not believe in the "vis medicatrix naturæ," and is said to have told his pupils that if nature came in the door he would pitch her out of the window. Potter was a man of wonderful skill in diagnosis and of national fame. He showed his courage by making himself the subject of experiments with the secretions of yellow fever patients, thus establishing the non-contagiousness of that disease. In this he combated the view of Rush. His later years were embittered by pecuniary embarrassment and the expenses of his burial were borne by his professional friends. He died suddenly, during a fit of coughing, January 2, 1843, in his seventy-third year. His remains repose in Greenmount Cemetery, unmarked by stone or device.

He married twice, but his family became extinct.

EUGENE F. CORDELL.

POTTER, Samuel Otway Lewis (1846-1914), of San Francisco, produced quiz-compends of anatomy and materia medica that were of great use to a generation of medical students. The son of the Rev. Samuel George and Elizabeth Magill Potter, he was born in Cushendum, County Antrim, Ireland, September 18, 1846. He had a private education in England, beginning the study of medicine at the age of fourteen, and coming to America at seventeen to serve in the United States Army, first in the volunteers, and later, after the Civil War, in the regular army. From 1872 to 1882 he was in the engineer department of the army. In 1878 he was graduated from the Homeopathic Medical College of Missouri, St. Louis; he got an A. M. from the University of Chicago two years later, and in 1882 took an M. D. from the Jefferson Medical College of Philadelphia. After a year as assistant surgeon, U. S. Army, settling in San Francisco, Dr. Potter became professor of the practice of medicine in Cooper Medical College, filling the chair from 1886 to 1893. From 1898 to 1902 he was major and brigade surgeon, U. S. V., with service in the Philippines. At one time he was president of the College of Physicians and Surgeons, San Francisco. In the year 1891 he became a member of the Royal College of Physicians, London.

Some of his writings are: The Quiz Compends, already referred to, the seventh edition being published in 1905; "Analytical and Topical Index to Reports of Chief of Engineers, 1866 to 1879," 1880; "Index of Comparative Therapeutics," 1879; "Handbook of Materia Medica, Pharmacy and Therapeutics," 10th ed., 1905; "Speech and Its Defects," 1882.

He died in St. Luke's Hospital, San Francisco, April 21, 1914.

WALTER L. BURRAGE.

POTTER, William Warren (1838-1911), president of the New York State Board of Medical Examiners, editor of the "Buffalo Medical Journal," and permanent secretary of the American Association of Obstetricians and Gynecologists, was born at Strykersville, N. Y., December 31, 1838. He was born and lived in a medical atmosphere, as his father, Lindorf Potter, and his paternal grandfather were both practitioners. His mother was Mary Green Blanchard Potter. Young Potter was educated at Arcade and Genesee Seminaries and at the University of Buffalo, where he received his M. D. upon the attainment of his majority in 1859. He engaged in practice with his uncle, Dr. Milton E. Potter, in Cowlesville, N. Y., and on the breaking out of the Civil War enlisted as assistant surgeon of the 49th regiment of New York Volunteers and saw service under McClellan and Burnside. He was captured by the confederates in 1862 and was confined in Libby prison, was exchanged and served as surgeon with the 57th regiment of New York volunteers at Chancellorsville and Gettysburg, and then had charge of the first division hospital of the second army corps, continuing in that position until mustered out at the close of the war. Then he was brevetted lieutenant-colonel for meritorious service.

After the war Dr. Potter was coroner of the District of Columbia, and was examining surgeon for the pension department, and after that practiced at Mount Morris and at Batavia, New York, being physician to the New York State Institution for the Blind. In 1881 he returned to Buffalo and began to make a specialty of gynecology and obstetrics, helping to organize the American Association of Obstetricians and Gynecologists, becoming the first secretary and editor of the transactions and filling the dual position for

twenty-two years. The fame and wide influence of the association were to him matters of loving pride and he gave to his duties careful, exacting and systematic attention. In 1891 he was president of the Medical Society of the State of New York and did much to revise its code of ethics, and when the medical practice act of the state went into effect, September first of that year, the society nominated him as a member of the board of medical examiners and he was elected. On the death of Dr. Wey, in 1897, Dr. Potter was elected president of the board and ten years later, on the passage of the new medical practice act, he was elected president and retained the office until his death. He was an ideal presiding officer, thoroughly schooled in parliamentary procedure, and by his judicial attitude gave great satisfaction to his confrères and to lawyers and witnesses who appeared before the board.

In 1888 Dr. Potter became editor of the "Buffalo Medical Journal" and shortly after was its owner. As editor he developed a good English style and kept in touch with the advances of medical knowledge, in later years withdrawing from practice and devoting himself exclusively to his editorial duties and to the work of his official positions. He had a remarkably retentive memory, coupled with fluency of speech, so that he was a welcome guest at postprandial functions. His associates on the board of examiners were most loyal to him and selected him each year as their representative to the council on medical education of the American Medical Association.

Dr. Potter married Emily A. Bostwick, of Lancaster, New York, in 1859, and they had three children. He died at Buffalo, March 14, 1911, aged 72 years.

WALTER L. BURRAGE.

POTTS, Jonathan (1745-1781), a member of the first medical class graduated in America, surgeon and a medical director in the Revolutionary War, was born April 11, 1745, at "Popodickon," the ancestral home of the Potts family named in honor of Popodick, an Indian chief, who was buried near the house, Colebrookdale, Berks County, Pennsylvania. Jonathan was the son of John Potts, who founded Pottsgrove, now Pottstown, Pennsylvania, whose father in turn, Thomas Potts, came to Pennsylvania the latter part of the 17th century, and was a pioneer in the development of iron interests in that state; Jonathan's mother was Ruth Savage. He received his education at Ephrata and in Philadelphia and determined to study medicine at the University of Edinburgh, so with Benjamin Rush, (q.v.) his friend and relative, sailed from Philadelphia August 31, 1766, and after a perilous voyage of fifty days, reached Liverpool in safety. His first duty was to communicate with Benjamin Franklin, who gave the young men recommendations to professors of the University of Edinburgh. He was engaged to marry Grace, daughter of Francis Richardson, and when he learned that his "dearest Grace" was ill and longed to see him, he relinquished his studies and returned to America, reaching Philadelphia in April, and was married in May, 1767. Wishing to continue his medical studies, he entered the Medical School of the College of Philadelphia, the faculty of which was made up of John Morgan, theory and practice of medicine; William Shippen, Jr., anatomy, surgery and midwifery; Adam Kuhn, materia medica and botany; Benjamin Rush, chemistry; Thomas Bond, clinical medicine, (q. v. to all). Potts was one of the ten graduates at its first medical commencement, June 21, 1768, to receive the degree of bachelor of medicine. The minutes of the Board of Trustees have the following entry: "An elegant valedictory oration was spoken by Mr. Potts on the advantage derived in the study of physic from a previous liberal education in the other sciences." The subject was selected by Franklin. At a commencement held on June 28, 1771, Potts had the second degree, that of doctor of medicine, conferred upon him, as well as on three other members of the first class—Jonathan Elmer, (q. v.) James Tilton (q. v.) and Nicholas Way. Pott's thesis was entitled, "De Febribus Intermittentibus potentissimum Tertianis" (among the intermittent fevers the most powerful is the Tertian). He settled in practice at Reading, Pennsylvania, was a delegate from Berks County to the provincial meeting of deputies, held in Philadelphia, July 15, 1774, and a member of the Provincial Congress in 1775. He was active in raising men and organizing forces in Berks County. On June 6, 1776, he was appointed by Congress physician-surgeon for the army for Canada and Lake George. The terrible condition of the hospitals and of the army were markedly improved by the zeal and efficiency displayed by Dr. Potts in executing the orders issued to establish a different state of things. In April, 1777, he was appointed to supersede Dr. Samuel Stringer as deputy director-gen-

eral of the General Hospital in the Northern department. For the unremitting attention and services of Dr. Potts and of his medical colleagues during the severe campaign, public recognition was made by Congress in a commendatory resolution passed November 6, 1777. Afterwards Congress appointed him director-general of the hospitals in the middle department.

It is not known what literary matter he may have written other than an article on smallpox printed about 1771 in Henry Miller's Philadelphia German paper, called the "Pennsylvania Staatsbote."

He died at Reading, in 1781, and was buried in the Friends' burying ground at Reading. He had three sons and two daughters.

EWING JORDAN.

POWELL, Seneca D. (1847-1907), professor of clinical surgery in the New York University Medical College, was born in Wilcox County, Alabama. He was of colonial descent, his ancestors coming from South Carolina. Powell was a cadet in the University of Alabama at the outbreak of the Civil War when he was in his fifteenth year, and served in the southern army until the end of the war. Then he began to study medicine and was graduated from the University of Virginia in 1869. He went to New York and took his M. D. from the University of the City of New York in 1870, serving a year and a half on the house staff of Bellevue Hospital. In 1871-72 he was assistant inspector of the Board of Health, and also an assistant to the professor of medicine in Bellevue Hospital Medical College. He soon became chief assistant to Professor James L. Little (q. v.) in the University Medical College, and held that position until the latter accepted the chair of surgery in the Post-Graduate Medical School, in 1882, when he followed his chief. In the latter named place, Dr. Powell was for some years instructor in surgical dressings, then professor of minor surgery and finally of clinical surgery, a position he held until his resignation in 1905. He was president of the Medical Society of the County of New York in 1893, and of the medical society of the State in 1897-98.

Dr. Powell was one of the best teachers of surgery, especially of minor surgery. He had a fine personality, and was a very great favorite. He introduced the carbolic acid treatment of leg ulcers, the lesion being painted with pure acid and then the acid neutralized when it had acted sufficiently, by the application of alcohol. His article on "Carbolic Acid in Surgery" is in The Transactions of the Southern Surgical and Gynecological Association, 1900 vol. xiii. He was also greatly interested in the surgery of the skull for the relief of cerebral disease, especially idiocy. Dr. Powell contributed many interesting cases to the medical journals, especially to the "Post-Graduate." In 1905 he resigned from this journal, of which he had been co-editor since 1887, on account of failing health.

Dr. Powell was elected a director of the Post-Graduate School in 1890, and served in that capacity until his resignation as a professor, when he gave up his directorship. The school owed much of its success to his skill and popularity in the days of his active work. He was a child of the school, having begun work with it in its infancy and having been actively connected with it for twenty-three years.

He married twice, first a daughter of Robert Irwin, and had one son, Irwin Powell, who died in the vigor of youthful manhood a few months before his father. In 1889 Dr. Powell married Isabelle V. Wilson, who with twin daughters, Emily and Isabelle, survived him.

He died at his home in Greenwich, Connecticut, on August 24, 1907.

Powell, Theophilus Orgain (1837-1907), alienist of Georgia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 934.

POWELL, William Byrd (1799-1867), "cerebral physiologist and medical philosopher" of the eclectic school, was born in Bourbon County, Kentucky, January 8, 1799, the eldest of thirteen children, born when his mother was little more than twelve years old. His father, from Orange County, Virginia, settled in Kentucky, and accumulated wealth. The son was graduated at Transylvania University in 1820, and studied medicine under Charles Caldwell (q. v.), graduating in medicine from the University in 1823. He was interested in cerebral physiology and when Spurzheim came to America, Powell investigated his phrenological theories, working along independent lines, studies which he kept up for thirty years. He declared that "the temperaments could be determined from the examination of the cranium alone, without any consideration of other parts of the body." He collected crania of different tribes, races, nations and tem-

peraments, and his collection surpassed that of Morton's noted collection. From 1843 to 1846 he lived among the Indians, "adopting their dress and manners to ingratiate himself among them," and secured skulls of their chiefs and warriors. His friends looked upon him as insane. In 1835 he had been appointed professor of chemistry in the Medical College of Louisiana; in 1847 he founded the Memphis Institute; in 1849 he aided in organizing the Law, Medical and Commercial Departments of the institute, and was professor of physiology and medical geology. In 1851 he moved to Covington, Kentucky, and in 1856 was made professor of cerebral physiology in the Eclectic Medical Institute of Cincinnati, holding this position two years; in 1866 he was appointed emeritus professor of cerebral physiology in the Eclectic Medical College of the City of New York.

He wrote "Natural History of the Human Temperaments" (1856); and collaborated with R. S. Newton (q. v.) in "The Eclectic Practice of Medicine," later published as "An Eclectic Treatise on Diseases of Children."

He died at Cincinnati, Ohio, May 13, 1866; his body (without the head, which he bequeathed to Dr. A. T. Keckeler to be preserved in his crania collection) was buried in the Covington cemetery.

POWER, William (1813-1852), who taught the discoveries of Laennec at the University of Maryland, a native of Baltimore, was born in 1813, his education being obtained at Yale College, which gave him his A. B. in 1832 and later an A. M. He studied medicine under Dr. John Buckler of Baltimore in 1833, and matriculated at the University of Maryland, graduating M. D. in 1835. Then he spent three years in Paris, studying under Louis, Chomel, Andral, Rostan, Grisolle, Barth and Roger. Paris was at that time the medical center of the world, and Power was one of that remarkable group of young Americans who gathered there. In 1841-42 he delivered at the University Hospital, Baltimore, two courses of lectures on physical exploration of the chest; these were the first lectures of the sort given at the university and were well attended. His health now gave way and in 1843 he abandoned work and went to Cuba. In the following year he resumed teaching and in 1845 was appointed lecturer on the theory and practice of medicine, and in 1846, on the resignation of Elisha Bartlett (q. v.), he succeeded him as professor of the theory and practice of medicine. He married in 1847. In January, 1852, in a letter full of pathos, he reluctantly resigned his chair, and on the fifteenth of August following, he died in Baltimore, the victim of consumption, in his thirty-ninth year.

He was the first to teach in his native city, clearly and impressively, the glorious discoveries of Laennec, and to imbue the students with his own enthusiastic love of science. His strength was in his clinical teaching, and the University of Maryland has never lost the effect of his thoroughness and system. He was not a large contributor to medical literature.

EUGENE F. CORDELL.

PRATT, Foster (1823-1898), medical educator of Michigan, was born at Mt. Morris, Livingston County, New York, January 9, 1823. His father, the Rev. Bartholomew Pratt, was of English descent; his mother, Susan McNair Pratt, of Scotch-Irish; their ancestors landed in Plymouth, Massachusetts, in 1622. Foster Pratt had his early schooling at Franklin Academy, Prattsburg, Steuben County, New York, then, thrown on his own resources at the age of seventeen, he worked as a teacher for seven years. In 1847 he entered the University of Pennsylvania, taking his M. D. there in 1849. He began practice at Romney, Hampshire County, Virginia, and soon secured a large clientèle, but removed to Kalamazoo, Michigan, in September, 1856. In 1858 he was sent to the State Legislature on an independent ticket where, in the face of strong opposition, he secured the appropriation of $100,000 for the completion of the Michigan Insane Asylum at Kalamazoo, the first large appropriation ever made. After this no sacrifice of time or convenience was too great for him if the asylum's interests were concerned. At the beginning of the war he assisted in raising the Thirteenth Regiment of Michigan Volunteer Infantry, of which he was appointed surgeon, and remained with it through the war, accompanied Sherman in his march to the sea. He was mustered out at Louisville, Kentucky, August, 1865, and resumed practice at Kalamazoo. In 1871, being made president of the Kalamazoo board of health, and knowing the scanty quantity and poor quality of the city water, he made a study of the local geology, finding an inexhaustible supply of the purest water. He also did much for proper drainage. In 1878 he was presi-

dent of The Michigan State Medical Society; and was an honorary member of the American Medico-psychological Association. In his presidential address Dr. Pratt pointed out the defects in the educational agencies of the medical profession and insisted that the only remedy was a more perfect medical organization. Without hope of reward Foster Pratt gave much time to the promoting in Michigan of a better preliminary education of medical students; a more thorough technical training; the management of professional affairs by professional men; and such organization as was needed to enforce the conditions essential to the best professional evolution. He was a striking looking man, tall, well proportioned, handsome, a born leader.

In October, 1849, he married Mary Lisle Gamble, of Moorefield, Hardy County, West Virginia. He died suddenly at Kalamazoo, Michigan, August 12, 1898, from heart failure following occasional attacks of angina pectoris.

LEARTUS CONNOR.

PRENTISS, Daniel Webster (1843-1899), professor in the medical department of Columbian University, Washington, D. C., was born on May 21, 1843, in Washington, District of Columbia, the birthplace of his parents. His father, William Henry Prentiss, was a son of Caleb Prentiss of Cambridge, Massachusetts. The general education of Dr. Prentiss was obtained in the schools of Washington and in Columbian University. He held the A. M. of Columbian College, District of Columbia, and the M. D. of the University of Pennsylvania, 1864. After graduation Dr. Prentiss engaged general practice in Washington and held a prominent position in the profession. From 1879 he was professor of materia medica and therapeutics in the medical department of Columbian University; physician in charge of the eye and ear service of Columbian Dispensary from 1874 to 1878; visiting physician to Providence Hospital in 1882; member of the Medical Society, Medical Association, Obstetrical and Gynecological Society.

Some of his contributions to medical literature are as follows: "Croupous Pneumonia" —report of eleven cases occurring in private practice, from February to June, 1878, read before the Medical Society; "Remarkable Change in the Color of the Hair from Light Blond to Almost Black, in a Patient while under Treatment by Hypodermic Injections of Pilocarpine;" "Membranous Croup treated with Pilocarpine;" "Change of Color of Hair," 1881; "Avi Fauna Columbiana," being a list of the birds of the District of Columbia, revised and rewritten by Dr. Elliott Coues (q. v.) and Dr. D. W. Prentiss, 1883; "Gall Stones of Soap," 1889; "Report of Five Hundred Consecutive Cases of Labor in Private Practice," 1888; "Case of the Change of Color of Hair of Old Age to Black, Produced by Jaborandi;" a "Paper on Pilocarpine, Its Physiological Actions and Therapeutic Uses."

In the "National Medical Review," 1899-1900, vol. ix, page 542, it is stated that Dr. Prentiss became a member of the National Medical Society in 1864, and was active in its scientific work and a warm promoter of all measures that tended to advance the best interests of the profession. Much of his work was original and his writings all showed his early work in natural science. The cases reported by him were usually of rare forms of diseases or of conditions before undescribed.

He married Emilie A. Schmidt, daughter of Frederick Schmidt, of Rhenish Bavaria, October 12, 1864, and two of his sons became doctors.

He died on November 10, 1899.

DANIEL SMITH LAMB.

PRESCOTT, Albert Benjamin (1832-1905), professor of chemistry and pharmacy in the University of Michigan, was born at Hastings, New York, December 12, 1832; son of Benjamin and Experience Huntley Prescott, whose ancestor emigrated from England to Massachusetts in 1640. This ancestor, James Prescott, was of the fourth generation from James Prescott, who for bravery was made Lord of the Manor of Derby in 1564 by Queen Elizabeth. When nine years old Albert B. Prescott suffered a severe injury to his right knee which entailed long suffering and permanent disability. His general education was with private tutors and in 1864 he took his M. D. at the Michigan University Medical Department. In May, 1864, he passed the regular examination for the United States Army and was commissioned assistant surgeon with duty at Totten General Hospital, at Louisville, Kentucky. On August 22, 1865, he was discharged from service with the brevet rank of captain of United States volunteers and immediately entered upon his life work at Ann Arbor, in the Laboratory of the University of Michigan with the rank of assistant professor of chemistry and lecturer on organic chemistry and metallurgy.

On the organization of the school of pharmacy, in 1868, its management was placed in his hands. He was successively professor of organic and applied chemistry and pharmacy; of organic chemistry and pharmacy and professor of organic chemistry. From 1876 he was dean of the school of pharmacy; from 1884 director of the chemical laboratory; fellow of the London Chemical Society; in 1886 president of the American Chemical Society; in 1899 president of the American Pharmaceutical Association. In 1886 Michigan University gave him her Ph. D.; in 1896 the LL. D.; in 1902 Northwestern University also gave him the LL. D.

He contributed much to the literature of chemistry, in the form of reports of research work in analytical and organic chemistry; works of reference on these subjects; papers on the education of pharmacists and topics of general interest. His first book, "Outlines of Proximate Organic Analysis," greatly promoted this subject. Later investigation concerned the natural organic bases and certain other derivatives.

In 1866 he married Abigail Freeburn who, with a foster son, survived him.

Dr. Prescott died at Ann Arbor, Michigan, February 25, 1905, from Bright's disease.

LEARTUS CONNOR.

PRESCOTT, Oliver (1731-1804), brigadier general of Massachusetts Militia in the Revolution, was born in Groton, Massachusetts, April 27, 1731, of the fourth generation from John Prescott, who came from England about the year 1640. His father was a member of the General Court; his mother, Abigail, daughter of Thomas Oliver, of Cambridge, Massachusetts. Oliver was educated at Harvard College, where he received his degree in 1750. After graduation he was a pupil of Dr. Ebenezer Robie, of Sudbury, Massachusetts, there being no medical schools in the country at that time. In 1791 Harvard conferred on him its honorary M. D. He settled in Groton and soon gained a very extensive practice. It was said of him that he acquired a habit of sleeping while making his rounds on horseback. He was a corpulent man, over six feet in height. His son, Dr. Oliver Prescott, Jr., vouches for the truth of his father's sleeping habit and says he has frequently travelled with him and witnessed it, "the horse continuing the whole time at the usual travelling pace." "He would, when drowsiness came upon him, brace himself in the stirrup, rest one hand on the pommel of the saddle and resign himself without fear, for miles together, to quiet repose." Dr. Prescott was one of the original incorporators of the Massachusetts Medical Society and was president of the Middlesex Medical Society during the whole period of its existence. He took a prominent part in the Revolution. Having been major, lieutenant-colonel and colonel of militia under the King, in 1775 he was made brigadier-general of militia by the Supreme Executive Council of the Massachusetts Bay, his command being assigned to guard duty, for the most part, and in the work of organizing the town committees of correspondence. In 1779, on the death of John Winthrop, he was appointed his successor in the office of judge of probate for the county of Middlesex, and gave great satisfaction by the tactful discharge of his duties.

He was the first president of the trustees of the Groton Academy, and a fellow of the American Academy of Arts and Sciences.

In 1756 he married Lydia, daughter of David Baldwin, of Sudbury, by whom he had ten children, four of them surviving him. He died at Groton "of a pectoral dropsy," November 17, 1804.

WALTER L. BURRAGE.

PRESCOTT, William (1788-1875), naturalist and genealogist, was born in Sanbornton, New Hampshire, December 29, 1788, and died in Concord, New Hampshire, October 18, 1875, at the age of 86. He was indentured to a farmer at sixteen years of age, received few educational advantages, taught school and studied medicine, receiving an M. D. from Dartmouth Medical School in 1815. From this time he practiced in Gilmanton until 1833, when he moved to Lynn, Massachusetts, and joined the state medical society. While in New Hampshire he was a most active member of the New Hampshire Medical Society, acting on important committees to revise the by-laws and to visit medical institutions, and attending most of the meetings. Lynn was his home until 1845, when he went to Concord, New Hampshire, becoming a member of the American Association for the Advancement of Science and the American Medical Association. He served in both branches of the legislature. He was an enthusiastic collector of minerals and shells. He wrote the "Prescott Memorial" (Boston, 1870).

PRESTON, Ann (1813-1872), dean of the Woman's Medical College of Pennsylvania, was the daughter of Amos and Margaret Preston, and was born at West Grove, Chester County, Pennsylvania, December 1, 1813. Her reputation as a physician was gained in Philadelphia, where she spent most of her time after leaving her country home. Being closely confined by grave responsibilities, her early education was not a liberal one. She took an active interest in the anti-slavery cause and early became known as a forcible writer on the subject and she assisted in the escape of fugitive slaves, showing great bravery and presence of mind.

When the Woman's Medical College of Pennsylvania opened in 1850, Miss Preston was one of the first applicants for admission and was graduated at the first commencement in 1851-2. The winter after, she attended lectures at the college and in the spring accepted the chair of physiology and hygiene then vacant. At that time it was impossible for a woman to gain admission to any hospital in Philadelphia. So highly did the managers of the Woman's Hospital value Dr. Preston's work at that time that in a report is found the following statement: "To her efforts more than to all other influences may be traced its very origin." She said in speaking of it, "I went to every one whom I thought would give me either money or influence." When the hospital was opened she was put on the Board and became consulting physician, holding these offices until the time of her death.

In 1866 Dr. Preston was elected dean of the faculty of the Woman's Medical College, a position she held for six years. In 1867 she wrote her ever-memorable reply to the preamble and resolutions adopted by the Philadelphia County Medical Society, to the effect that they would neither offer encouragement to women becoming practitioners of medicine nor meet them in consultation. This was one of her ablest literary productions and so completely did she answer the arguments put forth by the society that no reply was attempted.

In 1871 she had acute articular rheumatism from which she did not completely recover, so when the college opened in the fall she resumed her usual duties with less than her accustomed vigor. Another attack made it impossible for her to leave her room and at this time she prepared the Annual Announcement for the college session of 1872-73. It was the last work of her life, performed slowly and painfully, and this exertion brought on the relapse which terminated in complete nervous prostration from which she died, April 18, 1872.

Both the college and hospital were remembered in her will, the interest of four thousand dollars being used annually to assist in the education of one good student.

FRANCES PRESTON.

PRESTON, George Junkin (1858-1908), Baltimore neurologist, was born in Lexington, Virginia, in 1858, the son of Col. J. T. L. Preston. He was graduated A. B. in 1879 at Washington and Lee University and took his M. D. at the University of Pennsylvania in 1883. In 1894, as a member of the Medical and Chirurgical Faculty of Maryland, he was the first to suggest the feasibility of establishing a State Bacteriological Department. As chairman of the Faculty Library, he did his utmost to increase its richness and utility. He made the study of the nervous system his life work, and in 1885 went abroad and studied under Charcot, and, later, worked on the subject at Leipzig. In 1889 he was professor of physiology in the Woman's Medical College, Baltimore, and in 1890 entered the Faculty of the College of Physicians and Surgeons of Baltimore as professor of physiology and diseases of the nervous system. He also held the post of neurologist to the city, Bayview, the Hebrew and St. Agnes' Hospitals. In all his work he labored unceasingly to better the condition of the insane and attained high rank as a neurologist, for his knowledge and work were of an intensely practical nature.

His writings included: "The Differential Diagnosis and Treatment of Multiple Neuritis," 1891; "The Effect of Arterio-sclerosis Upon the Central Nervous System," 1891; "Traumatic Lesions of the Spinal Cord," 1893; "Cerebral Œdema," 1894; and a large volume, "Hysteria and Certain Allied Conditions," 1897.

He died in Baltimore on June 17, 1908.

PRESTON, Jonas (1764-1836), founder of the Preston Retreat of Philadelphia, was born January 25, 1764, at Chester, Pennsylvania. His family moved to Cantrells Bridge where his father died, when he returned with his mother to Chester, and lived there until the outbreak of the Revolution; then they moved to Wilmington, Delaware. There he studied with Dr. Way and in 1784 graduated in medicine from the University of Pennsyl-

vania. He went to Europe in 1785 and attended lectures and clinics in Edinburgh, London and Paris. Returning to America "his extreme Parisian mode of dress and address was a source of deep concern and anxiety to his mother," who was a preacher in the Society of Friends. He bought a farm near Chester, then sold it, and traveled into Georgia, where he spent some of his time with General Wayne, finally returning to Chester and practicing his profession for several years.

In 1794 he married Orpale Reese, the only daughter of William and his wife, Mary Reese, a woman with a fortune which Preston invested so wisely that the estate grew largely and formed the fund by which the large charity that bears his name has been sustained.

After marriage he removed to Newton and took an active part in public affairs. During the western insurrection he volunteered, and under Colonel McClelland served as a soldier in the expedition to maintain the laws and preserve the peace of the country. For this violation of the discipline of Friends he was disowned, but by his inherent force, clear judgment, patient and admirably regulated mind he later became one of their most useful members. Preston was a member of the Pennsylvania State Legislature, first in the House (1794-1800) and then in the Senate (1808-1811), and while in the Senate, as chairman of the committee on education, prepared the bill which became the law in operation for more than twenty years, under which the poor children of Pennsylvania received gratuitous education.

His second marriage to Jane, daughter of George Thomas, farmer of Newtown, took place in 1812. In 1816 his wife induced him to move to Philadelphia, where the following year he became a member of city councils and was chiefly instrumental in promoting the construction of extensive water works for the city. He became a director of the Bank of Pennsylvania and his services as director of the Schuylkill Navigation Company were attested by the gift of a silver vase from the stockholders that is now in the Preston Retreat.

He died at Philadelphia, April 4, 1836. In his last will, dated May 12, 1835, he made various bequests to relatives and friends, and then left the larger portion of his estate, nearly $250,000, to the foundation of the Preston Retreat, "The persons to be admitted shall be married women of good character, and in indigent circumstances, who are near the time of their confinement and at the time of application shall be resident in the city or county of Philadelphia or county of Delaware, and shall produce satisfactory testimonials of character." In pursuance of the bequest, the lying-in home was incorporated June 16, 1836, by an act of the Legislature of Pennsylvania with the title of "The Preston Retreat," and the cornerstone was laid July 17, 1837, Eli K. Price, his close friend and an executor, delivering the address. Owing to shrinkage in investments which prevented the opening of the institution for many years, it at last threw open its doors for the service of the public and at once made a great reputation for itself by the wise choice of William Goodell (q. v.), the eminent gynecologist and professor in the University of Pennsylvania (1865-1887), as the first resident physician. The second choice, Dr. Joseph Price (q. v.), was no less remarkable (1887-1894), and the latest incumbent is Richard Norris, surgeon, obstetrician and writer.

HOWARD A. KELLY.

PRESTON, Robert J. (1841-1906), alienist of Virginia, was the son of John F. Preston, of Washington County, Virginia, and was born in that county in 1841; he was a member of a prominent Virginian family. As a boy he went to Emory and Henry College, Virginia, taking the A. M., and then graduating M. D. from the University of Virginia in 1867.

During the Civil War he served his state first as a private and, later, by promotion, as a captain in the Twenty-first Virginia Cavalry, and made for himself a record of gallantry. He joined the Medical Society of Virginia in 1871, proved a zealous member, and had the honor of election to the presidency in 1894; he had the same honor conferred upon him by the Abingdon Academy of Medicine and by the American Medico-psychological Association in 1901-02, of which he was president in 1892. In 1887 he was elected first assistant physician to the Southwestern State Hospital (for the Insane), and in November, 1888, superintendent of the same, a position he filled until his death.

He was a member of the Tri-State Medical Association of the Carolinas and Virginia; honorary fellowship was conferred upon him by the Boston Gynecological Society, the Lynchburg (Virginia) Academy of Medicine, and the Medical Society of Virginia (1895).

Dr. Preston was a man of high order of intelligence and an excellent physician. As

superintendent of the hospital he made a faithful and popular official; a good disciplinarian, using reason and persuasion rather than harshness and force, he was eminently successful in the management of his unfortunate charges.

Dr. Preston married twice; his first wife, whom he married in 1875, was Martha E. Sheffey, and they had two children, Ellen F. and Robert J., both of whom were graduates in medicine. In 1902 he married Mrs. Elizabeth Gravely (née Stuart), who with a son survived him.

In 1906, while en route for Toronto, Canada, to attend a meeting of the British Medical Association, he was taken ill at Lewiston, New York, and died suddenly at that place on the twentieth of August.

His contributions to medical literature were numerous.

ROBERT M. SLAUGHTER.

PREVOST, François Marie (1770?-1848), of Louisiana, the first in this country recorded to have done a Cesarean section, was born at Pont-de-Cé, in the south of France about 1770. He was graduated in medicine at Paris and settled in San Domingo, but driven out during the insurrection, escaped to Louisiana and spent the remainder of his days at Donaldsonville, dying May 18, 1848, at the age of seventy-eight. R. P. Harris remarks of Prévost: "How early in his career in Louisiana he performed the operation of gastro-hysterotomy, I do not know, but I do know that he was at least credited with the four cases I have given him." He was a bold surgeon and was sixty-seven when he operated for the fourth time, in the midst of an active practice which lasted more than thirty years. The common cause of dystocia in his cesarean cases appears to have been rickets. The first subject was a slave and both child and mother survived. At the second operation, on the same subject, both lived. His third case occurred about 1825, and the woman is believed to have died while the child lived; in 1832, Prévost pointed out the boy of six or seven to Dr. Thomas Cottman, his successor. The fourth, in 1831, was a black slave about twenty-eight; the incision was left lateral; the mother survived the birth of a female child who grew to maturity and was given her freedom by the doctor's stipulation. A plantation rumor had it that this woman was the subject of some six or seven deliveries in the same way.

On May 29, 1838, Prévost married Victorine Castellain; they had no children, but brought up an adopted son, John Robertson.

We owe the little we know of Prévost to our medical statistician, Robert P. Harris, (q. v.).

PREWITT, Theodore F. (1832-1904), surgeon of St. Louis, was born in Fayette, Howard County, Missouri, on March 1, 1832, the son of Joel and Mary Trimble Prewitt. Owing to the death of his father, and being one of a family of eleven, he was thrown upon his own resources at the early age of fourteen. He entered the St. Louis Medical College, whence he was graduated in 1856, and married Mary Ingram, of Virginia, during the last year of his medical course. After the death of his wife in 1862, he went to St. Louis and again married in 1871, this time Mary Sowers; and the same year was appointed superintendent of the City Hospital, a position he held for three years. He spent some time at a number of the leading European hospitals.

On his return to St. Louis he accepted the chair of surgery in the Missouri Medical College, and later was elected dean. On the consolidation of the Missouri Medical College and the St. Louis Medical College to form the Medical Department of Washington University, he was continued in the chair of surgery and held this position until his death. For twenty-five years he was surgeon to St. John's Hospital and the surgical clinic at that institution.

An untiring energy enabled him to prosecute with vigor whatever matter claimed his attention. While occupied with the cares of a large practice, he at all times had at heart the cause of medical education.

Prewitt was president of the American Surgical Association, of the Missouri State Medical Society, the St. Louis Medical Society, the St. Louis Surgical Society, and the St. Louis Obstetrical Society, and a fellow of the Philadelphia Academy of Surgery.

PRICE, Joseph (1853-1911), of Philadelphia, one of the foremost figures in the development of American Gynecology in the eighties and nineties of the nineteenth century, found gynecology and abdominal surgery twin babes in swaddling clothes and left them, after a life of extraordinary activity, full grown specialties. He made common and safe the radical operation for the treatment of pelvic suppurations, and taught men in this country

how to operate with clamp, "serre noeud," pins, and external treatment of the stump, and so made hysterectomy for fibroid tumors a safe operation instead of a most dangerous one. Price's personality reached the hearts, while his writings and clinical teachings in some degree moulded the activities of every surgeon in this country and in Canada. To few men has it been given so to impress their personality and their sturdy convictions on their fellows.

Joseph Price was born in Rockingham County, Virginia, January 1, 1853. He received his early schooling at Fort Edward, N. Y., and attended Union College from 1871 to 1872, but left college to join the engineering corps of the New York Central Railroad. He took his medical degree at the University of Pennsylvania in the class of 1877, and then served as surgeon on a translantic passenger steamer between Philadelphia, Antwerp and Liverpool, making three voyages in all.

He began his life's work at the old Philadelphia Dispensary where he found a hearty coadjutor in one of its directors, Dr. Thomas Wistar. The class of people Price was raised up to examine and treat and become intimate with in their wretched dwellings, was the offscourings of a corrupt, boss-ridden, badly governed city and it is due to his fidelity to these usually neglected opportunities in a most depressing field that he owed his subsequent rapid advancement to the position of one of the foremost surgeons of America. If the slum poor of the city had been queens, instead of queans, they could not have received better and more faithful care at his hands; often did he, at his own expense, when he was struggling for recognition and for a livelihood, send some sad, worn-out creature to the country for several weeks to convalesce from a severe operation; his warm, Virginia heart was ever peculiarly tender towards the colored women under his care.

"Joe Price," as every one called him, had a racy humor and often found relief from care and gained complete relaxation following his work in relating to chosen spirits the comical situations and misunderstandings continually arising in the course of his visits to the city's poor. Let it be noted that his jests about the poor and about the quaint old mammies he met were ever tinctured with a chivalrous, tender sympathy; it was only when discussing his rivals that his humor became grim and the bolt often carried a festering barb.

Price was a devoted admirer of Marion Sims (q. v.), whose "Uterine Surgery" he knew by heart; he was also a follower and close friend of Sims's peer, Thomas Addis Emmet, (q. v.) and it was for many years his special delight to make up parties of interested Philadelphians and visiting surgeons, to run over to New York to meet Emmet, by special appointment, and see him do a vesico-vaginal fistula, or a perineal, or a cervical operation. The value of these trips was enhanced by the anticipatory graphic and lively picture of what we were to note particularly in the operations; in his zeal Price would grasp his interlocutor's coat or a bit of handy rag, and proceed to demonstrate with a needle and thread, or perhaps he would squeeze and adjust his thumb and fingers so as to demonstrate the principles of some plastic operation under discussion. His admiration of Lawson Tait, whose book, "Diseases of the Ovaries," he knew from cover to cover, drew him to Europe about the year 1887 and brought him into vital contact with England's pioneer surgical genius. Later he made a second visit to Birmingham and the two surgeons corresponded until Tait's death. Price's friends often dubbed him the "Lawson Tait of America." As a brilliant successful surgeon, in a large measure the inaugurator of a new era in this country, the comparison is merited, but on the other hand, although Price had the grave faults of strong bias and impulsive likes and dislikes, he was in every way immeasurably Tait's superior as a man. Joe Price's chief fault was an overmastering jealousy of the nearby successful competitors, and inasmuch as these, too, were but frail and erring mortals, his strictures were naturally often justified; he never knowingly or deliberately falsified.

His surgical technique was of the simplest —with a board for a table top and a little fistful of instruments, he brilliantly executed the most difficult abdominal operations. The secret of his success lay in his fixed purpose in life, his active restless mind, his piercing vision and his long, deft, trained fingers which were at once the envy and the despair of other surgeons. Under Tait's influence and encouraged by his own phenomenal success in his abdominal surgery, he rejected and ridiculed antiseptics and the germ theory, but preached "asepsis" as some sort of a different doctrine, and thus practically attained his unparalled results. Joseph Price easily led abdominal surgery on women in this country

for nearly two decades. He naturally fell heir to the abdominal work of his professor in surgery, D. Hayes Agnew (q. v.), who was too old to master the new fields opened up; his obstetrical skill was such that R. A. F. Penrose (q. v.), his professor in obstetrics, constantly relied upon his skill in difficult cases.

Price never held any regular collegiate teaching position, and yet he taught more men how to do abdominal and pelvic operations, and had more grateful followers than any other man in America. His kindness to the poor, and a supreme indifference to the bondage of office hours (the despair of his practical brother, Mordecai) (q.v), kept him from accumulating a substantial bank account; the emoluments of a big practice meant but little to him.

He had been engaged for several years to "Lou" Troth, when Professor William Goodell (q. v.) gave up the Preston Retreat (a large endowed obstetric home), and Price's name naturally at once came up for consideration. But the holder of the position must be married! The opportunities offered in the Retreat for obstetric experiences were unsurpassed, the salary was large, and with it went a big, comfortable house and grounds, the concession of office hours and an outside practice, provided the institution was duly cared for. Price's candidacy was settled in the happiest manner by immediate marriage; he was elected and filled the post with zeal and success from 1887 to 1894. The issue of the marriage was three daughters and four sons, none of whom studied medicine.

With C. B. Penrose he was the founder of the Philadelphia Gynecean Hospital (incorporated January, 1888), in which he was succeeded by Penrose and J. M. Baldy. Later he abandoned the Gynecean and opened a large private hospital with Dr. J. W. Kennedy. He was president of the American Association of Obstetricians and Gynecologists in 1895, and one of the staunch supporters of and a contributor to the proceedings of this honorable body of specialists.

Price's great subjects for operation or for a paper before a society, or for debate, were "Pus in the Pelvis," "Extra-uterine Pregnancy," "Early Ovariotomy" and "Fibroid tumors;" the vermiform appendix came in, too, for a large share of his attention. When he was known to be in attendance at a meeting, men flocked in and filled the room and crowded the aisles to enjoy his vigorous, spicy discussions. At first somewhat interrupted and hesitant in his speech, he soon warmed up as he felt the sympathy of his audience, until like Stonewall Jackson dashing at the head of his troops, he carried friends and foes alike with him, as he graphically depicted the lessons drawn from his large experience, and caustically flayed his opponents. His aggressive militancy for what he held to be the best interests of abdominal surgery is well illustrated by the following story, related to me by Dr. Charles H. Mayo, an eye witness. While Price and his associates in Philadelphia were zealously saving lives by their brilliant operations, a competitor was vaunting his simpler, safer cures of the same conditions by the Apostoli electric treatment. Price soon "camped on his trail," as he would express it, and closely followed the work of this man over a series of months. The electro-therapeutist finally announced a paper on his methods before the College of Physicians of Philadelphia. Price significantly asked Dr. Mayo, then visiting him, to be present, as the meeting "was likely to be interesting." Before the hour a dray drove up to the hall and a great number of jars containing big and little tumors and specimens were unloaded and deposited on a long table in front of the speaker's desk. Then followed Price, who took a little pad out of his pocket and busied himself writing slips and attaching them to the jars. The electro-therapeutist read his paper and cited the numerous patients cured by his conservative methods. Whenever the initials were given, Price put additional notes on the slips on the jars. The denouement came when the subject was thrown open for discussion. Price arose, one by one named the cases cured and then exhibited the morbid specimens he had afterwards removed from the patients; a big fibroid cut open to show the streaks of the intense cauterization, and the fact that the growth was uninfluenced; in another case he demonstrated that the needles had penetrated the uterine wall at a point remote from the growth; another patient had acquired "a vicious intestinal adhesion," jeopardizing the operation. The tubes of a "cured" pelvic inflammatory mass were picked up and incised and the pus flowed out. The effect was so crushing that the adversary had the pity of the hearers, but his therapeutic procedures were entirely discredited and electro-therapy received its death blow.

Bitter and unrelenting as a foe, Price was generous in the extreme to friends. He had not the habit of mind for the writing of a

scientific or a technical paper, but he saw with prophetic vision the next greater steps to be taken in surgery, he grasped them himself and then turned round to pull the rest of the world up to his standpoint, and before he quitted the scene, everyone had in fact gone his way.

One of the most difficult, nay the impossible task of a biographer is to grasp and depict such a personality and to measure the influence of a man like Joseph Price, and yet as great pioneers such men as he and his brother Mordecai often accomplish more for humanity than many who have poured forth much wisdom from the laboratory. Alas, the aroma of such a life is evanescent. Those who knew him well chuckle or grow pensive and sorrowful as they recall the talks and the walks and the tours and the operations in which they have been associated with him, and one and all are apt to end up with "Dear old Joe, I wish he were here now." Those who came on the scene later can never know him.

Price died of an infection (to which he was ever liable), a universal retro-peritoneal involvement of all the glands in the abdomen, so that in spite of his hurry call to his follower, J. W. Kennedy, to operate, he passed out of the field of his great labors, June 8, 1911. He received the honorary degree of LL. D. from Union College a month before his death. There is a good portrait in his biography by Dr. Kennedy in the "American Journal of Obstetrics" for January, 1912.

HOWARD L. KELLY.

PRICE, Mordecai (1844-1904), of Philadelphia, the son of Joshua and Feby Moore Price, Mordecai graduated from the University of Pennsylvania in 1869 and became one of the most eminent abdominal surgeons and gynecologists of Philadelphia and an operator of repute. He was born in Rockingham County, Virginia, in 1844, and came to Philadelphia when a boy and was associated in his work with his brother, Dr. Joseph Price (q. v.).

He died suddenly at his home in Philadelphia from apoplexy, October 29, 1904, aged sixty.

PRIME, Benjamin Young (1733-1791), physician and poet of New York, was born in Huntington, Long Island, December 20, 1733, and died in his native town, October 31, 1791. He was the son of Ebenezer Prime, a clergyman of that town.

Benjamin was a graduate of Princeton College in 1751, and later studied medicine under Dr. Jacob Ogden, and began to practice in Easthampton, L. I. In 1756-57 he held the position of tutor in Princeton. He was a great linguist and after his death there were found among his private papers a Latin versification of one of the Psalms written in all the various metres of the odes of Horace. In 1762 he sailed for England to attend medical clinics, and later was graduated at the University of Leyden in July, 1774. He then went to Russia and subsequently returned to New York and practiced medicine there. He wrote a poem on the passage of the stamp act, entitled "A Song for the Sons of Liberty." At the beginning of the Revolutionary war he left New York and returned to Huntington, L. I., but soon was obliged to flee to Connecticut, owing to his political views. At the close of the war he returned to his native town. After the war he wrote ballads and songs, among which may be mentioned: "The Patriot Muse," London, 1764 (poems on some of the principal events of the Revolutionary war); "Columbia's Glory: a poem on the American Revolution," 1791; and "Muscipula Cambryomachia," 1838. He wrote essays in Hebrew, Greek, Latin, French and Spanish. He contributed nothing to medical literature that can be found.

PRINCE, David (1816-1889). David Prince, of Jacksonville, Illinois, was a surgeon, a professor of surgery and a writer, there being no less than forty-one titles in the catalogue of the Surgeon-General's office. His best-known work was a treatise on plastic and orthopedic surgery that was used as a text-book in the medical colleges of the middle west. He was born in Brooklyn, Connecticut, June 21, 1816. His parents moving to Canandaigua, New York, he was educated at the academy in that town and then went to the College of Physicians and Surgeons, for the western district at Fairfield, New York State, finally taking his M. D. at the Medical College of Ohio, Cincinnati (1839), where he was brought into contact with Reuben Dimond Mussey (q. v.). After assisting Mussey for a year and a half, Dr. Prince settled in Payson, Illinois, his father having moved there. In 1843 he went to Jacksonville, Illinois, and was professor of anatomy in the Illinois Medical College for the five succeeding years, when this institution went out of existence; then for three years he practiced in St. Louis, Mo., and lectured on surgery at the St. Louis

Medical College, finally reaching his permanent residence in Jacksonville in 1852. During the Civil War he was a surgeon of volunteers; after the contest he established a sanitorium where he did much surgery; twice he visited Europe, both times as a delegate to international congresses. He was one of the first in Illinois to use ether as an anesthetic and also to perform ovariotomy (December 25, 1847).

Dr. Prince held membership in many medical societies; he was a member of the board of education, a philanthropist, a cool-headed, energetic, public-spirited citizen.

He died of pneumonia in Jacksonville, December 19, 1889, survived by two sons, who were physicians, and a daughter the wife of a physician.

PRUDDEN, Theophil Mitchell (1849-1924), New York pathologist, was born July 7, 1849 in Middlebury, Connecticut, the son of the Rev. George P. and Eliza A. Johnson Prudden. He was graduated B. S. from Yale, (Sheffield Scientific School) in 1872 and M. D., Yale Medical School, in 1875; in 1896, the LL. D. was given him. After an instructorship in chemistry at his alma mater during 1872-74, he spent the next three years as intern and student in Heidelberg, Vienna, and Berlin, and returned to assist Francis Delafield (q. v.) in organizing the new department of pathology at Columbia University. In 1882, he crossed again to work with Koch. From this year he was director of the pathological and bacteriological laboratories until 1892 when he took the chair of pathology; ill health caused retirement as emeritus professor in 1909. The development of the Board of Health of the State as well as of the City of New York owes much to his zeal, and through his interest in the application of bacteriology and pathology to common life, he was often thought to be a sanitarian rather than a teacher. After 1901, he was director of the Rockefeller Institute of Medical Research.

One of Dr. Prudden's first publications was a little "Manual of Normal Histology." His "Textbook of Pathology," written in collaboration with Prof. Delafield in 1885, reached its 12th edition. He was also the author of "Story of the Bacteria," "Water and Ice Supplies," "Dust and its Dangers"—a classic to sanitary engineers, and "The Great American Plateau," 1907—a record of his explorations of the remains of the cliff dwellers near the Grand Canyon.

He was an admirable teacher and a rigid disciplinarian; his staff and former students bless his generous advice and helpful criticisms, of inestimable value in their subsequent successes. Naturally shy and sensitive, he was a delightful companion to his intimates. His name was a password to the Grand Canyon and no one would have recognized the reserved, dignified teacher of pathology in the man who was the close companion and loyal friend to the guide of the great southwestern desert.

He died of heart disease, April 10, 1924.

FRANCIS C. WOOD.

PRYOR, William Rice (1858-1904), gynecologist of New York City, was born in Richmond, Virginia. His father, the Hon. Roger A. Pryor, was minister to Greece in 1855, and a justice of the Supreme Bench in New York. Pryor was educated in Virginia, then entered Princeton University, and in 1881 took his M. D. from the College of Physicians and Surgeons of New York, being appointed assistant gynecologist in the New York Polyclinic in 1886 and afterwards, in 1895, professor of gynecology, retaining that position till his death. He was also on the staffs of the Charity and St. Elizabeth's hospitals. He became a fellow of the American Gynecological Society in 1892.

His principal work consisted in improving the technic of vaginal hysterectomy, advocating more rational methods of treatment in puerperal infection, especially by the vaginal route whenever practicable, and in treating retroposed uteri by pulvic gauze packing through a vaginal incision. In 1903 appeared his "Text-book of Gynecology," written in his characteristic style, and giving an excellent résumé of his teaching.

His health began to fail in the spring of 1904 and he died August 25, 1904, in St. Vincent's Hospital, New York.

He was a man of fine presence and cordial manners, and of enthusiasm. A complete list of his writings, some fifty-eight, is given by his biographer, Dr. J. Whitridge Williams, in vol. xxx, 1905, of the American Gynecological Society's Transactions.

PULTE, Joseph Hippolyte (1811-1884), of Cincinnati, pioneer homeopathic physician, was born in Meschede, Westphalia, Germany, October 6, 1811. The son of a physician, he had a fine classical education at the gymnasium of Soest and received his M. D. from the University of Marburg in 1833. Emi-

grating to America the following year, with the intention of joining a brother in St. Louis, Joseph became converted to homeopathy by an enthusiastic Hahnemannian in New York, translated Hahnemann's works into English, went to Allentown, Pennsylvania, and practiced there for six years, aiding in establishing the Allentown homeopathic college. At the end of this time the college went out of existence and Pulte moved to Cincinnati.

He was a man of good scholarship and of progressive ideas. In 1846 he published "Organon of the History of the World," a work that excited a good deal of interest in such men as Humboldt, Bunsen and William Cullen Bryant, and two years later he visited Europe for the purpose of submitting to some of the governments a plan for encircling the globe with an electric telegraph, connecting North America with Asia across Behring Sea, a proposition that was regarded as chimerical. Returning to Cincinnati in 1849, Pulte was active in treating Asiatic cholera during the epidemic of that year and soon published his first medical work, "Domestic Medicine," a book that was translated into Spanish and republished in London. In 1852 he began the publication of the "American Magazine of Homeopathy and Hydropathy," with Dr. H. P. Gatchell, filling at this time the chair of clinical medicine in the Cleveland Homeopathic Medical College; later he was transferred to the chair of obstetrics. In 1853 Pulte published another successful medical book, the "Woman's Medical Guide;" in 1855 he was the principal speaker at the celebration at Buffalo of the centennial of the birth of Hahnemann. Altogether he was regarded as an able and successful citizen. He published poems that were highly spoken of.

Wealth came to him and when Dr. J. D. Buck (q. v.) and Dr. D. H. Beckwith decided to found a medical college for the teaching of homeopathy, Dr. Pulte assisted to such an extent that the college was named for him. The first session began in 1872, Dr. Pulte filling the chair of clinical medicine. He died in Cincinnati, February 24, 1884, at the age of seventy-two years.

WALTER L. BURRAGE.

PURPLE, Samuel Smith (1822-1900), founder and president of the New York Academy of Medicine. There is an old proverb that "A shoemaker should stick to his last," but fortunately for medical libraries there was one lad who worked with a book on the bench as he made shoes, who got up at four in the morning to study and looked far beyond his last to being, some day, a physician. This boy was Samuel Smith Purple, of English stock, which emigrated to America in 1674. He was born to Lyman Smith and Minerva Sheffield Purple on June 24, 1822, at Lebanon, Madison County, N. Y. The father was a tanner and shoemaker, and young Samuel went to a rural school, and when his father died in 1839 he had to take over the business, pay the many debts and support the family. But he had two relatives who encouraged him to study: his grandfather, Dr. Sheffield, and Dr. W. D. Purple, and when twenty-three, he had so far succeeded in business that he took a course of medical lectures at Geneva Medical College, secured free for him. There were some big teachers there and Purple returned home eager to earn money for more teaching. The gift of a free course at the University of New York from his uncle and the advantage of being under Valentine Mott (q. v.) enabled him to return home with an M. D. in 1844.

Whether to be a country or a city practitioneer? He had a poor wardrobe and twenty-five dollars in cash. To the city he went, working on a canal boat part of the way to save fare, and entering the service of the old Marion Street Maternity, New York, until he had an appointment in the New York Dispensary. Patients came slowly, but they did come eventually, also an editorship—of the "New York Journal of Medicine," which he held capably for ten years, his own papers in it establishing his reputation. He was president of the New York Academy of Medicine in 1875 and re-elected in 1877. He worked hard for its interests and used all his influence and most of his money to secure for it a library and a home. One man lent a willing ear; this was Dr. John B. Beck (q. v.), who, himself possessing a valuable library, urged Purple to avail himself of his editorship to collect old medical books, pamphlets, and files of medical journals. Frequent dealing with old bookstores led him to begin a collection of books on American historical literature and he helped Dr. Henry Stiles (q. v.) in editing "The New York Genealogical and Biographical Record." One of his "finds" he rescued from going to a paper mill. It was Dr. Samuel Bard's (q. v.) "Inquiry into the Nature and Cure of Angina Suffocativa or Sore Throat Distemper," 1771, a very accurate account of what is now known as diphtheria. To the Academy library he gave that great treasure, the serial medical literature of

this country, for more than one-fourth of a century ransacking every bookstore and corresponding with every likely person, 5,000 medical journals being his ultimate gift and a $75,000 donation won by his influence from Dr. Alexander Hosack (q. v.).

There was so much he meant to do besides: to write up biographies for his splendid collection of medical portraits and increase the number of valuable works in the Academy library, but in 1899 he had hemorrhage into the posterior chamber of the eye which permanently destroyed its sight, and he knew that he had advanced Bright's disease. He had never married, but his roof-tree sheltered his old mother, brother and brother's widow and children. He met death in the same calm, dignified way with which he had coped with early poverty, and the shoemaker's son is commemorated on a tablet in the library of the New York Academy of Medicine as its founder and president.

Among his few published papers are found: "Corpeus Luteum; Its Value as Evidence of Conception and Its Relation to Legal Medicine;" "Observations on Wounds of the Heart and Their Relations to Forensic Medicine;" forty-two cases.

He held, among other offices, honorary membership in the Medical Society of the State of New York; corresponding member of the Epidemiological Society, London, and physician to the New York Lying-in Asylum.

There is an oil painting of Dr. Purple in the library of the Academy of Medicine, New York.

DAVINA WATERSON.

PUTNAM, Charles Pickering (1844-1914), well known for many years as a practitioner of medicine, in Boston, but perhaps more widely known, yet not more warmly remembered, as a devoted worker on the broadest possible lines of social service, was born in Boston, September 15, 1844, and died there April 23, 1914, in his seventieth year. His parents were Dr. Charles Gideon Putnam and Elizabeth Cabot Jackson Putnam. His paternal grandfather was Samuel Putnam of Salem, a well-known and honored member of the Massachusetts Bar and for a long time a Justice of the Supreme Court of Massachusetts. His maternal grandfather was Dr. James Jackson (q. v.), of Boston. Dr. Putnam was graduated from Harvard College in 1865, and from the Harvard Medical School in 1869. After this he studied abroad, giving special attention to the diseases of children, and in the latter part of 1871 began to devote himself to his profession in Boston. Although he always carried on a general practice, he paid especial attention to pediatrics, and did some excellent pioneer work in orthopedics, then a branch of medicine that was but little known. In 1898 he was president of the American Pediatric Society. He lectured at the Harvard Medical School on the diseases of children from 1873 to 1875, and was clinical instructor in the same branch from 1875 to 1879.

As for his social service work, this was described so well by his relative, Mr. Joseph Lee, in a paper first published in the "Boston Medical and Surgical Journal" for May 7, 1914, that I will complete this brief record by the following quotations from that source: Dr. Putnam had been since the beginning of his practice of medicine a leader in charitable and social work—almost from the beginning the most important leader of such work in Boston, the first to take hold and the last to let go of each new and important enterprise. He was one of the founders, in 1873, of the little-known but extremely important Boston Society for the Relief of Destitute Mothers and Infants, which was a pioneer in establishing the policy of keeping mother and child together, and was president of the society from 1904 until his death. In 1875 he became physician to the Massachusetts Infant Asylum, and from 1898 to 1910 he was also president of the board of trustees. The ordinary death-rate in such institutions was at that time something over ninety per cent a year. The Massachusetts Infant Asylum had already brought the rate down to less than a quarter of that figure when Dr. Putnam became connected with it, and he by his skill and devotion again reduced it by two-thirds or more. He was one of those who in 1879 took part in the movement for establishing the Associated Charities, the second charity organization society in this country; and he was always one of the sustaining members of that society in the real, not the conventional, sense, working in many capacities, as president of a conference, as director, as chairman of many committees, including the important one on inebriety, and, since 1907, as president. From 1892 to 1897 Dr. Putnam took a leading part in the very important movement for the reorganization of the city of Boston institutions for the care of prisoners, of the poor, and of poor, neglected, and delinquent children, being on the special committee appointed by Mayor

Matthews in 1892, chairman of the board of visitors of 1893-94, chairman of the standing committee on pauper institutions of the advisory board appointed by Mayor Quincy in 1896, a steady fighter for the reorganization bill of 1897. When the new system of separate unpaid boards of trustees was established he was appointed a member of the Board of Children's Institutions, and was its chairman from 1902 to 1911, performing in that capacity a great and harassing, though invisible and unappreciated, service to his fellow-citizens.

Dr. Putnam was active in the campaign against tuberculosis and a director of the Mental Hygiene Association. He was one of the first to take up broad social questions from the legislative end, was the first experienced charity worker to enlist in the Massachusetts Civic League, and helped secure the establishment of the State Board of Insanity. He was among the earliest supporters of Dr. James R. Chadwick (q. v.) in founding the Boston Medical Library, of which he was an original member in 1875 and an incorporator in 1877, and which he served upon important committees until his death. He helped to organize and for many years carried on, practically unaided, the Directory for Nurses, under the direction of the Library.

Dr. Putnam's most distinctive characteristic was the power of enlistment. In each of the many services he undertook it seemed to those he served and to his fellow workers as if that must be the only thing he had to do. There are in every enterprise the helpful men, the wise, the brilliant men, the steady workers. And then there are the essential men, those without whom the thing will not be done. In an extraordinary number of instances Dr. Putnam was among these last. Whatever happened, however badly things might go, whoever else became lukewarm or discouraged, his associates knew that he, at least, would see the thing through, that he had enlisted for the war, intended doing as much, be it more or less, as might be necessary.

Dr. Putnam's wife, Lucy Washburn, and three children, Charles Washburn, Tracy Jackson, and Martha, survived him.

JAMES J. PUTNAM.

PUTNAM, Israel (1805-1876), of Bath, Maine, was born in Sutton, Massachusetts, December 25, 1805, and a good Christmas present he proved to his parents, for he became a noted physician and citizen, and left a son, Judge William LeBaron Putnam, of Portland, Maine, a jurist of ability. Dr. Putnam's father was Israel Putnam, a cousin of Gen. Putnam of the Revolution; his mother Hannah LeBaron, a descendant of Dr. Francis LeBaron, a great man in colonial days. Israel Putnam, Jr., was a graduate of Brown University, Rhode Island, in 1827, studied with Prof. James McKenna of Topsham, Maine, and attended lectures at the Medical School of Maine, graduating in 1830. Instead of remaining in the same town with his preceptor, and trying to compete with him and divide the practice, as is the way in this century, young Putnam moved to Wells, Maine, and began practice there. After staying four years, he married Miss Sarah Emory Frost, of Topsham, moved to Bath and remained for the rest of his life. He soon obtained positions of prominence, as a surgeon to the Marine Hospital, and City Physician; he was a member of Maine Medical Society, and the Maine Medical Association, and did excellent work in each. In his later years he was often of great help to younger physicians, and once said to a young graduate, "Come and take that house next to me, and when they call me out in the night I will say, 'You had better go to doctor-so-and-so, across the street, he is a first rate fellow, and wider awake at night than I am in the day time.'" He, like every other doctor, had a favorite drug, hyoscyamus, a good supply of which he carried around with him in his pockets, in the shape of a large black lump. When some patient would meet him in the street and say that "one of his women folks was sort of nervous like," he was sure to fish out the hyoscyamus, pinch out enough to make a few pills, roll them around in his hand and fingers as men do tobacco, and hand them to the old patient, who would go off rejoicing.

When a physician can resign a ten years' mayoralty (Bath), then resume his practice, and get all he wants for patients, it proves that he has made a few friends. Looking at the portrait of this well-known physician, you see a large face, bright eyes, long lips smiling at you from the corners, and you cannot help feeling that you knew him in real life.

After a prolonged illness of several months, Dr. Putnam died June 30, 1876, highly thought of and greatly missed.

JAMES A. SPALDING.

PUTNAM, James Jackson (1846-1918), for nearly fifty years identified with neurology

in Boston, his native city, died suddenly November 4, 1918, at his home, of angina pectoris. Born October 3, 1846, the son of Dr. Charles Gideon and Elizabeth Cabot Jackson Putnam, he had as his heritage the best traditions of a distinguished ancestry. His paternal grandfather, Samuel Putnam, of the Harvard class of 1787, was for many years judge of the supreme court of Massachusetts. His father was a physician of distinction and his mother was a daughter of Dr. James Jackson (q. v.), one of the most notable figures of his day in American medicine, an appreciative memoir of whom Dr. Putnam published in 1905. Dr. Putnam was graduated at Harvard College in the class of 1866 at the early age of twenty, already a student of high promise. Following his graduation from the Harvard Medical School he became a house-pupil at the Massachusetts General Hospital and thereafter continued his medical education in Leipsig and Vienna under the instruction of Rokitansky and Meynert. He also visited Paris and later England, where he came into intimate relations with Huylings Jackson, for whom he had always the warmest admiration. With this equipment and with the enthusiasm of a pioneer in a hitherto largely neglected branch of medicine, he forthwith became identified with study of the nervous system, both in its normal and pathological relations. He was appointed a lecturer on nervous diseases at the Harvard Medical School in 1872, and established the neurological clinic at the Massachusetts General Hospital. In 1893 his long years of teaching and devotion to his chosen subject were rewarded by his appointment as first professor of diseases of the nervous system at the Harvard Medical School. In this capacity he served until 1912, when he was retired by reason of age and made professor emeritus.

Dr. Putnam was one of the charter members of the American Neurological Association and was the last survivor for some years of the group of men who founded the society in 1874. He was also a member of the American Academy of Arts and Sciences, of the Association of American Physicians, the American Medical Association, the American Association of Pathologists and Bacteriologists, the American Psychopathological and Psychoanalytical Associations and several other societies, and took frequent part in their meetings and discussions. From its beginning he was a particularly active member of the Boston Society of Psychiatry and Neurology and was one of the leaders in its deliberations. At the last annual meeting of the Massachusetts Medical Benevolent Society, held a few days before his death, he was made one of its trustees. His eagerness to serve was exemplified in his unwavering interest in social and civic organizations—the Associated Charities, especially its committee on the alcoholic problem, and the social service movement, to all of which he gave much time and thought. To be a leader in an untried field demands exceptional qualifications. When Dr. Putnam returned from Europe to this country in the early seventies, he had the conviction firmly fixed that the time had come for America to do her part toward developing the practical study of the nervous system. He had few sympathizers and fewer followers, but to a man of his type this was a stimulant rather than a deterrent, and he forthwith started the neurological clinic at the Massachusetts General Hospital, to which was assigned one small room, and began to teach and to investigate. By degrees the clinic grew, an occasional assistant appeared, and a department which has since attained goodly proportions was permanently established. To a man of less persistence and determination the difficulties would have seemed too great and the road too hard. He lived to see this department of the hospital work, so humbly inaugurated, transferred finally to adequate quarters, with an increasingly large staff, but his ardent hope that sufficient beds to serve as a complement to the out-patient department be provided had not been realized. During these earlier years, in lieu of other facilities, he maintained a neuro-pathological laboratory in his house, the forerunner of the department of neuropathology at the Harvard Medical School. In this laboratory was done much of his pioneer pathological work. As a teacher of elementary students he was perhaps not so successful as in his other activities. The very profundity of the teacher's knowledge stood in the way of its transmission to the somewhat unwilling student of the earlier days. A certain difficulty in clear exposition of fundamental principles, induced by a conscientious desire to state all the facts of a complex subject, rendered his clinical lectures often hard to follow. To the more advanced students this very thoroughness was a decided help and inspiration; as a teacher of those already somewhat conversant with the subject he succeeded better in imparting his really extraordinary knowledge.

Dr. Putnam was a master of good English. He wrote extensively and always with painstaking care. His published work of approximately one hundred titles covered a wide range of topics, to all of which he brought originality of thought and expression. Among the most notable of his earlier contributions were an investigation on lead and arsenic poisoning, a study of paresthesia of the hands and a paper on "A Group of Cases of System Sclerosis of the Spinal Cord." The two latter papers, published respectively in 1880 and 1891, were pioneer contributions of great significance which, owing presumably to the somewhat involved wording of their titles and consequent difficulty in indexing, have not received the full recognition which is their due. In 1898 he published papers on internal secretions and splanchnoptosis, and again he anticipated our more recent views in an article on the "Psychical Treatment of Neurasthenia." His first interest was mainly with the problems of organic neurology, but during his later years his attention was turned rather toward the functional aspects of nervous disease, an interest which was greatly intensified by the advent of the psychoanalytic movement. The practical application of psychological methods to the problem of behavior in the large sense, as elaborated by Freud and his followers, made an immediate and insistent appeal, and thereafter up to the time of his death he was constantly at work in the attempt to elucidate the deeper significance of the mental life on the basis of the psychoanalytic method. During this period many papers appeared from his pen; his mind was never more active and he bore for the most part with equanimity, but with an occasional burst of indignation, the cynical and often abusive criticism aimed not so much at him personally as at the principles in which he believed. It is not to be questioned that when the heat of discussion over the newer psychological theories has subsided his thoughtful and searching papers will come to be regarded as contributions of permanent value in relation to this turbulent phase of medical research. Antedating somewhat this more recent and polemic period his Shattuck lecture before the Massachusetts Medical Society, delivered in 1899, with the original and suggestive title, "Not the Disease Only, but also the Man," revealed in striking fashion his catholicity of view, his belief in the significance of the mental life in the consideration of disease and his conception of the physician's duty toward himself and towards his patient—a masterpiece of expository writing.

His natural mental tendencies led him early toward philosophical inquiry. He was a close personal friend of the late Professor James (q. v.) and Professor Royce and followed eagerly the recent philosophical movement as represented by Bergsen. His constant attempt during the later years was to bring into accord fundamental philosophical conceptions and the practical affairs of life. He believed that the psychoanalytic movement might help toward this end in spite of its incompleteness in that it failed to correlate the ultimate spiritual demand with the practical details of individual experience, and much of his later writing, as, for example, his book on "Human Motives," was concerned with the endeavor to bridge this gap. Dr. Putnam combined in unusual degree the mental qualities of the man of science and the philosopher. "Physics," he said, "can come to its rights only through metaphysics."

Always keenly alive to the misfortunes of others, it was natural that he should have become one of the prime movers in the medical social service movement. From its inception he identified himself with its interests at the Massachusetts General Hospital, served on its committees and through example and in more material ways advanced the cause in which he ardently believed. In this, as in all other good causes, he took his part with a modesty and self-abnegation which was a constant source of marvel to those who knew of his manifold activities. Like his late brother, Dr. Charles P. Putnam (q. v.), and other members of his family, he was a force for good in the community, that was the stronger because exerted in ways which avoided publicity and popular recognition. His mind was always open to new ideas; he was almost childlike in his eagerness to see new light on old problems and to the very end he progressed and expanded. His liberality of thought was altogether admirable. With strong conviction on many subjects, he was peculiarly tolerant of the opinions of others and always willing to absorb and incorporate with enthusiasm into his own theories the conclusions of his fellow workers.

His really extraordinary modesty which in another might have appeared almost an affectation, made him a charming and stimulating companion. His understanding sympathy with human difficulties and weaknesses brought to him many, who were not patients, for advice and admonition. How many he helped over

hard places can never be known, but his death, while at the height of his activities, leaves behind the memory of a man indefatigable in good works which knew no abatement even in the physical suffering of his last year. With his interest in the more serious affairs of life went an unusual capacity for the simpler pleasures. His Adirondack camp, which he shared for years with his friend, the late Dr. Henry P. Bowditch (q. v.), was a perennial source of interest, where from time to time he entertained many notable persons. He was accustomed always to spend the month of September in this Adirondack camp, even after establishing his summer house at Cotuit, on Cape Cod, where he sailed his boat and worked in his garden with unvarying enthusiasm. He found it difficult, however, even in these periods of recreation, wholly to lay aside the problems which were always pressing for solution, as attested by the book or article he carried with him and his tendency always to turn conversation into serious and profitable channels. The war, happily ended a few days after his death, was to him a matter of almost personal sorrow; his attitude toward it was characteristic; it was as if he felt himself in some way personally responsible for the misdeeds of his fellow-men and suffered accordingly.

Dr. Putnam was in advance of his time. To such men adequate recognition, not always accorded in life, is sure to come in increasing degree as the years lend just perspective to our view. It cannot be doubted that such will be the case with him. He lived through a period of medical and social unrest and did his full share towards the establishment of the new order, combining, as few men have, a wholehearted and impartial devotion to his family, to his profession and to the community.

Dr. Putnam married Marian Cabot, of Boston, in 1886. They had several children.

E. W. Taylor.

Putnam, Sumner (1881-1887), early practitioner of Greensboro, Vermont. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 949-950.

PYLE, Walter Lytle (1871-1921), ophthalmologist of Philadelphia, was born December 20, 1871 in that city, the son of William J. and Sarah Lane Thomas Pyle. In 1888, he took his degree in arts from the University of Pennsylvania, and in 1893, his A. M. and M. D.; after post-graduate work in ophthalmology abroad, he settled in Philadelphia to practice his specialty. He was the associate and collaborator of George Milbry Gould (q. v.); clinical assistant in ophthalmology at the Polyclinic; clinical assistant and later assistant surgeon to Wills Hospital; and ophthalmic surgeon to Mt. Sinai Hospital. His best effort undoubtedly lay in the correction of ametropia.

Pyle edited the "International Medical Magazine," 1898, and the section on ophthalmology of "American Medicine" (1902-07), of the American Year Book of Medicine and Surgery (1903-05), and of the International System of Ophthalmic Practice (1912-19). He wrote, notably, "Diseases of the Eye," with George M. Gould, 1899, "Anomalies and Curiosities of Medicine," 1898, "A Manual of Personal Hygiene" (7th edit., 1918), and "Cyclopedia of Practical Medicine and Surgery" (4th edit., 1918), and was a frequent contributor to the proceedings of the medical societies to which he belonged.

He married Adelaide Besson, April 11, 1898.

After suffering for years from neuritis and a partial paralysis, he died at Merion, Pennsylvania, October 8, 1921.

PYNCHON, Edwin (1853-1914), ear, nose and throat specialist of Chicago, was born in Buffalo, N. Y., September 17, 1853, the son of Lucius K. and Marie Beau Pynchon. One of his earliest known ancestors was High Sheriff of London under King Henry VIII. Another ancestor, William Pynchon, came to America in 1629. His son John succeeded him in the government of Springfield, Mass., and served as colonel of the first regiment of Hampshire County during King Philip's and the first French wars. Edwin Pynchon received his early education in the public schools of Hartford, Conn., and in a military school in Massachusetts. He studied medicine for a time in Philadelphia, then entered the Eclectic Medical Institute at Cincinnati, where he was graduated in 1873. After visiting various American hospitals, he took a post-graduate course at the Medical College of Ohio, at Cincinnati, where, in 1876, he began practice. He gradually made a specialty of the diseases of the eye, ear, nose and throat and in 1883 attended clinics in Vienna, Paris, Berlin and London. Returning to the United States in 1885, he engaged actively in the practice of his specialty. He was clinical instructor in laryngology and rhinology at the Chicago Post-Graduate School, 1889-93,

professor of laryngology, rhinology and otology at the Chicago Summer School of Medicine, 1895-7, at the Chicago Eye, Ear, Nose and Throat College, 1896-1903, at Illinois Medical College, 1905-7, and at Bennett Medical College, 1907-9. From 1912 he was president of the faculty and professor of laryngology, rhinology and otology at the Chicago Hospital College of Medicine. He was senior assistant in aural surgery at the Illinois Charitable Eye and Ear Infirmary, and laryngologist to the Rhodes Avenue and Fort Dearborn Hospitals, Chicago. Dr. Pynchon was an active member of the American Medical Association, the American Academy of Ophthalmology and Oto-Laryngology, the Chicago Medical Society, the Illinois State Medical Society, the Chicago Laryngological and Otological Society and the Seventh Congress Internationale d'Otologie. He was a Mason and a member of the Ashland Club and the Club of Commerce. He attended the Episcopalian church.

Dr. Pynchon was noted as an inventor of many useful instruments, was a pioneer in tonsillectomy, which he did very skilfully by his method of cautery dissection, and was among the first to insist that tonsillectomy was not an office but a hospital operation.

Among his contributions to literature are: "The Bête Noir of the Vocalist"; "Nasal Bougies and Drainage Tubes"; "The Degenerate Tonsil"; "Directions for the Control of Nasal Hemorrhage"; "New Mechanical Saw for Intra-nasal Operations"; "New Nasal Speculum"; "New Nebulizing Device"; "Pneumatic Massage in Aural Practice"; "Surgical Correction of Deformities of the Nasal Septum"; "Technic of Tympanic Inflation"; "Tonsillectomy by Electro-cautery Dissection" and "Tonsillectomy in Children under General Anesthesia—a Hospital Operation." Dr. Pynchon was a linguist and in his later years travelled much in the United States and Europe.

He married Bertha L. Eberman, June 21, 1887, but had no children. He died in Chicago, September 28, 1914, following a uremic convulsion. A biographic notice was published in the "Laryngoscope" of September, 1914.

G. W. Boot.

QUINAN, John Russell (1822-1890), of Baltimore, medical historian, was of Irish lineage, one of the six children of the Rev. Thomas Henry Quinan, a native of Balbriggan, Leinster County, Ireland, and Eliza Hamilton Quinan, native of Enniskillen, Ulster County, Ireland. He was born at Lancaster, Pennsylvania, August 7, 1822, and educated at Woodward High School, Cincinnati, and at Marietta College, Ohio. Studying medicine with Dr. John K. Mitchell (q. v.), of Philadelphia, he was afterwards graduated M. D. at the Jefferson Medical College in 1844, and began practice in Calvert County, Maryland. Here he labored assiduously, as the leading physician of the county, for twenty-five years achieving much honor, but little profit. He removed to Baltimore City in 1869, where he achieved distinction as the medical historian, "par excellence," of Maryland. Dr. Quinan was president of the Medical and Chirurgical Faculty of Maryland in 1885-86. A list of his writings is given in the "Transactions of the Faculty," for 1891. The most important was a work of two hundred and seventy-four pages, issued by the Faculty in 1884 and entitled, "The Medical Annals of Baltimore from 1608 to 1880, Including Events, Men and Literature; to which is Added a Subject Index and Record of Public Services." This work originated in a celebration of the sesquicentennial anniversary of the founding of the City of Baltimore by the Medical and Chirurgical Faculty in 1880. To Dr. Quinan was assigned the part of writing the records of the "Physicians of the City," and, in doing this, he found it impossible to discharge the duty satisfactorily in the brief period assigned him and asked further time for its execution. The work once undertaken grew under his hands and when it was published four years after its inception, it had grown into a volume. Dr. Quinan received no compensation whatever for these great labors, but in his enthusiasm would have proceeded to issue a second and enlarged edition to constitute the "Medical Annals of Maryland," had not his mind been diverted into other channels by his appointments as one of the editors of F. P. Foster's "Medical Dictionary," on which he labored during the last year or two of his life, possessing peculiar qualifications for it in his knowledge of ancient and modern languages. Among other more interesting works of Dr. Quinan are his articles on "Inoculation and Vaccination in Maryland," and "A Key to Questions on Orthography," 1865. He died suddenly, November 11, 1890, after attending a case of infantile convulsions, death being probably due to disease of the heart or great arteries.

Dr. Quinan married August 31, 1845, Elizabeth Lydia Billingsley, of Calvert County, Maryland, who survived him with five children.

His greatest pleasure seemed to be in making some historical research in the libraries surrounded by his loved books. In brief, he was a man of the most scholarly tastes, a model physician, a most Christian gentleman.

The only teaching position he ever filled was that of lecturer on medical jurisprudence in the Woman's Medical College, 1883-85.

EUGENE F. CORDELL.

QUINE, William Edward (1847-1922), of Chicago, professor of medicine in the College of Physicians and Surgeons, the son of William and Margaret Kinley Quine, was born in the quaint town of Kirk St. Ann, on the Isle of Man, February 9, 1847. When six years old, his parents brought him to Chicago where he lived until his death, December 7, 1922, from angina pectoris. After studying pharmacy and materia medica and gaining practical experience as a drug clerk, medicine proved a stronger urge and he entered the Chicago Medical College, graduating in 1869. Before graduation, he was an interne in the Cook County Hospital. Following graduation, he was professor of materia medica and therapeutics in his alma mater until 1883 when he took the chair of principles and practice of medicine in the College of Physicians and Surgeons. The latter post he held until 1913, serving also as dean from 1892 to 1913, when the medical school was absorbed by the University of Illinois. Practice gave way to consultation work. He was attending physician to the Cook County and Mercer hospitals from 1871 to 1883 and on the consulting staff of St. Luke's and Michael Reese hospitals from 1910 to 1922. From 1885 to 1889, he was president of the Illinois State Board of Health. Quine was president of the Chicago Medical Society in 1872, of the Illinois State Medical Society in 1904, and of the Institute of Medicine of Chicago in 1916.

On November 14, 1876, he married Lettie Mason of Normal, Illinois, who had been a zealous medical missionary to China. There were three children, all of whom died. In honor of Mrs. Quine who died in 1903, he built a hospital of one hundred beds for women in Chin Kiang, China, and endowed and named for her four schools for girls in different parts of China. In memory of a daughter, he endowed a "Ruth Quine Deaconess" in connection with a benevolent institution in Normal, Illinois, founded by his mother. He also donated his former home to the Chicago Missionary and Church Extension Society of the Methodist Episcopal Church to be used as a community house for the benefit of negro Methodism.

Dr. Quine was a man of rugged build and impressive personality; he was deeply religious.

RAFFENEAU-DELILE, Alyre (1778-1850), a Frenchman identified with American medicine through his scientific work and professional services in the United States, was born in Versailles, France, January 23, 1778. He studied plants under Jean Lemonnier, went on the scientific expedition to Egypt (1798-1801) and became manager of the Agricultural Garden at Cairo. He was next appointed French vice-counsul at Wilmington, North Carolina, and was asked also to form an herbarium of all American plants that could be naturalized in France. He explored neighboring states and sent seeds and grains to France; he discovered some new graminea, which he gave to Palisot de Beauvois, the French naturalist, whose varied life in America included a place in the orchestra of a circus in Philadelphia and a membership in the American Philosophical Society. He described Raffeneau-Delile's gift in his "Agrostographie," or a disquisition on grasses.

In 1805, Raffeneau-Delile went to New York to study medicine, and in 1807 received his M. D. from Columbia College. He did excellent work in New York in visiting the poor tenements, during an epidemic of scarlet fever. Returning to France, he was also graduated in medicine at the University of Paris, in 1809. From 1819 until his death he was professor of botany in the University of Montpellier.

He wrote "Centurie des Plantes de l'Amérique du Nord" (Montpellier, 1820); "Flore d'Egypte" (five volumes, Paris, 1824); "Centurie des Plantes d'Afrique" (Paris, 1827).

He died at Montpellier in July, 1850.

RAMSAY, Alexander (1754-1824), anatomist. In glancing through the medical literature of the early years of the nineteenth century, one finds no name mentioned perhaps more often than that of Dr. Alexander Ramsay. According to some, he was a compound of personal deformity, immense learning, uncontrollable temper, and inordinate

vanity. According to others, he was a wonderful dissector, an unapproachable lecturer on anatomy, and a man who once known could never be recalled without unfailing reverence and deep affection. It is generally believed that Ramsay was born in London in 1754, for on his death-bed in 1824 he said that he was just seventy years old. He came of a good family, and one of considerable means, as proved by old title deeds to real estate. He received an excellent academic education, presumably at Aberdeen University, and then studied medicine under George Cruikshank in London, and in Dublin and Edinburgh with the celebrated teachers of that era. Finding it impossible, in Edinburgh, to continue his anatomical studies beyond a certain point, he established an anatomical school and museum of his own, and in that way finally compelled the medical faculty to add an anatomical school to the University. Unfortunately, even at this early age, his temper was bad, and he was constantly embroiled with men of the best standing in the profession, so that his influence was far from what his learning deserved. Besides lecturing, he learned how to draw and to engrave his own plates, and in this way originated his system of anatomy, worthily begun, but never completed.

Although a fine teacher and lecturer, Ramsay was born a wanderer beneath the bands of Orion and could not rest quiet anywhere. Whether the election of one of the Monros, instead of himself, to the chair of anatomy made him angrier than ever, we do not know, but at this time he began to talk of founding in the wilderness of America an institution which should stand at the head of the world in anatomy. In this way he talked at the age of thirty-six, but it was not until an epidemic of yellow fever appeared in New York about 1802 that he decided to cross the ocean. Arriving in Boston, he lectured there, then made his way to New York, and finally betook himself to the small settlement of Fryeburg in Maine, but how he could expect in that solitary region to build any institution that could influence American medicine, passes comprehension. While here, at intervals for many years, he lectured on anatomy, had some small attendance at thirty dollars a course, and practiced medicine occasionally. Never did he fail at the patient's bedside to express his horror and loathing of other practitioners who were "murderers and vile Hottentots." Here, too, he became famous for his fever-treatment. After stripping the patient and placing him on a flat board, he would wrap him in blankets wrung out in hot water; keep applying hot water externally for fifteen minutes, then bare the patient again, dash a tumblerful of cold water on his chest and then on his back, and so rush him into a warm bed, a profuse sweat and a rapid cure. With this treatment, and rare doses of brandy, he never lost a patient. Another epidemic of yellow fever in New York in 1803 sent him on his way to that city. He found New York a plague-stricken city, did good medical work on the spot and printed his results later in the "Edinburgh Medical Journal" for July, 1812.

Ramsay probably returned to Edinburgh in 1805, for he then personally received an honorary degree from Aberdeen, took a look at his property, and continued work on his anatomical plates. His diploma is now in the posession of the Maine Historical Society. Returning to New York in 1806, he tried to establish a new medical school in connection with Dr. Douglas, Dr. Hosack and Dr. Miller, but the plan failed. The next year saw him lecturing in various cities, and in 1808 we find him engaged by Dr. Nathan Smith (q. v.) to give his anatomical lectures at the Dartmouth Medical School, where many practitioners and students flocked to listen to his reputed eloquence. Old letters tell us that Dr. Lyman Spalding (q. v.), of Portsmouth, furnished several subjects, carting them across the state in barrels of rum. Others tell us that the only man living who could manage Ramsay was Nathan Smith, who laughed him out of his fits of anger and brought smiles to his face once more. Ramsay offered a gold medal for the best dissection made during the course, and at night lectured on natural history. The London papers bear witness that Ramsay was in that city in 1810, and that he traveled about England lecturing and begging money for his school at Fryeburg, District of Maine until 1816. He also wrote, for the medical magazines, articles on "Contractions of the Muscular System from Intellectual Influence," and in 1812-13 published the first parts of his system of anatomy embracing the brain and the heart; truly wonderfully engraved. Although his temper was notorious, he still had friends, among whom were the Duke of Sussex and his body physician, Sir Joseph Banks, and other men of influence. Having decided to sail once more to America, he applied with the endorsement of his friends for a free passage on a government vessel, carry-

ing out the British Ambassador. He claimed that his great services to medicine in studying the yellow fever and publishing his great work on anatomy deserved this reward, but his request was denied. He lectured in New York City in 1816, and then at the medical school at Fairfield, New York, where, although his knowledge was admired, he was soon detested for introducing religious discussions into his medical lectures. The year 1817 found him in Charleston, South Carolina, and then in Savannah, Georgia. At the one place he collected an herbarium of medical plants, at the other he carried on a newspaper squabble with an editor who had insulted him on his deformity of body. His expenses on this trip were large, amounting to not less than $3,000.

From this year to the end of his life in Parsonsfield, Maine, on November 24, 1824, Ramsay was incessantly at work, mostly in New England. In one year he petitioned the New Hampshire Legislature to establish an Institution for Anatomy at Conway in that State. In another year he asked the legislature of Maine to aid him for an institution at Fryeburg. His applications were both in vain. At that time he valued his anatomical museum at $14,000, and threatened in each State to send it back to Europe, unless he were assisted with money. He was elected honorary member of the New Hampshire Medical Society, and read before it his "Personal Experiences From a Bite by a Rattlesnake." The topics of his lectures were generally: "The Animal and Intellectual Economy of Human Nature as Founded on Comparative Anatomy," and "Dissection as a Basis of Physiology, Anatomy, Surgery and Medicine." Arriving in a town, he would advertise for money to complete his Academy. He asserted that Columbia should ask him to found such an institution, instead of his demeaning himself to beg for it. Dr. Ingalls (q. v.), of Boston, offered him, at one time, his lecture-room, but the attendance and receipts were small. Ingalls is said to have been one of the few who could manage him, despite his temper. The winter of 1821 found Ramsay lecturing in Montreal and other Canadian cities. His learning was brilliant as ever, but the man behind was hard to deal with. In 1823 he was laid low with a "lung" fever and a similar disease terminated his life. He was buried at Fryeburg, where by many he was cherished as a teacher, physician and friend.

His aim in life was to establish in America an anatomical museum of which the Nation should be proud. In this he failed. Another purpose of his life was to improve everyone with whom he came in contact, and in this he often succeeded. He was visionary in the extreme. He was deeply religious, and as deeply conscious of his faults. He was genuinely eloquent; his students hung upon his every word. Personally, he was short, clumsy and misshapen, yet he was always referring to the beautiful development of his muscles and the magnificent shapeliness of his head. After his death, his famous collection of specimens and preparations was most unfortunately dispersed. Some writer has said that Ramsay hated every physician, and saw in every anatomist a rival, but no one, reading the charming letters of recommendation given by him to another anatomist seeking a vacant chair of anatomy in a metropolitan school, would believe this charge, nor can we forget his excellent behavior to physicians at Dartmouth under the gentle handling of Dr. Nathan Smith.

Ramsay was a genius, as his beautifully engraved plates, still extant, bear witness, and as attested by letters of the past. Like all such, however, he was too eccentric for ordinary humanity to understand or endure. He wrote many medical papers and many letters. His style was quaint and turgid. Too often did the remark of some person "cause the blood to curdle in my veins." He wrote his letters and lectures on large sheets of papers, the upper half covered with a design beautifully engraved, of the sun above, and below it the mottoes "To thy years there shall be no end" and "They die and return to the dust." Below these, three cherubims, one standing, one flying and one seated weeping over a skull and hour glass. In the extreme lower left-hand corner was a delicate etching of Edinburgh Castle.

JAMES A. SPALDING.

RAMSAY, David (1749-1815), of Charleston, South Carolina, physician and historian, was born in Lancaster County, Pennsylvania, April 2, 1749. He was the youngest son of James Ramsay, a farmer, who in early life had emigrated from Ireland and settled in Pennsylvania. As a child Dr. Ramsay is said to have exhibited extraordinary precocity. At the early age of six he was able to read the bible with ease, foreshadowing, in his predilection for historical books, his future life work, and before he was twelve years old "he

had read, more than once, all the classics usually studied at grammar schools, and was, in every respect, qualified for admission into college." It was thought inadvisable, however, that he should begin his collegiate work at such a tender age, and he, therefore, accepted a position as tutor in the Academy at Carlisle. This position he occupied for more than a year, giving instruction to boys much older than himself, when he entered the sophomore class at Princeton College, where he was graduated in 1765, at the early age of sixteen. After spending two years as a private tutor in Maryland he began the study of medicine at the medical department of the University of Pennsylvania, under the guidance of Dr. Thomas Bond (q. v.) of Philadelphia, graduating as Bachelor of Physic in 1772. It was while a student in Philadelphia that he learned to admire Dr. Benjamin Rush (q. v.), who was then professor of chemistry; and between them a warm and lasting friendship developed. After practicing medicine for about a year in Maryland he removed to Charleston, South Carolina, in 1773. In a letter which he carried from Dr. Rush the latter writes that "his abilities are not only good, but great; his talents and knowledge universal; I never saw so much strength of memory and imagination, united to so fine a judgment. His manners are polished and agreeable—his conversation lively, and his behavior, to all men, always without offense."

Upon settling in Charleston, Dr. Ramsay rapidly became one of the leaders in his profession. He did not, however, confine his activities to medicine, but took a prominent part in public affairs as well, and in the struggle for independence was a most ardent patriot, having been one of the earliest advocates of the American cause. In 1778 he gave the first Fourth of July oration delivered in the United States, and in the gloomy state of affairs at that time when men were wavering in doubt, Dr. Ramsay's strong patriotism and boldness of speech rendered a distinct service. For a short period he served with the army, as surgeon, in which capacity he was present with the Charleston Ancient Battalion of Artillery at the siege of Savannah. His chief service, however, was in the political field, and throughout the Revolution he was a member of the South Carolina Legislature. For two years he was one of the Privy Council, and in 1780, on the capture of Charleston, was banished to St. Augustine in company with Dr. Peter Fayssoux (q. v.), Dr. John Budd and a number of other citizens of Charleston. Here he remained eleven months when he was returned in exchange. As a member of the Legislature Dr. Ramsay opposed the confiscation of the estates of those who had remained loyal to Great Britain. In 1782 he was elected a member of the Continental Congress, serving until the end of the war. In 1785 he was elected to represent his district in Congress; and, in the absence of Mr. Hancock, he was chosen president "pro tempore" of that body, a position he filled for a year. In 1786 he returned to Charleston and resumed the practice of medicine in partnership with Dr. John Budd. In his practice he was a disciple of his friend and former teacher, Dr. Benjamin Rush, whom he regarded as one of the foremost physicians of all time. He is said to have been especially efficient in the management of yellow fever. While very successful as a physician it was as an author that Dr. Ramsay became most distinguished, his reputation extending beyond the borders of his own country. Endowed with a remarkable memory his mind was a storehouse of universal knowledge, and furthermore, he was possessed of an inexhaustible energy and an almost boundless capacity for work. It was his habit to sleep only four hours, rising before day and meditating with a book in his hand until it was light enough to read. Recreation was confined to the evenings, as he never read by candlelight. He was a fluent and ready speaker, carrying conviction by the logic of his arguments and by the sincerity of his manner rather than by brilliant oratory. As an historian he seems to have been very impartial in his judgments in spite of having taken so active a part in the events which he related. "I shall decline the fruitless attempt," he writes, "of aiming to please either (Americans or Europeans) and instead thereof, to follow the attractions of truth whithersoever she may lead."

The following are his principal publications: "The History of the Revolution in South Carolina," two volumes, 1785 (this work was submitted to General Greene before publication); "The History of the American Revolution," two volumes, 1790; "Life of Washington," 1801; "History of South Carolina from its first Settlement in 1670 to the Year 1808"; "A Sketch of the Soil, Climate, Weather and Diseases of South Carolina," 1768; "Memoirs of Martha L. Ramsay," 1811; "An Oration on the Acquisition of Louisiana," 1804; "A Review of the Improvements, Progress, and State of Medicine in the 18th Cen-

tury, Delivered January 1, 1801," "Medical Register" for 1802; "A Dissertation on the Means of Preserving Health in Charleston"; "A Biographical Chart On a New Plan to Facilitate the Study of History"; "An Eulogium on Dr. Rush"; "A Brief History of the Independent or Congregational Church in Charleston"; "A History of the United States," published posthumously; "Universal History Americanized; or an Historical View of the World from Earliest Records to the Nineteenth Century with Particular Reference to the State of Society, Literature, Religion and Form of Government in the United States of America." Before his death he had begun collecting materials for a life of General Andrew Jackson.

Dr. Ramsay's first wife was Miss Sabina Ellis, who died eight or nine months after their marriage. His second wife was a daughter of Dr. John Witherspoon, President of Princeton College, by whom he had one son, Dr. John Witherspoon Ramsay. His third wife was the daughter of Henry Laurens, by whom he had three sons and four daughters. One of his sons, Dr. James Ramsay, was one of the founders of the Medical College of South Carolina.

He died on May 8, 1815, from the effects of pistol wounds received at the hands of a man whom he had shortly before pronounced insane.

ROBERT WILSON, JR.

RAND, Benjamin Howard (1827-1883), professor of chemistry in the Jefferson Medical College and author of books on chemistry, was the son of B. H. Rand, writing master in Philadelphia, and was born in that city, October 1, 1827. He began his professional studies in 1843 under Dr. Robert M. Huston, dean of the Jefferson Medical College, subsequently attended the usual course of lectures at Jefferson and received his degree of M. D. there in 1848. During the last two years of his student life he was clinical assistant to Professors Mütter and Pancoast. In 1850 he was elected professor of chemistry in the Franklin Institute, filling the chair until his election as professor of chemistry in Jefferson in 1864. From 1859 to 1864 he held the chair of chemistry in the Central High School of Philadelphia. He was secretary of the Academy of Natural Sciences from 1852 to 1864 and he served as professor of chemistry in the Philadelphia Medical College until it ceased to exist in 1861. In 1853 he became a fellow of the Philadelphia College of Physicians, and in 1868 a member of the American Philosophical Society. He held the chair of chemistry in Jefferson until 1877, when he retired because of ill health. He died in Philadelphia, February 14, 1883, at the age of fifty-five.

Dr. Rand married Hannah M. Kershaw in 1853. She died the following year and fifteen years later (1869) he married Mary M. Washington, great-granddaughter of Fairfax Washington.

His chief published works were: "Chemistry for Students," 1855; "Elements of Medical Chemistry," 1863 and 1875; and he edited Metcalf's "Caloric," two volumes, 1859. He was an efficient teacher whose thorough mastery of his subject ever won the respect of his students.

RAND, Isaac (1743-1822), of Boston, did much to establish the art of obstetrics in that town, he helped organize the Massachusetts Medical Society, and he acted as preceptor to students of medicine. The son of Dr. Isaac Rand of Cambridge and his wife Margaret Damon, he first saw the light April 27, 1743. Entering Harvard College in 1757, he graduated in 1761, making a journey to Newfoundland in his senior year as a part of an expedition sent by the government to observe the transit of Venus. The study of medicine was begun with his father and continued with Dr. James Lloyd (q. v.), Boston's first obstetrician, and after the prescribed three years' novitiate, young Rand settled in practice in Boston. He was said to be a good scholar, translated Greek and Latin with facility and was an omnivorous reader. At the beginning of the Revolution his sentiments were with the tories; he took no active part, did not leave the town, and finally changed his first opinion that the efforts of the colonists to free themselves were premature, to a more sympathetic attitude.

In 1778 with John Warren (q. v.) and Lemuel Hayward he established a smallpox hospital in Brookline, where later William Aspinwall (q. v.) inoculated. Rand's name is among the thirty-one petitioners to the General Court in 1781 for the incorporation of the Massachusetts Medical Society, in the subsequent welfare of which he took a deep interest. He was on the first board of "Counsellors," read papers before the society and served it in minor offices until 1798 when he was elected president, an office he held until 1804. As a pupil of Dr. Lloyd he assisted in taking the practice of obstetrics

from the midwives and placing it with the physicians; to perfect himself in the art he visited Europe, giving up a very large practice in order to make the journey, and returning, gave himself largely to an obstetrical career. In 1810 Dr. Rand was elected an overseer of Harvard College, at a time when that body consisted of only three members in addition to fifteen congregational ministers, the governor and the state officers. He served on the board for five years and held membership in the Massachusetts Historical Society, the American Academy and a corresponding membership in the London Medical Society. In 1799 Harvard conferred on him its honorary M. D.

In later years Dr. Rand devoted himself to a study of theology and to reading. He died in Boston, December 11, 1822.

A son, the third Isaac Rand (1769-1819), graduated at Harvard in 1787, joined the Massachusetts Medical Society in 1800, and practiced medicine in Boston, but did not survive his father.

The writings of Isaac Rand, senior, are: "A Case of Emphysema Successfully Treated by the Operation," Trans. Mass. Med. Soc'y., vol. i, series i, p. 66; "Observations on the Hydrocephalus Internus," "idem," p. 69; "Observations on the Phthisis Pulmonalis and the Use of Digitalis Purpurea in the Treatment of that Disease; with Practical Remarks on the use of the Tepid Bath," "idem," p. 129, the Annual Discourse before the Massachusetts Medical Society in 1804, the first oration to be given. It was delivered in the year after the reorganization of the society.

WALTER L. BURRAGE.

RANDOLPH, Jacob (1796-1848), pioneer surgeon and lithotomist of Philadelphia, was born in that city November 25, 1796, the sixth son of the patriot, Edward Fitz-Randolph, whose ancestor of the same name came over from England in 1630. Jacob received his early education at the Friends' School on Fourth street, and in 1814 began to study medicine with Woollens, and after his death with Cleaver. He entered the University of Pennsylvania and graduated in 1817. He took a position as ship's surgeon for China, but was obliged to leave his ship at her first stop in England on account of intense seasickness. After visiting Scotland and France, he returned home and began practice in Philadelphia. Becoming acquainted with Dr. Philip Syng Physick's (q. v.) family, he married his eldest daughter in 1822. Randolph was appointed surgeon to the Almshouse Infirmary in 1830, and in the same year began lecturing upon surgery in the School of Medicine, an institution established for summer teaching. He succeeded Hewson in the Pennsylvania Hospital in 1835. He was in Europe in 1840-1842, and while abroad was a close student at the Paris hospitals; he was obliged to decline at this time an election to the professorship of operative surgery in the Jefferson Medical College, as it would have necessitated his immediate return. After holding the position of lecturer upon clinical surgery for some time, he was elected to professorship in the University of Pennsylvania in 1847.

Randolph's greatest reputation was as an expert lithotomist and I well recall the vivid descriptions of his dexterity by my old friend, Dr. Robert P. Harris (q. v.), who saw him at the Pennsylvania Hospital. He was noted for a sound, discriminating judgment and a clear eye, a steady hand and a manual dexterity, so necessary in pre-anesthetic days. In 1829 he removed the lower jaw for osteosarcoma with success ("American Journal of Medical Science," November, 1829). He wrote on hip joint disease in the same journal in February, 1831. He introduced the lithotrite in 1831, following Baron Heurteloup, in Europe. Randolph undertook his crushing operations after thorough preliminary studies on the dead in the Almshouse, where he would put a stone in the bladder and then practice catching it, and crushing it; in this way he also acquired dexterity in introducing and withdrawing the instrument, and "a prudent confidence in his abilities which led to success." He preferred simple instruments and had no desire to operate quickly or to do too much at one sitting. "The fear of the loss of fame, or the desire of notoriety as an operator, had no influence with him; and more than once, when unexpected difficulties arose in seizing the stone or its fragments, he would close and withdraw the instrument and disappoint the spectators." His first report was of six cases in the "American Journal of the Medical Sciences," in November, 1834; he had seventeen cases in five years. He reported a case of femoral aneurism ligated for the second time ("North American Medical and Surgical Journal," 1829).

His most extensive literary production is "A Memoir of the Life and Character of Philip Syng Physick," read before the Philadelphia Medical Society in 1839.

His face was oval, regular in its features, and expressive of energy of character; in stature he was above medium height, and he appeared to be a man of unusual vigor.

He died in his fifty-third year, February 29, 1848, from an attack of intermittent fever, attended in the course of a few days with copious hemorrhages (undoubtedly typhoid fever).

HOWARD A. KELLY.

RANDOLPH, Nathaniel Archer (1858-1888), hygienist of Philadelphia, the son of Nathaniel Randolph, who was a nephew of Jacob Randolph (q. v.), and of Eliza Sproat Randolph, was born in that city September 7, 1858. He attended private schools in Philadelphia and later Swarthmore College, Pennsylvania. In 1874, he entered Cornell University, where his literary work showed promise. Here he pursued a general scientific course for two years. After a year at home and in the West, he went to Europe. He entered the medical department of the University of Pennsylvania and was graduated in 1882. His thesis on "Certain Appearances in the Red Blood-corpuscles" received distinguished mention. The following autumn, he was appointed assistant demonstrator of physiology in the medical department of the University of Pennsylvania; in 1883, instructor in physiology in the Towne Scientific School; and in 1884, in the Department of Biology, finally in 1886, professor of hygiene in the Auxiliary Department of Medicine.

Dr. Randolph was a medical writer of repute. His especial interest lay in the physiology and hygiene of digestion. He was assistant editor of the "Medical News" from 1885 until 1887 when he took the chief editorship of the "Medical and Surgical Reporter."

On August 21, 1888, he was drowned while in bathing at Longport, New Jersey.

HORACE JAYNE.

RANDOLPH, Robert Lee (1860-1919), ophthalmologist, of Baltimore, "Bob Randolph" as he was affectionately called by his friends, was born at Fredericksburg, Virginia, Dec. 1, 1860, the son of Alfred Magill, and Sallie Griffith Hoxton Randolph. His father, an Episcopal clergyman, was later bishop of Virginia. Robert had his early education in the Episcopal High School of Virginia, and then at the Johns Hopkins (1881). He took his medical degree from the University of Maryland (1884), and then spent a year as a student at Vienna, and an additional year as assistant in ophthalmology at the Royal Polyclinic there (1886). Johns Hopkins gave him an honorary A. M. (1902). He was one of the surgeons to the Presbyterian Eye and Ear Hospital of Baltimore (1887-1892), and was assistant (1892-1899), and associate (1899), and associate professor of ophthalmology from 1901, at the Johns Hopkins University, and held a corresponding position at the Hospital as associate ophthalmic and aural surgeon. He also held various positions in local institutions as an expert specialist. He was on the editorial staff of the "Annals of Ophthalmology" (St. Louis) and of "Progressive Medicine" (Phila.), wrote a chapter for Norris and Oliver's Diseases of the Eye, and another for American Text-Book of Diseases of the Eye, Ear, Nose and Throat. Dr. Randolph's claim to be remembered by posterity rests upon two prize theses, one securing the Alvarenga prize of the College of Physicians of Philadelphia (July 14, 1899), and the other the Boylston prize of Harvard Medical School (1902). In the Alvarenga prize essay he makes an experimental study of the regeneration of the crystalline lens, showing its possibility by experiments upon the eyes of rabbits, when some portions of the lens have been left behind. He also showed that in complete extraction of the lens in the newt that regeneration takes place, even when the lens is removed in its capsule, confirming the experiments of Wolff. (See Johns Hopkins Hospital Reports, vol. 9, 1900.) In the Boylston Prize essay he showed the importance of toxins in inflammations of an injured eye, opening up an important field in the investigation of the pathogenic action of bacteria. (See Johns Hopkins Hospital Bulletin, 1903). He married Phoebe W. Elliott, of Beaufort, S. C., daughter of Bishop Elliott, April 15, 1891. He died Dec. 9, 1919 of Bright's disease.

RANNEY, Ambrose Loomis (1848-1905), New York anatomist and neurologist, was born on the tenth of June, 1848, in Hardwick, Massachusetts, one of the thirteen sons of Lafayette and Adeline Eliza Loomis Ranney, seven of whom became physicians. Graduating A. B. and A. M. from Dartmouth College in 1868 and 1872 respectively, he first studied under his uncle, Prof. Alfred L. Loomis (q. v.), in New York City, then received his M. D. from the University of the City of New York in 1871.

Early recognizing the connection of eye strain as a cause of functional nervous disease, he paid special attention to this subject and wrote a great deal, the most important of his writings being listed in the Catalogue of the Surgeon-general's Library under his name. Some of his books passed through several editions and were translated into French or German. Among these is his chief work: "Essentials of Anatomy," 1880; also "Practical Medical Anatomy," 1882; "Treatise on Surgical Diagnosis," 1884, and "Applied Anatomy of the Nervous System," 1888.

He was a member of the Neurological Society of New York and was president of the New York Academy of Medicine, besides being adjunct professor of anatomy, University of the City of New York; and professor of nervous and mental diseases in the University of Vermont, Medical Department.

In 1876 he married Marie Celle, of New York City, and had two children, T. Elliott and Marie Bryan. Dr. Ranney died suddenly from heart disease in New York City, December 1, 1905.

RANSOHOFF, Joseph (1853-1921), eminent surgeon of Cincinnati, Ohio, was born there May 26, 1853, the son of Nathan and Esther Kahn Ransohoff. He was graduated in medicine at the Medical College of Ohio (later, the University of Cincinnati) in 1874 and went to Europe for post-graduate work. He was made F. R. C. S. of London in 1877, and received the LL. D. from the University of Cincinnati in 1920.

Dr. Ransohoff began his surgical practice in Cincinnati in 1877, when he joined the medical faculty of his university, retaining this connection until his death. Upon his retirement, a fine memorial volume was prepared as a tribute to his splendid services to surgery. He held successively the posts of demonstrator of anatomy, 1877-78; professor of anatomy, 1879-81; professor of surgical anatomy and clinical surgery, 1891-1902; professor of the principles of surgery, 1902-05; and professor of surgery from 1905 on. He was surgeon to the old Cincinnati (now the Cincinnati General), Good Samaritan, and Jewish hospitals in Cincinnati; director of the first surgical division of the Cincinnati General Hospital, and dean of the Jewish Hospital; and chief surgeon of the C. N. O. and T. Railway.

Ransohoff wrote extensively on the greater surgical operations under evolution in the eighties and nineties: he reported two ovariotomies in 1885, the treatment of aneurism by wiring in 1886, on the anatomy, physiology, and pathology of the cecum and appendix in 1888, also on hernia, gall stones, and, with especial interest and originality, on the surgery of the kidney—more particularly renal calculus. He also contributed the article on the surgery of the kidney and the suprarenal capsule for Keen's and White's "System of Surgery," in 1908.

He was made a fellow of the American College of Surgeons in 1913 and was active in the American Medical Association, in the Southern Surgical and Gynecological Association, and in many other medical societies.

He married Minnie Workum Freiberg of Cincinnati, March 12, 1879; they had five children, one of whom, J. Louis, followed closely in his father's footsteps.

It is difficult to appreciate the value of his unremitting toil and services to all classes throughout his long life, together with his most acceptable labors as a teacher of both students and graduates in medicine. He did much to create and settle the ideals of the profession in the middle west. He died March 10, 1921.

RAUCH, John Henry (1828-1894), sanitarian and naturalist of Iowa and Chicago, was born in Lebanon, Pennsylvania, September 4, 1828, son of Bernard Rauch, of German ancestry, and Jane Brown, a presbyterian, of Scotch-Irish origin. His early education was had at the academy in Lebanon, and in 1846 he began the study of medicine under John W. Gloninger (q. v.) in Lebanon. He entered the medical department of the University of Pennsylvania in 1847, graduating in 1849 with a thesis on "Convalaria Polygonatum." In 1850 he settled in Burlington, Iowa, and began to practice. He joined the Iowa State Medical Society, organized at this time, and was appointed to report "On the Medical and Economical Botany of the State," the report being presented at the next annual meeting; he represented the Society at the meeting of the American Medical Association (Richmond, Virginia, 1852), being the first delegate from the Iowa Society, of which he became the president in 1858. During 1850 and 1851 he secured the interest of the United States Congress towards giving medical aid to "those engaged in maritime pursuits on the western waters," being made one of the commissioners to select sites on which to build marine hospitals.

He secured sites at Galena and Burlington and the hospitals were opened in 1858.

Dr. Rauch gave the annual address before the State Horticultural Society of Iowa, and was a member of the Iowa Historical and Geological Institute. He spent part of 1855 and 1856 in Cambridge, Massachusetts, with Professor Agassiz (q. v.), whom he helped in collecting material for the "Natural History of the United States," and he secured a collection, mostly piscatorial, from the Upper Mississippi and Missouri rivers, a description of which appeared in Silliman's "Journal of Natural Sciences". Interested in education and in science, Dr. Rauch aided in securing the passage of a legislative bill in 1856, authorizing a geological survey of Iowa. From 1857 to 1859 he was professor of materia medica in Rush Medical College (Chicago), retaining his residence in Iowa. He was instrumental in inducing the government to abandon the United States Cemetery at Burlington and in securing the ground for educational purposes. He was one of the founders of the Chicago College of Pharmacy, where he became professor of materia medica and medical botany (1859).

Dr. Rauch was in the medical department of the United States army under General David Hunter and took part in the battle of Bull Run; made brigade surgeon and assigned to McDowell's division stationed at Arlington, he went later with General Augur, taking part in the capture of Falmouth and Fredericksburg, and was with him in the transfer to Banks' Corps and he was medical director at Cedar Mountain and Culpepper Court house, his position being medical director of the Army of the Potomac. In General Pope's campaign he saved during the retreat not only many of the wounded but the army's medical stores. At the battle of Antietam he had charge of the sick and wounded of both forces and of paroling disabled soldiers. With General Banks on the New Orleans expedition, he was at Baton Rouge as special medical inspector of the department of the Gulf; was at the capture of Port Hudson, and was with General Franklin on the Sabine Pass expedition going on up the Teche. Relieved from active service in 1864, he was appointed medical director at Detroit, then transferred to Madison General Hospital and mustered out in 1865. He returned to Chicago; published "Intramural Interments and Their Influence on Health and Epidemics," giving his views on burial in cities, as already stated at the Historical Society of Chicago in 1858. He was one of the organizers of the Chicago Board of Health, to which he was appointed by the judge of the Superior Court, serving until 1873 and presenting reports on "Drainage" (1868); the "Chicago River and the Public Parks" (1869); "Sanitary History of Chicago" (1870), and the official reports of the Board of Health from 1867 to 1870, eight volumes. Interested in improving sanitary conditions of the Venezuelan gold miners, he visited South America in 1870 and while there made a valuable collection of natural objects for the Chicago Academy of Natural Sciences; his "South American Notes," together with his herbarium, his "Synopsis of the Flora of the North West" and "Report for the Board of Health," was destroyed by the great fire of 1871. He was treasurer of the American Public Health Association organized in 1872, and its president in 1876, and was associated with the Relief and Aid Society of Chicago; he wrote a paper on "Slaughtering" and gave, on request, an opinion on the Schuylkill Dooryard Abattoir; and he also published a report on the "Texas Cattle Disease" (1868). He was appointed a member of the Sanitary Committee for the Interior Department of the United States for the Centennial Exposition (1876).

Rauch never married. When his health failed he went to live in his old home at Lebanon, Pennsylvania, and died there, March 24, 1894.

RAVENEL, Edmund (1797-1870), of Charleston, South Carolina, physician, chemist and conchologist, was born in that town December 8, 1797, of Huguenot lineage, being descended from René Ravenel, Sieur de la Massais, the emigrant. His early education was in the schools of his native city; and in 1819 he received his M. D. at the University of Pennsylvania. He began to practice in Charleston, and in 1824 took an active part in the organization of the Medical College of South Carolina. He was elected to the chair of chemistry in the new college, a position he held for ten years, afterwards removing to his country home, where he devoted himself to planting until the close of the war, when he returned to Charleston. During the summer months he lived on Sullivan's Island, where he occupied the leisure hours stolen from his practice with gathering his large and valuable collection of shells. This collection contained 3,500 species of land, fresh water and marine shells from all

parts of the world. What remains of his collection is now preserved in the Charleston Museum. The catalogue of Dr. Ravenel's collection made in 1834 was interesting as being the first of its kind published in America. He was a contemporary and correspondent of Say, Lea, Conrad, Gould (q. v.) and other pioneers of conchology in this country.

Many of his writings are to be found in the Proceedings of the Elliott Society of Natural History, and in the Proceedings of the Academy of Natural Sciences, Philadelphia.

Dr. Ravenel was Vice-president of the Elliott Society of Natural History, Charleston, South Carolina, from its organization in November, 1853, to his death.

He was married twice: First to Charlotte Ford, and afterwards to Louisa C. Ford. By his first wife he had one daughter; and by his second, eight children, one of whom, Edmund, studied medicine.

In his later years he lived in his home at Charleston, a victim of almost total blindness, where he died, July 27, 1870.

ROBERT WILSON, JR.

RAVENEL, St. Julien (1819-1882), chemist, of Charleston, South Carolina, was born in that town December 15, 1819. Through his father, John Ravenel, he was descended from René Ravenel, of Bretagne, who emigrated to South Carolina after the revocation of the Edict of Nantes, and through his mother, Elizabeth Ford, of Morristown, New Jersey, he traced descent from the old Gualdo family of Vicenza, Italy. His boyhood education was had in his native town, and at Morristown, New Jersey, and he began the study of medicine with Dr. J. E. Holbrook (q. v.), graduating from the Medical College of the State of South Carolina in 1840, and for two years following, he studied at Philadelphia and at Paris. Upon his return in 1812, he was elected demonstrator of anatomy in the Medical College of the State of South Carolina. When the war between the States broke out, he entered the Confederate service and was appointed surgeon of the Twenty-fifth South Carolina Regiment. Subsequently he was chemist in charge of the laboratory at Columbia, South Carolina, for the preparation of medical supplies.

Dr. Ravenel began the practice of medicine at Charleston upon his return from Europe and soon gained an enviable reputation as a skilful diagnostician. But yielding to his fondness for purely scientific work—inspired by Holbrook and Agassiz, under whom he studied—he abandoned purely medical practice in 1852 in order to devote himself to chemistry. His diagnostic acumen, however, was called into requisition from time to time throughout his life; and he rendered his profession further service by overthrowing the old calomel treatment of yellow fever. In the field of agricultural chemistry he manifested an extraordinary productiveness; his discoveries exercised an immense influence in the rehabilitation of South Carolina after the war. In 1856 he ascertained that lime could be manufactured from marl, and established the lime works at Stoney Landing, near Charleston, which furnished most of the lime used in the Confederate States. Much of his life was spent in the study of agricultural chemistry in the effort to improve agricultural conditions in his state. He approached the subject from the point of view of the physiologists, and drew his conclusions from experiments in the field. "In doubt, ask the plant," he said, "it alone knows all about it." The principles which he advocated, as a result of his investigations, resulted in increasing in one section, the yield of long staple lint cotton, per acre, from 100-150 pounds to 300-400 pounds. In 1866, having resumed investigations begun before the war, he discovered the value of the phosphate deposits near Charleston, and founded the Wando Phosphate Company for the manufacture of fertilizers. This was the beginning of the industry which figured so prominently in the commercial salvation of South Carolina. At the time of his death he was engaged upon investigations looking to the improvement of rice culture. During the war his inventive genius produced the famous torpedo boat, "Little David," which was built in 1863.

Dr. Ravenel was a man of unassuming manners and great modesty. It is related that his own father did not know the ability of his son, until one day, at a dinner party, when a question pertaining to physiology was asked the young doctor, and his reply manifested an extent of learning, originality of thought, and power of exposition that astonished not only the guests but his parent as well. His chief fault was that he allowed himself to be too busy to leave a written record of his work.

He married Harriet Horry Rutledge in 1851, and had five daughters and four sons, none of whom studied medicine.

He died of cirrhosis of the liver, March 15, 1882.

ROBERT WILSON, JR.

RAY, Isaac (1807-1881), hospital superintendent, writer on the medical jurisprudence of insanity, was born in Beverly, Massachusetts, January 16, 1807, and died in Philadelphia, March 31, 1881. His literary education was received at Phillips Academy and Bowdoin College, where he defrayed his expenses by teaching school during the vacations. He began the study of medicine in the office of Dr. Shattuck of Boston, and was graduated from Bowdoin College, M. D. 1827. He had also A. M. from Bowdoin in 1846 and from Brown an LL. D. in 1879. He entered upon the practice of medicine in Portland, Maine, and soon moved to Eastport, Maine, where, in 1838, he published his first work, "The Medical Jurisprudence of Insanity," a book which passed through many editions, and was largely quoted by criminal lawyers. In 1841 he was appointed superintendent of the State Hospital for the Insane, at Augusta, Maine, where he remained till 1845, when he accepted an appointment to the superintendency of the Butler Hospital, at Providence, Rhode Island. After a short visit to Europe, and an examination of some of the principal institutions of England and the Continent, he returned to Providence, and supervised the construction of the buildings for the Butler Hospital, which was finally opened in 1847. In this work he had the assistance of Dr. L. V. Bell (q. v.) of the McLean Asylum, who contributed materially in the arrangement of the details. At Butler Hospital, Dr. Ray remained a laborious administrator and faithful student, until the year 1867, when, from considerations of health, he resigned, and removed to Philadelphia.

He was one of the "original thirteen" who, in 1844, organized the "Association of Medical Superintendents of American Institutions for the Insane," and was its president from May, 1855, to May, 1859. In 1863 he published a second work, entitled, "Mental Hygiene," and in 1873 a third, entitled "Contributions to Mental Pathology," a title which covered such "contributions" as he had already made in the way of papers, review articles and reports pertaining to insanity. In Philadelphia, where his health improved, his life was far from an idle one. Besides frequent calls upon him for professional consultations, and expert testimony in criminal cases before the courts, or in testamentary disputes, his pen was constantly engaged upon work for the medical and literary journals and on papers for the various associations to which he belonged. Dr. Ray was seldom or never absent from the meetings of the Association of Medical Superintendents, and kept up the liveliest interest in its discussions up to the time of his death. He was president of the Rhode Island Medical Society, 1856-58, and after leaving the Butler, he practiced in Philadelphia until his death.

Dr. Ray was an interested reader of theological works, and a man of strong religious conviction. His funeral took place at Providence, from the chapel of the Butler Hospital, where his principal life work had been, and the interment was in the adjoining cemetery.

RAYMOND, Joseph Howard (1845-1915), secretary of the faculty of the Long Island College Hospital, sanitarian, was born in Brooklyn, New York, November 18, 1845. He was the son of Israel Ward Raymond and Frances Bryant Howard, both of old New England ancestry. He received his preliminary education at the Brooklyn Polytechnic Institute, and was graduated from Williams College in 1866, receiving his A. M. degree three years later. He was a graduate in medicine of the Long Island College Hospital in 1868, and of the College of Physicians and Surgeons, New York, in the following year. After graduating in medicine he served on the staff as interne of the Nursery and Child's Hospital and Idiot Asylum on Randall's Island, New York, and subsequently in the Brooklyn Hospital; he spent several years in general practice and was well equipped in all respects to succeed as a general practitioner. But his taste led him to relinquish the duties of general practitioner and to devote all his time to the teaching of physiology and sanitary science. He was for many years connected with the Health Department as sanitary inspector, sanitary superintendent, deputy commissioner and commissioner of the Brooklyn Board of Health. Brooklyn never had a more efficient health commissioner than Dr. Raymond. His experience and training in subordinate positions in the department rendered him peculiarly fitted to assume the responsible duties of commissioner. He made no enemies (except law breakers) while holding this office, the duties of which require tact and good judgment in the fulfilment.

Dr. Raymond filled the position of secretary of the faculty for nearly thirty years, and was an ideal secretary. His knowledge of the details of the office was always accurate and at his fingers' ends. His long ex-

perience in that office must have given one so throughly equipped for the work a knowledge of the duties of the position that was invaluable to the institution. He not only attended to the minutiæ of the office, but in his interest in the success of the college he foresaw and bent every effort to secure the adoption of measures calculated to further the welfare of the school. It was at his suggestion that the late Mrs. Theodore Polhemus, when generously donating a fund for the erection of the Polhemus Memorial Clinic in memory of her husband, added to the clinic building sufficient space to be used for the instruction of students; so that the college had, through Dr. Raymond's foresight, a structure that was admirably equipped, both for teaching and clinical works.

Besides his work in and for the Long Island College Hospital, Dr. Raymond was interested actively in general and medical education as a trustee of the Brooklyn Polytechnic Institute, a director of the Brooklyn Eye and Ear Hospital, editor for several years of the "Brooklyn Medical Journal," author of a History of the Long Island College Hospital and its Graduates, and a standard work on Physiology, as well as numerous papers on medical and sanitary subjects. He was an excellent French and German scholar, and became much interested in Esperanto, attending the Esperanto Congress in Dresden in 1908. He served as secretary and treasurer of the Hoagland Laboratory, and secretary of the Polhemus Memorial Clinic. He was at one time medical examiner for the New Board of Education. He was a member of the Medical Society of the County of Kings, New York Physicians' Mutual Aid Society: vice-president of the American Public Health Association; visiting physician, St. Peter's Hospital.

Personally, Dr. Raymond was a charming companion and associate, alert of body, quick in thought, word and action. His white hair was the only physical feature that made one think of him as a man past middle life. He thought the present times were better than the past, and the future times would be better than the present. Quick at repartee, of ready wit, he could tell a story a little better than the one told to him. When some one complained that at present it cost more to live than formerly, he replied, "It is worth more to live at present."

Dr. Raymond, in 1875, married Nannie Van Nostrand Gardiner, who died in 1898. He subsequently married Mrs. Rachel Biddle Craven of Philadelphia, who, with her son and daughter, survived him. He was also survived by a daughter by his first marriage, Mrs. Ernest W. Congdon, and one grandson.

He died March 7, 1915, following a gastroenterostomy performed for duodenal ulcer.

RAYMOND-SCHROEDER, Aimée J. (1857–1903), of New York, general practitioner and editor, was born in Montreaux, Switzerland, August 21, 1857. Names found on the family tree are Edward Raymond, the original ancestor of the family in America, Captain Urial Raymond, of the Revolutionary War, also John Alden and General Southworth, on the mother's side. She was the youngest daughter of Henry J. Raymond, founder and editor of the "New York Times." This brilliant man was a strong supporter of Dr. Elizabeth and Dr. Emily Blackwell (q. v.) in their early struggles for the medical education of women, and this doubtless influenced his daughter in her decision to study medicine. Most of her early life was passed in France and Italy. As her father's daughter, she had access to the best society here and abroad, so that although her education was desultory, it was really one of the best and broadest. Her only degree was that taken at the Woman's Medical College of the New York Infirmary, in 1889. She was a member of the County Medical Society of New York, and for several years held a position in the out-patient department of the New York Infirmary, and was associated with other organizations, being particularly active in agitating and securing the enactment of better laws regulating the conditions for working girls. Always regardless of herself when others were in question, her professional work was done with a headlong passion of altruism which her friends found adorably characteristic. Her almost unreasoning generosity in giving herself to others proved too much for her frail body, and upon her marriage in 1893 to Dr. Henry Harmon Schroeder, of New York, she retired from active practice, although remaining an earnest student of medicine and devoting her time to its literary side.

She died, December 25, 1903, after an operation for appendicitis.

Dr. Raymond-Schroeder was a valued member of the editorial staff of the "New York Medical Record" and "American Journal of Obstetrics." Her one book was "Health Notes for Young Wives." She did much translation from the French and Italian, including Poz-

zi's "A Treatise on Medical and Surgical Gynecology," and translated numerous articles for "The Twentieth Century Practice of Medicine."

ALFREDA B. WITHINGTON.

REA, Robert Laughlin (1827-1899), Chicago surgeon, was born in Rockbridge County, Virginia, on July 1, 1827. Until fifteen he had a scanty education, which was followed by farm work in Fayette County, Indiana, and five years as a teacher. He afterwards studied medicine under Dr. W. P. Kitchen, and in 1855 graduated at the medical college of Ohio, Cincinnati, although, degreeless, he had previously practiced for four years at Oxford, Ohio. He occupied the positions of demonstrator of anatomy in his alma mater; physician to the Commercial Hospital, Cincinnati; for sixteen years (after 1859) professor of anatomy, Rush Medical College, Chicago; professor in the Chicago Medical College, and in 1882, professor of surgery in the College of Physicians and Surgeons (Chicago), of which he was a co-founder. During the war of the Rebellion he served as surgeon in the Federal ranks.

"Surgery was his choice in practice and his knowledge of anatomy made him a skilful and dexterous operator. He seized upon all the rapidly increasing innovations in surgery and adopted them."

In 1851 he married Adeline Tuttle of Fayette County, Indiana, and in 1874 Nellie R. Manlove, of Indianapolis. At his death he made provision for the endowment of the Rea professorship of anatomy in the Northwestern University and gave $5,000 to the College of Physicians and Surgeons.

His death, from a complication of cerebral and kidney disorders, occurred on July 10, 1899.

REAMY, Thaddeus Asbury (1829-1909), pioneer obstetrician of Cincinnati, was born in Frederick County, Virginia, April 23, 1829. His father, Jacob A., was of Huguenot extraction, his mother, Mary W. Bonifield Reamy, of Scotch and English. They were natives of Virginia, but migrated to Muskingum County, Ohio, in 1832. Here Reamy, the first of eleven children, was brought up on a farm and received a rudimentary education at the district school. As soon as he became of age he taught school and, as opportunity afforded, completed his education. He began the study of medicine under Dr. D. L. Crist, and in 1854, after attendance upon two courses of lectures, obtained his M. D. from the Starling Medical College. He practiced medicine at Zanesville until 1871, when he moved to Cincinnati.

The honors conferred upon him, and the work he did, indicate the character of the man. With no advantages other than those of nature's endowment, such as a powerful and versatile mentality, a rugged physique and a magnetic and winning address, he rose by his own efforts, and often against active opposition, to the highest honors of his profession. He was one of our pioneers, and did good work. A self-made man and possessing the self-reliance and resourceful qualities of such men, he held the first obstetric clinic ever held in a college amphitheater in this country. His extensive knowledge, felicity of expression, quickness at repartee, and willingness to fight for his convictions caused him to be feared. In his days there was no out-door obstetrical clinic and lying-in hospital connected with the Cincinnati Medical College, and Reamy had two or three rooms established in the rear of his amphitheater. He, too, introduced into that city the study of pregnancy, labor and confinement in the living human female, in an amphitheater. He was invited to join the American Gynecological Society in 1877, the year after its foundation, and took an active and prominent part in its deliberations, until prevented by advancing age and infirmity. He was vice-president in 1881, president in 1886, and was placed on the list of honorary members in 1907, at the age of seventy-eight years.

The degree of A. M. was awarded him by the Ohio Wesleyan University in 1870, that of LL. D. by Cornell in 1890. He was professor of materia medica and therapeutics in Cincinnati College of Medicine and Surgery from 1858 to 1860. He was surgeon to the Thirteenth Provost Marshall District of Ohio in 1863; professor of diseases of women and children in Starling Medical College from 1864 to 1871; professor of obstetrics, clinical midwifery and diseases of children, in the Medical College of Ohio, from 1871 to 1888, when he became professor of clinical gynecology. He was also obstetrician and surgeon to the Good Samaritan Hospital, and consulting surgeon to Christ's Hospital. He was an ex-president of the Ohio State Medical Society; of the Cincinnati Academy of Medicine; member of the Southern Surgical and Gynecological Association and the Medico-Chirurgical Society of Philadelphia.

Dr. Reamy died of chronic interstitial nephritis, on March 11, 1909, at the home of his niece in Cincinnati.

HENRY T. BYFORD.

REBER, James Wendell (1867-1916), ophthalmologist of Philadelphia, was born in St. Louis on April 3, 1867. He studied medicine in Washington University, graduated in 1889 and practiced in his native city for several years. He was obliged to forego the advantages of postgraduate schools from lack of pecuniary means, but compensated for these early privations by regular attendance and thoughtful discussions at meetings of ophthalmological societies, and also by familiarity through both writings and personality with the leaders in ophthalmology in the United States and Western Europe, for he had early determined to specialize in that branch of medicine. His capacity for work and his close application to his profession were in evidence from his first entrance into American ophthalmology, and he served with distinction in the Wills Hospital, Jefferson Medical College and many other institutions in and about Philadelphia. At the time of his death he was professor of diseases of the eye in Temple University and at the Philadelphia Polyclinic and College for Graduates in Medicine; he was visiting ophthalmologist to the Philadelphia, Samaritan and Garretson Hospitals and was consulting ophthalmologist to the Friends' Hospital and the Rush Hospital for Consumption and Allied Diseases.

Dr. Reber was a fellow of the American Academy of Ophthalmology and Oto-Laryngology, serving as president in the latter organization; he was also chairman of the ophthalmologic section of the Medical Society of the State of Pennsylvania and president of the Philadelphia Clinical Association; in 1914 he was the American representative of the Oxford Ophthalmological Congress and delivered an address before that distinguished body. He was a frequent and most welcome visitor at its meetings. His contributions to literature were many and of great merit. His text book on the ocular muscles, which he wrote with Dr. Howard F. Hansell, of Philadelphia, was considered his masterpiece. Dr. Reber was best known as a teacher. One of his greatest interests in life was to "Help and teach his boys," as he called them, and his many students, who later in life became his loyal friends, bear testimony to the success of his efforts in this direction.

He was married, January 6, 1902, to Miss Jessie Dalrymple.

He was a man of many sides, not only a scientist and teacher, but a man of rare culture and refinement—genial, artistic, optimistic and enthusiastic in temperament, possessing a keen sense of humor which attracted to him a large circle of friends; a man with an abounding sense of honor and justice and above all, of loyalty in his friendships. He died, December 30, 1916, from pneumonia.

REDDY, John (1822-1884). This distinguished medical man, who practiced his profession in Montreal for over thirty years, was born at Athlone, county of Roscommon, Ireland, March 31, 1822. In accordance with the custom of that day, he was apprenticed to a local surgeon in the year 1839, and remained with him until 1842. In April, 1847, he appeared before the Royal College of Surgeons of Ireland, and received their license in April of that year. He obtained an M. D. degree in 1848 at the university of Glasgow, and held some dispensary appointments in Ireland for a short time, coming to Canada in 1851. Through the influence of friends in Montreal he had been appointed house surgeon of the Montreal General Hospital, and immediately entered upon the duties of that office, remaining in the hospital for three years. On leaving the hospital he began private practice in the city. In 1854 he distinguished himself for his unremitting attention to the care of the many sufferers who were falling on every hand with the epidemic of Asiatic cholera, which was sweeping over the country. His unvarying kindness to his patients, his cheerful, warm-hearted Irish manner, his already considerable skill and experience soon led to his finding himself surrounded by a large and increasing clientèle.

During the thirty years of his practice in Montreal, his perseverance and assiduity knew no rest; he was constantly and busily employed from morning till night, and very often from night till morning, until 1883, when to the regret of his friends, it was observed that his health was beginning to fail. He went to Europe for change of air and rest, but unfortunately no return to health was to come to him, and he died in Dublin, January 23, 1884.

Dr. Reddy held many offices of trust. In 1856 he was appointed attending physician of the Montreal General Hospital, a post he held until he retired upon the consulting board.

In 1856 he received the degree of M. D. "ad eundem" from McGill College, and for many years served as representative fellow in medicine in the corporation of that university. He was a member of the Medico-Chirurgical Society and was a long-service officer in the volunteer militia, having been surgeon of the Montreal Garrison Artillery.

He married Jane Fleming, July 1, 1851. They had six children. One son, H. L. Reddy, M. D., succeeded him in practice.

His was a quiet, unostentatious, busy, blameless life.

Among the various contributions he made to medical literature of Canada may be mentioned: "On the treatment of aneurysm by compression and injection with the perchloride of iron" (1858); "Pneumonia of right lung" (1879-80); "Case of temporary diabetes" (1879-80); "Case of rupture of mitral valve" (1880); "Case of tetanus neonatorum" (1881-2).

REDMAN, John (1722-1808). The materials for a biography of John Redman are somewhat scanty, yet all writers agree he deserved to be remembered as one who did good service in Philadelphia in organizing the College of Physicians, as a teacher, and for the share he took in laboriously combating the yellow-fever epidemic there in 1792. He was born in Philadelphia, February 27, 1722, and went for his education first to a school kept by the Rev. William Tennent and afterwards to study medicine under Dr. John Kearsley, Jr.; soon after he was heard of in Bermuda practicing as a doctor. He was next seen in Edinburgh "walking" the hospitals, then on to Paris to study new methods, and from there to Leyden, where he was graduated M. D. in 1748. Not content with this amount of experience he returned to England and worked some time at Guy's Hospital, so one is not surprised to learn that on settling in Philadelphia he "soon built up a lucrative practice." In 1751 he was elected a member of City Councils; in 1762 he was trustee of the College of Philadelphia until it joined the University of the State of Pennsylvania and became the University of Pennsylvania (1791), when he resigned, and he was a member of the American Philosophical Society from 1768.

His paper "De Abortu," appeared in 1748; in 1751 he was elected a consulting physician to the Pennsylvania Hospital and held the position twenty-nine years, and from 1787 to 1805 was president of the College of Physicians, having been the first president of that body and a most efficient and faithful officer, being rarely absent from its meetings. In 1759 he published "A Defence of Inoculation," and a pamphlet on the "Yellow Fever in Philadelphia in 1762," which he read before the College of Physicians in 1793, when a greater epidemic was raging, and he was attending some eighteen or twenty new cases daily. He based his treatment on "Purgutation with Glauber's salts, sustaining the patient with cordials or wine, with an antiemetic of tartar vitriolat gr. x and a half or whole drop of ol. cinnamon in a spoonful of simple mint and two spoonfuls of decoction of snakeroot every two hours." In order to lessen danger of contagion he had a bowl of vinegar kept in the room and a hot iron occasionally plunged into it; he himself when there always kept tobacco in his mouth to prevent the swallowing of saliva, the only precaution used, as he found the use of many preservatives to affect his mind "with such fears as I thought were likely to render me more susceptible of infection than the omission of them." Redman had two attacks of fever and in 1762 developed liver disease and was obliged to restrict his practice, not retiring, however, until 1784. His pupils, Rush and Shippen, and many others, always kept a warm friendship for the old doctor.

Dr. Redman was an elder of the Second Presbyterian Church for many years, and was a trustee of Princeton College.

He "was somewhat below the middle stature, his complexion was dark, his eyes black and uncommonly animated; and his gesture and speech such as indicated a mind always busy and teeming with new and original conceptions of humane and divine things."

He died in Philadelphia, March 19, 1808.

REED, Walter (1851-1902), chairman of the United States Army Yellow Fever Commission, and discoverer of the mode of propagation of the disease, was born in Gloucester County, Virginia, on September 13, 1851. His father, Lemuel Sutton Reed, and his mother, Pharaba White, were both of English descent and both North Carolinians by birth, though the greater part of Lemuel Reed's life was spent in Virginia as a Methodist minister. Walter, the youngest of six children, was educated at different private schools until, at the age of sixteen, he entered the University of Virginia. He did so with the intention of pursuing the usual undergraduate course of study, but at the end of the first year he de-

termined to study medicine and graduated from the medical department of the university in 1869, being the youngest student who had ever done so. On leaving Charlottesville, he went to New York and matriculated at Bellevue Medical College, receiving his M. D. there at the end of the year. He was then associated with several hospitals in New York and Brooklyn, among which was the King's County Hospital, where he was interne. In 1874 he made up his mind to enter the medical corps of the United States Army and, after passing the required examinations, received his commission as assistant surgeon with the rank of first lieutenant, in June, 1875. His first station was at Willet's Point, near New York Harbor, but in May, 1876, he was ordered to Arizona where he began a garrison life of thirteen years on the frontier. These years of life in the far west were tedious and uninteresting in the extreme but they constituted the soil best suited to the development of Reed's talents, and the foundations of his career as a scientist were then laid. In 1889 he began to feel the necessity for time and opportunity to keep abreast of the time in medical research, and obtained an appointment as examiner of recruits in Baltimore with permission to attend the course just opened to physicians at the Johns Hopkins Hospital. The science of pathology and bacteriology was then a new field of investigation and it was to these subjects in particular that he devoted himself. His first scientific paper on "The Contagiousness of Erysipelas" was published in 1892, and from that time forward he was a constant contributor to medical periodicals. The papers written during this period witness the indomitable perseverance and industry of the man as well as his unusual intellectual endowments, for not only were they all written within a single decade but the scientific researches they record were all executed within the same space of time. In 1898, when the Spanish-American war broke out, Reed was appointed chairman of a committee to investigate the causation and mode of propagation of the epidemic of typhoid fever among the United States volunteers, the other members being Dr. V. C. Vaughan of Ann Arbor and Dr. E. O. Shakespeare of Philadelphia. The report of this committee is a most interesting and important work, revealing some points concerning the disease which were not before appreciated, or even known.

Reed's first association with yellow fever was in 1897, when he and Dr. James Carroll (q. v.) were appointed by Surg.-Gen. Sternberg (q. v.) to investigate the bacillus icteroides which Sanerelli claimed to be the specific cause of yellow fever. The investigations carried on by them proved beyond a doubt that the bacillus icteroides is a variety of the common hog-cholera bacillus and if present in yellow fever at all it must be as a secondary invader. In 1899, when the disease appeared among the American troops stationed at Havana, a commission of medical officers from the United States Army was appointed to investigate its cause and manner of transmission, Reed being chairman. The other members were Dr. Carroll, Dr. J. W. Lazear, (q. v.) and Dr. Aristides Agramonte, a Cuban immune. Shortly after Reed's arrival in Havana, in June, 1900, he had the opportunity to observe an epidemic of yellow fever at the little town of Pinar del Rio, and what he then saw convinced him that the prevailing belief in the transmission of the disease by means of fomites conveyed in clothing, bedding, etc., was erroneous. He determined, therefore, that the search for the specific cause of the disease, upon which up to that time all effort had been concentrated, had better be abandoned, and every energy bent upon discovering the means by which it was transmitted. The line of investigation which, in his opinion, offered most prospect of success was the theory suggested by Dr. Carlos Finlay in 1882 that the disease was conveyed from one person to another by a certain species of mosquito, the "stegomyia fasciata." Some preliminary experiments showed that there was reason to believe in the truth of this supposition, and an experimental sanitary station, called Camp Lazear, was established by Reed near Quemados, in order that further experiments might be carried on under conditions of absolute security. The first experiment at Camp Lazear was made upon a young private from the United States Army, John R. Kissinger from Ohio, who volunteered to be bitten by mosquitoes which had bitten a yellow-fever patient. Kissinger was kept in strict quarantine for two weeks and was then bitten by some mosquitoes which had been purposely infected fifteen to twenty days previously. At the end of three and a half days the disease developed and he had it in a typical form. This experiment was confirmed by others of the same nature, proving conclusively that yellow fever is transmitted by the "stegomyia fasciata." It was next necessary to prove that the disease is not conveyed by fomites, and

for this purpose a building was especially constructed by Maj. Reed from which all ventilation was excluded, the temperature being extremely hot and the atmosphere damp. In this building Dr. E. G. Cooke and two private soldiers, Folk and Jernigan, volunteered to sleep for twenty nights surrounded by articles of clothing and bedding used by yellow fever patients and soiled by discharges. Not a single case of the disease developed, and the same experiment repeated on several subsequent occasions was followed by the same negative result. These experiments were succeeded by others for the purpose of investigating various secondary points connected with the mosquito theory of the disease, the facts established altogether being these: The mosquito, "stegomyia fasciata," serves as the intermediate host for the parasite of the yellow fever. Yellow fever is not conveyed by fomites, hence disinfection of articles supposed to be contaminated by the disease is unnecessary. The infection of a building with yellow fever is due to the presence of mosquitoes which have bitten some one with the disease. Yellow fever can be produced experimentally by the subcutaneous injection of blood taken from the general circulation during the first, second and third days of the disease. Intervals of at least twelve days must elapse after the mosquito has bitten a yellow fever patient before it is capable of transmitting the disease. The bite of the mosquito at an earlier date after contamination does not appear to convey any immunity against a subsequent attack. The mosquito is capable of infection for at least fifty-seven days after contamination and possibly longer.

On the conclusion of these experiments, in February, 1901, Maj. Reed returned to his work in Washington, where he was professor of bacteriology and clinical microscopy in the Army Medical School, and of pathology and bacteriology in the Columbian University. His natural aptitude for teaching appears to have been great, and as the subjects which he taught were then comparatively unknown, he was compelled to develop his own methods of instruction, a fact which imparted an originality to his lectures and laboratory work which made them peculiarly attractive. In the summer of 1902 Harvard University showed her recognition of Reed's services to humanity by conferring upon him the honorary degree of A. M., and shortly after the University of Michigan made him an LL. D.

In November, 1902, he was taken ill with appendicitis, for which his old friend and brother officer, Maj. Borden, operated, finding trouble extending back over some years. The removal of the appendix was followed by sloughing, and unfortunately Reed's general health was so much depreciated by years of over-exertion that he had no strength to make resistance. On the fifth day after the operation symptoms of peritonitis appeared, after which he sank rapidly and died on November 22, 1902. He was buried at Arlington, the monument erected to his memory by his wife bearing this inscription, taken from the address made by President Eliot when conferring upon him the Harvard degree, "He gave to man control over that fearful scourge, Yellow Fever."

Walter Reed married, in 1876, Emilie Lawrence of Murfreesboro, North Carolina. He had two children: a son, Walter Lawrence, who became an officer in the United States Army, and a daughter, Emilie Lawrence.

Reed's greatest service to humanity was, of course, his discovery of the means by which yellow fever can be controlled, a discovery which, as Gen. Leonard Wood said, "results in the saving of more lives annually than were lost in the Cuban war and saves the commercial prosperity of the country greater financial losses in every year than the cost of the Cuban war." Aside from his work in yellow fever, however, he accomplished much in the service of his fellow men. His investigations in typhoid fever, in erysipelas, and in cholera did much to improve our knowledge of these diseases; his influence as a teacher was singularly deep and far-reaching; while the good done during the long years of quiet unrecognized service as a post surgeon brought an amount of health and happiness into many lives which can never be estimated.

A list of his writings may be found in the Catalogue of the Surgeon-General's Office, Washington, D. C.

CAROLINE W. LATIMER.

REES, William, pioneer Canadian alienist, an Englishman by birth and education, came from England in 1819 and began the practice of his profession in Quebec. Toward the close of 1829 he went to York (now Toronto), and having passed the examination of the Medical Board, January, 1830, purchased the practice of Dr. Daly. This inscription appeared in the "Upper Canada Gazette": "Dr. Rees has taken rooms, corner of Market Square, King Street. He will vaccinate and

give advice gratis to the poor, Monday, Wednesday and Saturday." In 1832 he disposed of his practice to Dr. Grasett and removed to Cobourg. The following card later appeared in the Cobourg "Star": "Dr. Rees, professionally educated in England, pupil of Sir Astley Cooper, and 10 years a practitioner in the Canadas, respectively tenders his services to the inhabitants of Cobourg and vicinity, October 21, 1832." But his stay at Cobourg was a short one, and he returned to Toronto.

Dr. Rees was a many-sided man. He conceived various projects of a scientific and benevolent character. He was regarded as of a speculative rather than practical disposition and of unusual intelligence and public spirit. Mrs. Jameson, in her entertaining narrative of her sojourn in Canada, says that Dr. Rees entertained the idea of founding a house of reception for destitute female immigrants, where, without depending on charity, they might be boarded and lodged at the smallest possible cost and be respectably protected until employment was obtained.

He presented a petition to Parliament in 1836 praying the grant of a sum of money for the erection of a provincial museum. He planned to establish in connection with the museum a botanical and zoological garden on a grant of land on the government reserve in the western part of the city. It, however, came to nothing. He was surgeon to the first West New York Battalion, 1837. It is stated that Dr. Rees was also the originator of the present Toronto Club.

Up to 1841 no insane asylum existed in Upper Canada. In January of this year the Provincial Asylum was first opened in Toronto by virtue of an act passed in 1839, largely through the activity of Dr. Rees. The provincial authorities had acquired the old gaol at the east side of Toronto Street, north of King Street, after the new gaol in the east end had been completed. He was the first superintendent of the asylum, which at first had 17 patients. This building was soon densely filled, and it became necessary to procure further accommodation for the numerous applicants for admission. The eastern wing of the Parliament building was appropriated to this purpose, and subsequently a still further addition was made by the occupation of a vacant house near the old garrison. The three buildings were used until the present asylum was ready for occupancy. Dr. Rees held the position of superintendent until he was succeeded by Dr. Telfer. Dr. Rees, notwithstanding his evident ability and enterprise, unfortunately seems to have been wanting in a proper mental balance. Concerning his connection with the Provincial Lunatic Asylum, the following memorandum was made by a friend: "Dr. Rees was a learned man on some things, but an eccentric and most sanguine man—was always considered flighty and never had much practice. Through his energy the first lunatic asylum was established in Toronto, and he was appointed to the superintendency, and management thereof (upon the principle, one may suppose, of setting a madman to watch a madman). He was seriously injured by a blow on the head from one of the patients, the effects of which he felt to his dying day. Very properly after this he was removed from his position, and the asylum placed in other and undoubtedly, more able hands . . . But poor Rees never recovered from the effects of the step, which, no doubt, the government felt constrained to take. He brooded on the injustice that he thought had been done him, and he never ceased to mourn over the neglect that the country had shown him. In all his madness he made several good speculations in land, but the benefit of these was reaped by others."

Opposite the old Parliament buildings, on what was called the "Broken Front," Dr. Rees constructed a wharf, which was long known as "Rees' Wharf." Near it, under the hill, he built a small comfortable house, in which he passed his bachelor life, always ready to welcome any visitor and interest him with anecdotes, of which he had a large fund.

The date of his death is not given.

WILLIAM CANNIFF.

REESE, David Meredith (1800-1861), of Baltimore, was a voluminous writer on medical topics and also on politics and religion, and he was an accomplished public speaker. He was born in Philadelphia, in the year 1800, and graduated in medicine at the University of Maryland, March 26, 1819, his inaugural thesis being entitled "De Mania Religiosa." Settling in practice in Baltimore, he survived an epidemic of "fever" which devastated the city, the first year of his practice. Then he used the epidemic as the title of his second literary venture, which appeared as a duodecimo pamphlet in 1819. Subsequently, he was appointed professor of the institutes of medicine and surgery in Washington University, Baltimore, and he

held professorial chairs in the Albany Medical College, New York State, and in Castleton Medical College, Vermont. When he settled in New York City about the year 1834, he obtained the appointment of resident physician to Bellevue Hospital, and held it until 1849, when the office was abolished. In the year 1830 Dr. Reese brought out a new edition of Cooper's "Surgical Dictionary," his most important literary undertaking, being the fifth and sixth London editions revised. He acted as editor of the seventh edition also, published by the Harpers in 1848.

On retiring from his hospital position, Dr. Reese engaged in private practice and soon began the publication of a weekly medical journal, the "American Medical Gazette," which was shortly changed to a monthly and survived for many years. Of the many papers he published, there are twelve titles in the Surgeon General's Catalogue, the most useful being his reports on medical education and other subjects for the American Medical Association. He was a ready and fluent speaker, a good debater and familiar with parliamentary rules. As a writer, he wielded a vigorous pen and was something of a controversialist. One obituary of him says he was not too happy in his choice of subjects or in the manner of treating them. He wrote "Treatise on Epidemic Cholera," 1833; "Quakerism 'versus' Christianity," being a reply to S. H. Cox's "Quakerism not Christianity," New York, 1834; "Phrenology known by its Fruits," 1838; "A Brief Review of the First Annual Report of the American Anti-Slavery Society," 1834; Editor of Chambers' Educational Course, 12 volumes.

He died of heart disease at New York City, May 13, 1861.

REESE, John James (1818-1892), medico-legal expert of Philadelphia, was born June 16, 1818. He took both his liberal and medical degrees from the University of Pennsylvania; A. B., 1836; A. M. and M. D., 1839. Settling in Philadelphia, he soon had an excellent practice.

He was several years physician at St. Joseph's Hospital, and at the Gynecological Hospital and Infirmary for Diseases of Children. He was a fellow of the College of Physicians, Philadelphia, and honorary member of the New York Medico-legal Society. He was professor of medical jurisprudence and toxicology in the University of Pennsylvania.

Dr. Reese was editor of the seventh American edition of A. S. Taylor's "Medical Jurisprudence." He also wrote well and much on his own account on topics connected with toxicology and legal medicine. In particular, his text-book entitled "Medical Jurisprudence and Toxicology," went through some seven editions and did much to brighten the luster of his name. This work, small but compact, contained the kernel of toxicology and forensic medicine as it existed in his time. He wrote also "Analysis of Physiology," American Medical Formulary.

In 1861 he entered the Federal Army as volunteer surgeon, and in this capacity was placed at the head of the Christian Street Hospital, in Philadelphia.

Dr. Reese was a tall, slim man, of dark complexion, with very black hair and eyes. His manner was quick and animated, and he was very copious and pleasant of speech. He was possessed of a magnetic presence, and his lectures always fell upon attentive ears. He was a member of the Protestant Episcopal church.

He died at Atlantic City, New Jersey, September 4, 1892.

THOMAS HALL SHASTID.

REEVE, James Theodore (1834-1906), of Wisconsin, was born of American parentage near Goshen, Orange County, New York, April 26, 1834, and was educated in the common schools, afterwards studying medicine at Ann Arbor, Michigan, Castleton Medical College, and Jefferson Medical College, receiving his M. D. from Castleton in 1854, and from Jefferson in 1855, and he had the honorary A. M. from Ripon College, Ripon, Wisconsin, in 1882. He was a member of the New York Medico-legal Society, and president of the Wisconsin State Medical Society. Dr. Reeve began to practice at the age of twenty-one in De Pere, Wisconsin, and practiced continuously in the Fox River Valley for fifty-one years, seeing and actively participating in its growth from a primeval wilderness to an important commercial and educational center. When the Civil War broke out he drove with his wife from Green Bay to Madison, Wisconsin, through 150 miles of unsettled country, and enlisted in the army, being appointed second assistant surgeon of the Tenth Regiment. He was soon transferred to the Twenty-first Regiment, and served throughout the war, his regiment participating in many severe engagements, notably the battles of Stone River, Perryville, Resaca and

Kenesaw Mountain, and Chickamauga. After the latter engagement he remained with the field hospital and was captured and taken to Libby Prison for three months. On being exchanged he returned to the service, marched with Sherman from Atlanta to the sea, and was present at the siege of Savannah, Averysboro and Bentonville.. He was promoted to the position of brigade-surgeon, and at the close of the war was acting division-surgeon, with the rank of major, and after the war settled at Appleton, Wisconsin. Besides being, like all good doctors, a sort of father confessor to patients, he was very often sought for aid and comfort wholly aside from professional matters, and the words "the best friend I ever had" were on the lips of many who never called on him in sickness. To others he was fond of sending gifts of money outright in quaint ways, as gold pieces in pill-boxes, marked "take one when necessary." In such ways he gave away considerable sums, while spending on himself practically nothing beyond what was necessary for food and clothing.

He was married in 1857 to Laura Spofford, and had six children, the eldest being associated with him in practice. He died at Appleton, November 4, 1906, at the age of seventy-two, of chronic bowel trouble, complicated with nephritis, the foundation for which was doubtless laid during army service, and aggravated by unremitting toil.

He contributed little to the medical press, but during eighteen years of work as secretary of the State Board of Health he wrote thousands of letters to physicians and members of local boards of health urging and directing organization for intelligent sanitation, and aiding in mitigating and preventing the spread of epidemics. These, and the editing and writing for the annual reports of the board, constituted no small contribution to the progress of the highest branch of medical science.

JAMES SPOFFORD REEVE.

REEVE, John Charles (1826-1920), born June 5, 1826, at Mells, Somerset, south of London, easily figures as one of the great lights of the middle west, emerging from the crudities of its pioneer practices into the ways of modern scientific medicine, and is a noble example of a self-made man. His name is written in large letters in the history of Dayton, Ohio. He was one of thirteen children of John and Sarah Gladwyn Reeve who settled in Cleveland, Ohio, in 1832. His schooling ceased at twelve and later instruction was but casual. He started out in the office of the "Cleveland Advertiser" at twenty dollars for the first year and thirty, the second, with board; then he went to the "Daily Herald" at seven dollars a month with board, never again in life to feel so rich. At seventeen, he taught school, where he awakened a love of study in students who years later returned to thank him; pay was so meagre that he could not afford postage on home letters. His second school was within the limits of the present city of Cleveland at ten dollars a month, and "boarding 'round." In 1845, he went for the spring session to the Academy at Kirkland, the early seat of the Mormons. Under Polk's administration he entered the Cleveland Postoffice, his brother-in-law being postmaster; under heavy pressure of work, he sometimes passed weeks without undressing. In order to expedite the German mail, he studied the language, taking lessons from an old shoemaker whose firewood he carried up-stairs in payment. Having determined to study medicine, the transfer of the college from Willoughby to Cleveland, where it became the Cleveland Medical School, now the medical department of Western Reserve University, furnished the needed opportunity; this was in the dark days when the purchase of Thompson's "System of Medicine" for five dollars conferred a legal right to practice. The botanic school rose as a protest against the frightful abuse of calomel and other "regular" crudities. The requirements at that time being three years in the office of a practitioner ("preceptor") and attendance upon two courses of lectures, he entered the office of John Delamater (q. v.), where the compounding and dispensing of the doctor's prescriptions was an important part of the duty of the students who thus became well grounded in pharmacy. The College library, made much of in the annual program, was small and scarcely ever entered, and the chemical laboratory was not in evidence. In the amphitheater was a table which served both for cadaveric demonstrations and surgical operations. Teaching was oral, six wearisome lectures a day, without practical instruction. In Watson's "Practice," fevers occupied one chapter under the head, "Continued Fever," and the degree of fever was estimated by touch. Reeve believes himself responsible for the introduction of thermometry to the medical profession of this country through his review of Wunderlich's

"Das Verhalten der Eigenwaerme in den Frankheiten," 1868. The following winter (1848-1849), he attended the second course of lectures, a repetition of the first. In this year he married Emma Barlow, a teacher, and left for Mayville on Lake Michigan, without a diploma, then a common custom. This location was not satisfactory and fees were often paid in pork and potatoes. Eager for better training, he gave up practice to go to Europe, while his fine wife returned to teaching. He spent the winter at Kings College Hospital, London, and the summer of 1854 at Goettingen. It was the first of seventeen trips across the Atlantic. Upon his return, he settled in Dayton, Ohio, where he spent sixty-six years of his long and fruitful life.

During the year preceding his arrival in London, Queen Victoria had been aided in one of her labors by the administration of chloroform, an event which excited great interest and much opposition in all medical circles, an event which begot in Reeve a life-long interest in anesthetics. He made this the occasion of one of his first communications to the "American Journal of the Medical Sciences" and collected and analyzed in a brochure sixty deaths from chloroform. He became an earnest advocate of the A. C. E. mixture and opened up a new vein in the field of current medical literature to which he was ever after a zealous and inspiring contributor. In 1860, he was elected professor of materia medica at the Medical College of Ohio, Cincinnati, but the Civil War soon broke out and he made for the front with G. C. Blackman, where he at last attained the long coveted opportunity for a large clinical experience.

Dr. Reeve did much to guide the trend of medical thought and to establish its ideals in its formative period; he set a notable example of life-long studious habits and high aims as he lifted pioneer medicine out of the bogs in which he found it floundering and helped to put it upon a worthy pedestal. He began with medicine in her nonage of phlebotomies and calomel and closed his career with modern science in the van and the era of hygiene peeping over the horizon. Of all the great changes in medicine in his lifetime, he could write "quorum pars una fui": anesthetics came in to create surgery, pathology was born to make medicine a science, the microscope became an integral part of daily practice, antiseptics made great surgery safe, bacteriology put the capstone on pathology, and one after another the various specialties sprang into commanding prominence.

His reviews were admirable; S. D. Gross (q. v.) remarked, "Dr. Reeve writes the best reviews of any man in America" (Baldwin). In 1859, he translated Flouren's "History of the Discovery of the Circulation of the Blood."

Reeves was a founder of the American Gynecological Society in 1876. His college gave him his medical degree in 1853 because of notable attainments. In 1896, the Western Reserve conferred her LL. D. upon him.

He died of pneumonia September 15, 1920. Four children survived him; of two sons, one is Dr. J. C. Reeve, Jr. The father was in such remarkable possession of his mental powers up to the time of his death, that upon the request of Prof. Wilder of Cornell, his brain was bequeathed to the University for study.

HOWARD A. KELLY.

REEVE, Richard Andrew (1843-1919), of Toronto, Canada, a striking personality in the medical profession of the Dominion, an operator of great ability in diseases of the eye and ear, was a graduate of Queens University, Kingston, Ontario, in 1865, and of the University of Toronto in 1889. Dr. Reeve lectured on the diseases of the eye and ear in the Toronto School of Medicine from 1872 to 1887 and then was professor of ophthalmology and otology in the University of Toronto until his death from heart disease on the street in Toronto, January 27, 1919. For two years, 1906-1908, he was dean of the faculty of medicine; for twelve terms he was president of the alumni association. Dr. Reeve was a founder of the Reeve Scholarship, a member of the council and senate of the university and also one of the board of regents of Victoria University, Cobourg, Ontario. He had been president of the Canadian Medical Association and also of the Toronto Academy of Medicine. He had the honorary degrees of LL. D. from the University of Toronto, 1902; McGill University, Montreal, and the University of Birmingham, England, 1911.

REEVES, James Edmund (1829-1896), of Wheeling, West Virginia, the son of Rev. Josiah Washington and Nancy Kemper Reeves, was born April 5, 1829, in Annisville, Rappahannock County, Virginia. He was compelled to leave school when only fourteen to assist his father who was a tailor, but five years later he undertook the study of medi-

cine first with E. D. Talbott, Philippi, Virginia, and then with Jacob Neff, New Market, Virginia, who frequently left him in charge of patients. In the spring of 1850, he began to practice in Sutton, West Virginia. Having secured enough money by the following fall, he attended a course of lectures at Hampden Sydney Medical College of Richmond. Some years later, he entered the Medical Department of the University of Pennsylvania and was graduated in 1860. Dr. Reeves' lifelong interest in public health work asserted itself soon after settling in Wheeling, West Virginia. He secured the passage of an ordinance establishing a health department in the city and became health officer and county physician in 1869; he fathered the law creating the State Board of Health of West Virginia of which he was secretary for five years; was a founder of the American Public Health Association and its president in 1885; and during the yellow fever epidemic at Jacksonville in 1888 made sanitary inspections of the State's defences for the Tennessee State Board of Health.

He was the author of "A Practical Treatise on Enteric Fever, Its Diagnosis and Treatment," 1859; "The Physical and Medical Topography, including Vital, Manufacturing, and Other Statistics of the City of Wheeling," 1870; "The Health and Wealth of the City of Wheeling, including its Physical and Medical Topography; also General Remarks on the Natural Resources of West Virginia," 1871; "A Manual of Medical Microscopy for Students, Physicians, and Surgeons," 1894; and many articles relating to contagious diseases and public health interests. He edited "The West Virginia Medical Student," in 1875-76. He organized the State Medical Society of West Virginia in 1867 and was its first secretary and in 1881 its president; he was vice-president of the American Microscopical Society in 1886 and of the section of public and international hygiene of the International Medical Congress in 1887, a member of the judicial council in 1882 and trustee in 1895 of the American Medical Association, and a member of the advisory council of the Pan-American Medical Congress, Washington, 1893.

Dr. Reeves' last professional service of note was directed against quackery—a brave and successful battle against the "consumption-cure."

He married three times: first, Lydia Martz of Rockingham County, Virginia, in 1851, by whom he had four children; second, Mary V. Frey of Allegheny County, Maryland, in 1863; and last, Frances M. Starrett, Cumberland, Maryland, in 1872. On January 4, 1896, he died of liver disease at his home in Chattanooga, Tennessee, where he had lived for the last few years.

REID, David Boswell (1805-1863), inventor, chemist and expert in sanitation (ventilation), was the second son of Peter Reid (1777-1838), physician, editor of Cullen's "First Lines of the Practice of Physic," a writer on medical and educational subjects, and noted for his advanced educational ideas. His mother was Christian, daughter of Hugo Arnot, historian of Edinburgh. A brother was Hugo Reid (1809-1872), chemist, mechanician and writer of educational books. David received his diploma in medicine at the University of Edinburgh in 1830. His chief interest was in chemistry; he had a laboratory and held classes, giving instruction in practical and theoretical chemistry. His success led to his appointment as assistant to Thomas Charles Hope (1766-1844), professor of chemistry at the University of Edinburgh. He had given much attention to the ventilation of public buildings, and in 1844 published "Illustrations of the Theory and Practice of Ventilation"; it attracted wide notice, and Sir Charles Barry (1795-1860) adopted Reid's system in the new Houses of Parliament, rebuilt after their destruction by fire in 1834. Reid gave five years at Westminster to this work. The system of ventilation was adopted more fully at St. George's Hall, Liverpool, the only building, Reid said, in which his system was entirely carried out.

In 1856 he came to the United States, became professor of chemistry in the University of Wisconsin, and in 1863 was appointed medical inspector to the United States Sanitary Commission. New military hospitals had been erected throughout the country when the Civil War broke out, and Reid was about to leave Washington on a tour of inspection of these when taken ill, and he died at Washington, April 5, 1863. Henry Barnard (1811-1900), in a letter quoted by Allibone, says: "Dr. Reid has done more for public sanitary science reform and the ventilation of houses, etc., than any man who has lived." With Elisha Harris, (q. v.) Reid wrote "Ventilation in American Dwellings" (1858). Reid was also the author of two text-books: "Elements of Chemistry" (1837), and "Text-book for Students of

Chemistry" (1839), and of other books bearing on chemistry and ventilation.

HOWARD A. KELLY.

REID, William W. (1799-1866), of Rochester, New York, was the first to show the futility of trying to reduce dorsal dislocation of the hip, by forcible longitudinal traction by pulleys, and he gave a partial explanation why the English method then in vogue was not correct. He deserves the gratitude of the world for perfecting the comparatively painless and the efficient method of reduction, now in use. The known facts of his life are few, due in part to the loss by fire of the records of the Monroe County Medical Society. He was born in Argyle, Washington County, New York State, in 1799, and entered Union College from that town, April 26, 1823, graduating A. B. with Phi Beta Kappa honors, July 27, 1825. He began the study of medicine under Dr. A. G. Smith of Rochester, and Reid says he was there in 1826, '27 and '28, but where he took his M. D. degree has eluded the careful search of many investigators in New York State. That he had an M. D. is plain, for it was signed to his published articles, and as he was president of the Monroe County Medical Society in 1836, '37 and '49, he was in good standing and at the same time regarded with favor by his associates. It is likely that the degree was conferred by the local medical society, in accordance with the custom of the time. His writings prove him to have been an original, inventive and bold surgeon. He practiced in Rochester from 1828 until about 1864, when he moved to the vicinity of New York City.

In 1830 he married Elizabeth Manson.

His death occurred December 6, 1866, by drowning in the Hudson River while crossing from Jersey City to New York.

Such are the bits of information that have been preserved about this noteworthy character. As regards his contributions to the advancement of surgical practice we must turn to the "Buffalo Medical Journal" for August, 1851. In this publication appeared an abstract of a paper which Dr. Reid read before the Monroe County Medical Society, May 8, 1850. The same facts were published in the "Boston Medical and Surgical Journal" for December 31, 1851 (vol. xlv, pp. 441-447), and a complete exposition of the subject was presented at the annual meeting of the Medical Society of the State of New York, February 3, 1852, appearing in the transactions of that year as a paper of seventeen pages, with diagrams. It is to be understood that at the time Dr. Reid arrived at the true principles and rationale of the method of reduction of dislocation of the head of the femur on the dorsum ilii, the common practice, enunciated by Sir Astley Cooper, was what Reid called a cruel method of extension of the limb using pulleys and blind brute force, the object being to tire out the muscles which were supposed to prevent the reduction by their contraction. We know now that the traction ruptured the Y ligament. Nathan Smith (q. v.) and others had found as long ago as 1831 that some sort of flexion often effected reduction. The maneuvers advocated were haphazard and were not founded either on investigation or experience. Dr. Reid tells us that his attention was directed to the subject of dislocation of the hip during the years 1826, '27 and '28, while a student of medicine in Rochester, where he saw several cases that were treated by the leading surgeons of the time by inquisitorial torture of the patients, often with poor end results. Ever after he gave the subject thought, and for ten years previous to 1850 the question how he might help such patients was seldom out of his mind. By manipulating the skeleton and by dissecting and testing the strength of the muscles of a sheep's leg he decided that the essential muscles about a dislocated hip were not contracted, but overstretched, and that a little too much overstrain would rupture them. These views were confirmed in 1849, after he had had several cases of reduction, by the dissection of both hip joints of a human subject in conjunction with Dr. E. M. Moore (q. v.), professor of surgery in the Woodstock and in the Berkshire medical schools. Both joints were dislocated, after being dissected, and were reduced by Reid's method, it being noted that too strong flexion of the thigh hindered reduction and that direct traction without flexion partly carried away the capsular ligament. Reid thought that flexion, as it relaxed the muscles, was the proper procedure in cases of dislocation and in the case of the hip he advocated flexing the leg on the thigh, the thigh on the abdomen, adduction to the sound side, then abduction and outward rotation.

He was called to his first case in the spring of 1844, a stout Irish woman who had fallen down a flight of steps and dislocated her hip four days previous to his visit. In the presence of four physicians Dr. Reid, using his method, reduced the dislocation in three

minutes with very little force and with trifling pain. This was before the advent of surgical anesthesia. He reported three cases, all reduced without an anesthetic, in his paper read before the Monroe County Medical Society, and in his later paper gave the data of two cases reported by other surgeons, one with an anesthetic and the other without, both reduced successfully by his method. Moses Gunn (q.v.) demonstrated during the winters of 1851-52-53 by many dissections that the untorn portion of the capsule of the joint, in dislocation of the hip, caused the characteristic attitude assumed by the limb and was the true obstacle to reduction. ("Luxation of the Hip and Shoulder Joints, and the Agents which Oppose their Reduction," 1859.) Although Reid did not appreciate the full importance of the capsular ligament in the mechanism of dislocation and knew nothing of its accessory Y-ligament—a structure described in detail by H. J. Bigelow (q.v.) nearly twenty years later—he worked out in an intelligent manner the correct method of treating this serious injury, thus obviating great and unnecessary suffering besides much crippling of joints in coming generations, and he is therefore entitled to full credit and to the gratitude of posterity.

WALTER L. BURRAGE.

REITER, William Charles (1817-1882), was a classical family physician but his activity was not confined to the practice of medicine; natural history, and especially botany, a science in which he held a foremost position in his locality, were a vocation of great interest and enjoyment to him. His father, of French Huguenot ancestry, was born in Hesse. His mother was of Hanoverian extraction. Married in Baltimore, Maryland, they removed to Pittsburg, Pennsylvania, about 1812, where William Charles was born March 24, 1817. He attended lectures at Jefferson Medical College during the session of 1834-1835, after which he engaged in practice at Pleasant Unity and Mount Pleasant, Pennsylvania, and in 1836, on the death of his preceptor, Dr. A. Torrence, succeeded to his practice. At this time he was married and after four years of professional work he returned to Jefferson Medical College, where he was graduated in the spring of 1839. Of a philosophic bent of mind, he took much pleasure in the study of natural history, and was looked upon as a local authority in botany. On the establishment of the Pittsburg College of Pharmacy in 1880 he was elected to the chair of materia medica and botany, an office he filled for several years till the infirmities of age necessitated his resignation. Previous to this time he also delivered lectures at the Western University of Pennsylvania at Pittsburg on chemistry, geology and physiology.

He was married on November 8, 1836, to Eliza Reynolds, daughter of Captain William Reynolds, of Westmoreland County, Pennsylvania, and had four children, three daughters and one son. Reiter died at Edgewood Park, Pennsylvania, a suburb of Pittsburg, on November 20, 1882, of general arteriosclerosis.

At the time of his earlier life the cause of most diseases was purely a matter of speculation and to a man of Reiter's strong convictions and force of mind the need of forming a theoretical etiology based upon experience and observation, became almost mandatory. Thus he believed that diphtheria was due to an excess of fibrin in the blood, and in support of this hypothesis and the treatment of the disease with enormous doses of calomel (as much as three or four drams during the course of the attack), he published, in 1878, a booklet on "The Treatment of Diphtheria Based upon a New Etiology and Pathology," which attracted wide attention.

His portrait was in the possession of his daughter, Miss Mary Reiter, at Edgewood Park, Pennsylvania.

ADOLPH KOENIG.

REULING, George (1839-1915), ophthalmologist and oto-laryngologist of Baltimore, Maryland, known in particular as an operator on the eye, and the first American ophthalmologist to remove a cataractous lens within its capsule, was born in Darmstadt, Germany, November 11, 1839, studied medicine at the University of Giessen from 1860 till 1865, and in 1865 and 1866 at Munich, Vienna and Berlin. His degree was received at Giessen in May, 1866. From the day of his graduation till September of the same year he served as surgeon in the Prussian Army, in the war against Austria. Late in 1866 he became assistant surgeon at the eye hospital, Wiesbaden. The following year he studied at Paris under de Wecker, Liebreich and Meyer.

In 1868 he removed to America, settling as ophthalmologist and oto-laryngologist in Baltimore. Here he was soon widely known as an operator on the eye. In 1869 he was appointed surgeon-in-charge of the Maryland Eye and Ear Infirmary. He was also at various times oculist and aurist to the Baltimore

Home for the Aged and to the German Hospital. From 1871-73 he was professor of eye and ear surgery in the Washington University, and in 1893 was appointed to the chair of ophthalmology and otology in the Baltimore Medical College. He was a member of numerous societies, among others the American Academy of Arts and Sciences, the Heidelberg Ophthalmological Society, the American Laryngological, Otological and Rhinological Society.

Dr. Reuling was rather short, of a fair complexion, and with dark blue, slightly grayish keen eyes. He wore a small mustache, and was calm, placid and judicial in manner. He was very fond of art and music, and had in his spacious residence a collection of antique paintings.

He married, September 21, 1871, Miss Eliza Knelp, daughter of Captain F. Knelp, of Darmstadt, Germany. They had two children, Dr. Robert C. Reuling, of Baltimore, and Marie R., wife of Richard H. Pleasants. Dr. Reuling died at the Maryland General Hospital in Baltimore, November 26, 1915, after a protracted illness.

THOMAS HALL SHASTID.

REVERE, John (1787-1847), professor of the theory and practice of medicine in Philadelphia and New York, was born in Boston, Massachusetts, March 17, 1787, and died in New York City, April 1847. He was the youngest son of Colonel Paul Revere, the patriot of Revolutionary fame. His education was obtained from Reverend Thomas Thacher (q. v.), his tutor, and from the public schools of Boston. He graduated from Harvard University in 1807. He studied medicine as a private pupil of James Jackson (q. v.), professor of theory and practice of medicine in Harvard University, and went abroad and received his M. D. degree at Edinburgh, Scotland, in 1811. Upon his return he began the practice of medicine in his native city, but resided in New England only a short time owing to the severity of the climate, which irritated a bronchial affection. He went to Richmond, Virginia, where this seemed to have left him, and after a short time he settled in practice in Baltimore, Maryland. While there he became interested in chemistry and thought he had made a discovery which would prevent rusting of iron in sea water, having in mind its substitution for copper on the bottoms of ships. In 1829 he went to Europe and endeavored to interest Sir William Adams in his discovery, but the project failed on account of expense. There Revere renewed his medical studies, and then returned to Baltimore. He became the translator of Magendie's physiology, and wrote: "An Inquiry into the Origin and Effects of Sulphurous Fumigations in the Cure of Rheumatism, Gout, Diseases of the Skin, Palsy, etc.," 63 p., Baltimore, 1822, and "Some Remarks on the Crude Sodas of Commerce," 10 p., 1827; also several lectures of his were published. In 1831 he moved to Philadelphia, Pennsylvania, and was appointed professor of the theory and practice at Jefferson Medical College. In 1841 he was called to the chair of theory and practice of medicine in the University of the City of New York on its organization, and was professor in high esteem in this institution for six years. It is said that his death was due to typhus fever, which he caught when in impaired health, while attending cases in the great epidemic.

FREDERIC S. DENNIS.

REX, George Abraham (1845-1895), physician and cryptogamic botanist of Philadelphia, was born at Chestnut Hill, Philadelphia, was graduated M. D. at the University of Pennsylvania, in 1868, and during his earlier life was assistant demonstrator of anatomy there. He was also a fellow of the College of Physicians and became a member of the Academy of Natural Sciences in 1881, serving as conservator from 1890 until his death.

Dr. Rex was considered the highest authority on the myxomycetes in the United States. It was his enthusiastic study of this group which first brought him to the academy, and he was the author of a number of species which, owing to his extreme conservatism, will doubtless continue to bear his name. His collection of myxomycetes, presented by his sister, is in the Academy of Natural Science, Philadelphia, but he was also an ardent admirer of everything beautiful in microscopic nature. As a faithful and tireless worker he inspired his co-laborers and as a medical practitioner for twenty-five years in Philadelphia, earned the gratitude of high and low. During the Civil War he acted as engineer in the United States Navy. He died suddenly on the morning of February 4, 1895, of heart disease.

His writings included: "Siphoptychium Caspary," "Botany Gazette," ix-x; "The Myxomycetes," "Ibid.," ix-x; "On the Genus Lindbladia," "Botany Gazette," "Ibid.," xvi; "New American Myxomycetes," "Proceedings of

Academy of Natural Science," Philadelphia, 1891; "New North American Myxomycetes," "Ibid.," 1893; "Notes on Cribraria Minutissima and Licea Minima," "Botanical Gazette," xix; "The Banded-spore Trichias," "Journal of Mycology," ii.

JOHN W. HARSHBERGER.

REYNOLDS, Dudley Sharpe (1842-1915), an oto-ophthalmologist of Louisville, Kentucky, was born near Bowling Green, Warren County, Kentucky, August 31, 1842, the son of Reverend Thomas, and Mary Nichols Reynolds; he received the degree of A. M. at Ogden College, Bowling Green, and, in 1868, the medical degree at the University of Louisville. From 1869-71 he was surgeon-in-chief to the Western Dispensary—a position which he resigned to begin the study of ophthalmology and otology. After spending some time at the University of Pennsylvania, the Wills Eye Hospital, Philadelphia, and the New York Eye and Ear Infirmary, he proceeded to Europe, where he studied at the Royal London Ophthalmic Hospital (Moorfields), the London Throat Hospital, and, in Utrecht, under Donders and Snellen, and in Paris under De Wecker, Sichel, Ed. Meyer, and Galezowski; in Vienna under Stellwag, Fuchs, Gruber and Politzer; in Berlin, under Schweiger, Hirschberg, and von Bergmann. Returning to America, he was soon widely known as an oto-ophthalmologist. One of the organizers of the Hospital College of Medicine (the Medical Department of the Central University of Kentucky), he was professor of ophthalmology and oto-laryngology at this institution from its very inception in 1874. He was also professor of general pathology and hygiene from 1882 to 1892. In the last year, on the establishment of a chair of medical jurisprudence at the college in question, Dr. Reynolds was made the first incumbent, retaining the position until 1901, when he retired from teaching altogether. Dr. Reynolds was one of the organizers of the Confederation of American Medical Colleges, and was chairman of the Judicial Council of that body for a number of years. He was later the chairman of the Judicial Council of the Association of American Medical Colleges. In 1880 he was chairman of the section of Ophthalmology, Otology, and Laryngology of the American Medical Association. He was once foreign delegate of the American Medical Association, and in 1881 was made an honorary member of the British Medical Association. In 1887 he was President of the Mississippi Valley Medical Association.

Dr. Reynolds was thrice married: first, on May 7, 1865, to Mary F. Keagam; again, on July 13, 1881, to Matilda L. Bruce; and, on June 5, 1907, to Lillie B. Baldwin. He died at his country home, "West Meath Farm," near Louisville, Kentucky, February 4, 1915.

Dr. Reynolds was a large, stout man, smooth-faced, of fair complexion, and with bright blue eyes and brown hair. He was very deliberate and thoughtful as an operator, but, at his home and in social life, he was cheerful and even gay. He was fond of fishing and country life in general, and, for the last seven years of his life, lived in the country near Louisville, while continuing to practice in that city. He was a very broad-minded, and public-spirited man, a Democrat in politics, but interested in all phases of public affairs, regardless of party affiliations. With the assistance of about fifty citizens of Louisville, he reorganized the Polytechnic Society of Kentucky, paid off its debt and gave of his private means for the purchase of a considerable portion of the volumes in its library.

THOMAS HALL SHASTID.

REYNOLDS, Edward (1793-1881), founder of the Massachusetts Charitable Eye and Ear Infirmary, was born in Boston, February 28, 1793, and graduated in arts in 1811, at Harvard College, afterwards studying medicine for several years under Dr. John Collins Warren (q. v.). Brown University and Bowdoin College conferred on him the honorary M. D. in 1825. In London he studied under Abernethy, Astley Cooper, and William Lawrence (on the eye), and in Paris under Bichat and Dupuytren, devoting himself on his return to America chiefly to general and ophthalmic surgery. In 1824, with John Jeffries (q. v.), he founded a dispensary, which a few years later developed into the Masachusetts Charitable Eye and Ear Infirmary, and he served the institution continuously until 1870. Elected an honorary member of the American Ophthalmological Society at its inception, he was one of the founders of the Tremont Medical School, and professor of surgery in this institution until 1845. He delivered the annual discourse before the Massachusetts Medical Society in 1841 on the condition, prospects and duties of the medical profession and he was a fellow of the American Academy of Arts and Sciences. Dr.

Reynolds wrote: "Importance of Knowledge of Physiology to Students"; "Hints to Students on the Use of the Eyes," 1835, and an address at the dedication of the new building of the Massachusetts Charitable Eye and Ear Infirmary.

He died December 25, 1881, in Boston, leaving a son, Dr. John Phillips Reynolds, who was professor of obstetrics in Harvard Medical School from 1877 to 1885.

Rice, Ebenezer (1740-1822), pioneer practitioner of Wells, Maine. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912 vol. ii, 317-318.

Rich, Hosea (1780-1866), pioneer surgeon of Bangor, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 974.

RICHARDS, George W. (1800-1853). Among the early medical teachers in the Middle West, George W. Richards stands out as one of the most forceful characters, and he was probably second in influence only to Daniel Brainard (q. v.). His skill and enthusiasm as a teacher brought to him numerous students, and this with his organizing and executive ability caused him to be sought by medical schools. About all we know of him before he studied medicine is that he was born in 1800 at Norfolk, Conn. Nothing has been learned of his parentage or early education. He graduated in 1828 from the College of Physicians and Surgeons of the Western District of New York at Fairfield. The next year, he became a member of the Onondaga County, N. Y., Medical Society, of which he was vice-president in 1835, and president in 1836. During this time, his address is given as Camillus, N. Y. At a meeting of this society, in 1835, he "reported a case of wound of the heart of a child with a small knife producing death in 10 minutes, the child having, to appearance, been well most of the time." Just when he came west is uncertain, but he settled in St. Charles, Ill., about 1841. W. G. Todd, who was a student at the first session of Rush Medical College in 1843-1844, says: "About 1839 Dr. George W. Richards came to St. Charles from Lockport, Ill., bringing with him a subject, a man who had been killed on the canal. He sent an invitation to all the students around to make him a visit. I came with the rest. He was a splendid teacher and after listening to his first lecture, I decided at once to be one of his students." For many years, he was the leading physician in and about St. Charles. In 1842, Richards organized a medical school at St. Charles. The reputation of Richards and his associates and the number of their students led to his being placed on the faculty of the LaPorte Medical College as head of anatomy in 1844-1845, and as professor of theory and practice in 1845-1847. In the catalog of the LaPorte school for 1846-1847, he appears as preceptor for 13 students. In 1848, he was active in organizing the Rock Island Medical School, taking with him M. L. Knapp from the LaPorte School. He was professor of theory and practice of medicine and president of the faculty. In his address at the opening of the Rock Island school, M. L. Knapp, speaking of Professor Richards, said: "His office of late years, especially since he commenced public teaching, has been thronged with students, ranging from 20 to 40 in number, who have received daily instructions and examinations in the various branches of the medical sciences."

In the spring of 1849, he was suspected of having in his office the body of a young woman which had been removed from a recent grave in the neighborhood. Having given assurance that the body was not in the building, he resisted the efforts of a mob to search the house, and a bullet, fired by a member of the mob, passed through his shoulder, and caused such injury to the nerves that his right arm was permanently paralyzed. When the medical school at Rock Island was moved to Davenport, Iowa, in 1849, Richards remained on the faculty as dean and professor of theory and practice of medicine, and when later, in 1850, the school again moved, now to Keokuk, Iowa, he continued to occupy the same chair.

When Nichols Hard, (q. v.) of the Keokuk faculty died in 1851, Richards and Armor (q. v.) left the school because they could not endure the friction which arose among the faculty over the appointment of a successor. Richards then went to Dubuque, Iowa. Here he took an active part in the organization of the North-Western Medical Society, and was elected its first president, Jan. 11, 1853. He enjoyed this honor but a short time, dying in Dubuque, April 22, 1853, of pneumonia, aged 53 years.

After the loss of the use of his right arm in 1849, Richards learned to write well with his left hand, but he was restricted in his ability to practice medicine, and the experience seems to have left permanent effects on

the man. This appears in the affecting letter, written in 1850 to one of his earlier students, Dr. George A. Bunker, in which he appeals to his "boys" for financial aid.

This fragmentary information is all we have been able to find regarding G. W. Richards, but it is enough to convince us that he was no ordinary man, and that he was naturally a teacher able to attract and hold young men.

GEORGE H. WEAVER.

RICHARDSON, Alonzo Blair (1852-1903), eminent as an alienist and neurologist throughout the United States, and superintendent of the Government Hospital for the Insane at Washington, District of Columbia, died in that city on the evening of June 27, 1903, after but a few hours' illness. Dr. Richardson was born near Harrisonville, Scioto County, Ohio, September 11, 1852. Entering the Ohio University at Athens, Ohio, he remained two years, going thence to the Ohio Wesleyan University at Delaware, Ohio. In the fall of 1847 he attended his first course of lectures at a medical college in Cincinnati, Ohio, and the next year entered the Bellevue Hospital Medical College at New York City, where he was graduated in 1876. Returning to Ohio he accepted a position as assistant physician at the State Hospital, Athens, Ohio. In 1880 he was appointed superintendent. He was successively superintendent of the State Hospital, Columbus, Ohio; the State Hospital, Massillon, Ohio, and when occupying the same post at the Government Hospital, Washington, he obtained government grants for the enlargement and improvement of the latter. In 1892 he was, without solicitation or suggestion on his part, unanimously elected to the superintendency of the State Hospital in Columbus, Ohio, and retained this position until the completion of the new State Hospital at Massillon, Ohio, in 1898. He had been one of the board of constructors of that institution from its inception and had largely shaped its plans.

Amid the multiplied demands of his position he continued an enthusiastic student. He must be counted among the foremost of those who have led in the notable amelioration and improvement in the treatment of the insane that has taken place. Despite his busy life in other respects, he found time to contribute to some of the leading journals of the time. Insanity and its causes among the American troops in the Philippines and Cuban campaigns formed some of the subjects from his ready pen. Dr. Richardson was a member of the Columbus, Ohio, Academy of Medicine, the Ohio State Medical Society, the New York Medico-Legal Society, and the American Medico-psychological Association, of which he was elected president.

Dr. Richardson was professor of mental diseases in both Columbian and Georgetown Universities, in Washington. He was survived by a widow, Julia Dean Richardson, and four children, Dr. William W., Mrs. W. G. Neff, Edith Harris, and Helen.

CHARLES H. CLARK.

RICHARDSON, James Henry (1823-1910), the first graduate in medicine at the University of Toronto, was born at Presque Isle, October 16, 1823. His grandfather had served in the British Navy and came to Canada in 1785, when he received an appointment in the merchant marine service. His father, James Richardson, was born at Kingston, served during the War of 1812 under Sir James Yeo and in May, 1814, lost an arm at the shoulder, at the capture of Oswego by the British. The mother of James Henry Richardson was the second daughter of John Dennis, a well known United Empire Loyalist, who came to Little York about the beginning of the century.

James H. Richardson began his medical studies in 1841, with Dr. Rolph (q. v.), then living in Rochester, New York, and remained with him two years. He then attended, as a matriculated student, the first course of lectures delivered by the medical faculty of King's College. In 1844 he went to England and studied at Guy's Hospital for three years, spending the summer of 1846 at the hospitals and in attendance on lectures in Paris. He obtained his diploma at the Royal College of Surgeons, England, in 1847, being the first Canadian to receive that honor. He then returned to Toronto and commenced practice. In 1848 he took the degree of M. B. at King's College. In 1850 he was appointed professor of anatomy, in the newly constituted medical department of Toronto University, and held this chair until the department was abolished in 1853. Some years later he accepted the chair of anatomy in the Toronto School of Medicine, and at the organization of the medical faculty of the Toronto University was again appointed professor of anatomy, resigning in 1902.

Dr. Richardson took great interest in the volunteer force and was, successively, sur-

geon of the Field Artillery, the Merchant's Company and the Tenth Royal Regiment. After twenty years of continuous service he retired, retaining the rank of Surgeon-Major. During the time of his service he was an enthusiastic and successful rifle shot, receiving, in 1861, the first prize ever competed for in Toronto at long range. The prize was presented to him by General Williams, afterwards the hero of Kars. He was all his life a lover of outdoor sports, such as yachting, curling and fishing, and to this attributed the good health which he enjoyed. In the last named sport he passed his summer vacations from place to place, at almost every noted fishing camp in the Dominion, from Cape Breton to the rivers and shores of Lake Superior. On these vacation expeditions he never carried any surgical appliances, and on one occasion it happened that he met a French-Canadian who was in most urgent need of relief by the use of a catheter. While the doctor was wondering how he could help him, his eye fell upon a goose's wing, used for dusting. He took the quills, cut them in convenient sections, and uniting them together, end for end, fixed the joints with shoemaker's wax. In this way he fashioned a catheter, and by it relieved the suffering of the Frenchman, who considered that his life had been saved and whose gratitude was unbounded.

Dr. Richardson married Miss Mary Skirving, of Scotland, who became known as an active philanthropist. They had three daughters and four sons. One son, W. A. Richardson, entered the medical profession, and at one time had charge of the Royal Jubilee Hospital at Victoria, B. C. In 1903 a dinner was given Dr. Richardson by the medical profession of Toronto and he was presented with an oil painting of himself. He died of old age, January 15, 1910.

RICHARDSON, Joseph Gibbons (1836-1886), microscopist of Philadelphia, was born in Philadelphia, January 10, 1836, his family being of the Society of Friends and of English descent. He took his M. D. from the University of Pennsylvania in 1862, and after serving as resident physician at the Wills Hospital and the Pennsylvania Hospital, he settled in practice at Union Springs, New York, where he remained five years. Returning to Philadelphia in 1868, he devoted himself to medical microscopy and became microscopist to the Pennsylvania Hospital and visiting physician to the Presbyterian Hospital. In 1877 he was elected professor of hygiene in the medical department of the University of Pennsylvania. He held the positions of secretary of the biological and microscopical section of the Academy of Natural Sciences; member of the College of Physicians of Philadelphia and the Pathological Society, and was a delegate to the International Medical Congress. Dr. Richardson contributed frequently to the leading medical periodicals, some of his papers being: "Cellular Structure of the Red Blood Corpuscle"; "Identity of Red Blood Corpuscles in Various Races of Mankind"; "Detection of Elastic Tissue in the Sputum of Phthisis." His most important work was his "Handbook of Medical Microscopy," a book of 333 pages, published in 1871.

He died of apoplexy at the age of fifty, November 13, 1886.

RICHARDSON, Maurice Howe (1851-1912), Boston surgeon, was born in Athol, Massachusetts, December 31, 1851, and died in Boston, July 31, 1912. He was the son of Nathan Henry and Martha Ann Barber Richardson, of New England descent. When he was eleven the family moved to Fitchburg, where he was graduated at the High School; he took his A. B. at Harvard in 1873, and the following year taught in the Salem High School, where he studied with Dr. Edward B. Peirson for a year, and then entered the Harvard Medical School, second year, and received an M. D. in 1877. On July 10, 1879, he married Margaret White Peirson, daughter of Dr. Peirson, and one of his former High School pupils. They had four sons among whom were Drs. Edward Peirson and Henry Barber and two daughters. Dr. Richardson began his career as a private assistant to the demonstrator of anatomy at the Harvard Medical School, after resigning the position of surgical house officer at the Massachusetts General Hospital. His great desire was to be a surgeon and the most direct route to practice was through the dissecting room. He was later demonstrator and then assistant professor of anatomy. He served under Oliver Wendell Holmes (q. v.), who resigned as professor of anatomy in 1882. In 1895 Richardson became assistant professor of clinical surgery, and in 1907 he was made Moseley Professor of Surgery. He was surgeon to out-patients at the Massachusetts General Hospital in 1882 and visiting surgeon in 1886. In 1911, when a rearrangement of the surgical staff was made with continuity

of the service, he was made surgeon-in-chief, a position which he held up to death. During his early practice he was surgeon to the Carney Hospital, and consulting surgeon to other hospitals in Boston, and in various New England towns. His work outside of anatomy lay along clinical lines, and his surgery grew out of his superior anatomical training and experience as a surgical assistant. His originality lay in his ready adaptation of sound surgical principles and extensive anatomical knowledge to the many new problems created by the antisepsic era which dawned as he entered the field. When he began his work abdominal surgery meant little more than an occasional ovariotomy; the surgery of the appendix, the gall bladder and the stomach did not exist.

He wrote from the fullness of large personal clinical experiences, and as he worked and wrote abdominal surgery grew "pari passu."

One of his first papers describes a gastrotomy in 1886, for a set of false teeth low down in the esophagus. He opened the stomach and pulled the plate out through the cardiac end and through the stomach, the first gastrotomy for the removal of a foreign body in the esophagus. In 1887 he reported fifteen laparotomies; in addition to the case just mentioned nine were ovariotomies. When R. H. Fitz (q. v.) pointed out the relation of the appendix to perityphlitis and peritonitis, Richardson was quick to see its surgical importance and became an early champion of operative treatment; his relationship with Fitz remained intimate through life. In 1892 he was able to draw conclusions from eighty-one of these cases, forty of which were treated by operation; in 1894 he had 181 cases, and in 1898 as many as 757. From the study of his acute cases he was early convinced of the need for the removal of an appendix, the subject of previous attacks. His numerous papers on the appendix educated the profession in the diagnosis and the demand for early surgical intervention. Numerous papers also testify to his keen interest in diseases of the gall-bladder and biliary system. His first successful cholecystotomy was published in 1889. A second paper in 1892 reported ten operative cases. From this time on the diagnostic and surgical difficulties presented by these cases formed the subject of repeated communications which remain a substantial part of the foundation on which surgery of the biliary tract rests today. His various papers cover nearly the entire range of abdominal surgery, as well as other surgical subjects. Papers may be particularly mentioned on the stomach, pyloroplasty, pylorectomy and especially a successful total gastrectomy (1898); on pancreatitis and pancreatic cysts; on intestinal obstruction, intestinal resection, lateral anastomosis and idiopathic dilatation of the colon; on omentopexy, and on tuberculosis of the mesenteric glands; on nephrectomy, nephrorrhaphy, renal stone; intra-peritoneal cystotomy, ureteroplasty, ureteral implantation; on ovarian tumor with twisted pedicle, extra-uterine pregnancy, the surgical treatment of fibroids, and cancer of the uterus. He was at one time much interested in cranial and nerve surgery, shown by writings on brain tumor, removal of the Gasserian ganglion, nerve suture and spasmodic torticollis. Other subjects were: "Diverticulitis of the Oesophagus, With Two Cases of Successful Resection," "Cancer of the Breast and Acute and Chronic Empyema."

Later studies deal more with surgery in its wider aspects, its dangers and responsibilities; the relation of the surgeon to his patient, and his profession; the importance of an alert conservatism. In these he sounded a note of warning to a profession flushed by its successes in the new fields. A systematic treatise on surgery of the abdomen was planned and partly worked out, but never finished. His most comprehensive articles were a contribution to Park's "Surgery by American Authors," 1895; on "Surgery of the Abdomen and Hernia," and to "Dennis' System of Surgery" in 1896 on "Surgery of the Alimentary Tract."

He had a large practice, and never sought to make life easy, being ever ready to respond promptly to any call to operate in nearby towns or at a distance, trips both time-consuming and exhausting. He subscribed to and used the Corey Hill Hospital, Brookline, in 1904, but in the later years he distributed his patients in several small hospitals. Added to a strenuous private practice were hospital practice and teaching in the medical school, and the result was that day after day was spent in vain effort to catch up with his engagements; writing was done customarily in the early morning, or at intervals between operating.

As a teacher his talents lay in clinical lectures and demonstrations, and he was at his best demonstrating a case, or an anatomical region, or a method, before students, illustrating by rapid accurate blackboard sketches, often using both hands. His personality inspired and stimulated students, and few will

forget his insistence on the responsibilities and dangers of surgery, and on the importance of exact knowledge of anatomy and living pathology.

He frequently attended medical societies, and wrote for journals covering a wide range of subjects. He was original, incisive and notably frank in acknowledging mistakes.

Dr. Richardson was a member of the American Medical Association, chairman of its surgical section, in 1904, a member of the Southern Surgical Association, and president of the American Surgical Association in 1902, and a charter member of the International Surgical Society.

Physically he was well adapted to the strain and demands of his life. As a young man his strength and endurance were remarkable, and were well shown by his walking in a single day from Fitchburg to the top of Monadnock Mountain and back, nearly sixty miles; he swam across Vineyard Sound, and also the nine miles from Salem to Magnolia. His chief relaxations were music and outdoor pursuits. He took up successfully the piano, the flute, the 'cello, and the bassoon. Later years limited his playing to the piano during evening visits to the Corey Hill Hospital. He was fond of sea and woods, and in summer got never failing recreation from evenings and Sundays at Marion, spent chiefly on the water, fishing for bluefish or squeteague. Many fall vacations were spent in the Adirondacks, often with R. H. Fitz, taking long walks over mountain trails. His place at Eastham on Cape Cod had a particular charm for him. His principal occupations were walking along the ocean dunes or the bay, fishing or clamming expeditions along the shore, and searches for arrowheads in the plowed fields. The coastwise shipping, the activities of the weir fishermen, the wreckage along the beaches, or the changing picture of migrating fowls were sources of unfailing interest.

He died after a heavy day's operating, in sleep, July 30, 1912.

EDWARD PEIRSON RICHARDSON.

RICHARDSON, Tobias Gibson (1827-1892), author of "Elements of Human Anatomy," son of William A. and Symia Higgins Richardson of Louisville, Kentucky, was a student of Samuel D. Gross (q. v.), and graduated M. D. from the medical department of the University of Louisiana, 1848, where for some years he was professor of anatomy and later professor of surgery. He was also a member of the College of Physicians of Philadelphia and of the American Surgical Association. His chief writings appeared in the "North American Medical and Chirurgical Review," the "New Orleans Medical and Surgical Journal," the "Transactions of the American Medical Association," and in those of the American Surgical Association. The chief are: "Injuries of the Knee-Joint," "Transylvania Journal of Medicine," vol. x, 2; "A Case in Which Death resulted from the Thompsonian Practice, with an Autopsy," "Ibid."; "An Essay on Tenotomy with Illustrative Cases," "Western Journal of Medicine"; "Report on Statistics of Hernia, with New Operation for the Radical Cure," "Semi-Monthly News," vol. i, 1859; "Six Operations for Strangulated Hernia, Five of Which Had Favorable Issue."

In 1841 he "extirpated successfully the parotid gland. He amputated both legs at the hip-joint, at one time, in the same subject and the patient recovered, growing afterwards, extremely fat." (This was years prior to the use of anesthetics or antiseptics). In 1854, while demonstrator of anatomy in the University of Louisville, Richardson published his work entitled "Elements of Human Anatomy: General, Descriptive and Practical" (1854). This was the first and only systematic treatise of the kind ever published in the valley of the Mississippi. It consisted of one volume, octavo, seven hundred and thirty-four pages and two hundred and sixty-nine illustrations, with several marked improvements in the arrangement of its subjects, and with the unique feature of "substituting English for Latin terms, wherever this appeared to be practicable and judicious." Dr. Richardson subsequently became a professor in one of the schools of Philadelphia. He did his best work, however, in New Orleans, where he occupied the chair of surgery in the Tulane University, and was visiting physician to the Charity Hospital.

Richardson was elected president of the American Medical Association at Buffalo, in 1878.

His first wife was Sarah E., a daughter of Dr. Charles Wilkins Short (q. v.), a prominent physician of Kentucky, after whom the Shortia was named. Mrs. Richardson, on her way up the Mississippi to join her husband, was drowned with her three children, below Vicksburg, through the destruction of the steamboat by fire.

Several years after the loss of his wife he married Cora Slocum, a relative of the Brashear family of Kentucky, and after his

death, in 1892, Mrs. Richardson contributed $170,000 to build a memorial addition to the Tulane University in memory of her husband, and at her death she made a further bequest of $25,000.

AUGUST SCHACHNER.

RICHMOND, John Lambert (1785-1855), who was destined to perform the first recorded successful Cesarean section in the United States, was the son of Nathaniel and Susannah Lambert Richmond, and was born April 5, 1785, on a farm near Chesterfield, Massachusetts. When he was three years old his parents moved to Western New York. With the exception of two weeks' schooling which he received at a country school, all his education was self-acquired. His people were very poor, supporting themselves by hard labor. In his leisure hours, and also while at work, he carried books with him, and never idled away a moment. He married, early in life, a woman who appreciated his talents, and aided him in every way to develop them. His wife would copy lessons from books on pieces of paper which she would pin to his sleeves so that he might study while at work. It is said that most of his knowledge of Latin and Greek was acquired in that way. By incessant effort he succeeded in getting a license to perform the functions of a Baptist minister (1816). On Sundays he preached in the open air or in a barn, while he continued his menial labors during the week to support his family. Finally he turned his eyes westward, where many of his friends had found new homes. Through many hardships he reached Pittsburg, where he took a flatboat (1817), which brought him and his family to Cincinnati. On Main street, near the Ohio River, Isaac Drake, father of Dr. Daniel Drake, (q. v.) conducted a store. In the second story of the building the Medical College of Ohio had its home (1820-22), and here, Richmond, applying for work, was made janitor of the College. Envying the students in their acquisition of knowledge, he finally offered to Dr. Drake half of his meagre salary for the privilege of attending lectures. Drake, mindful of his own struggles with poverty, paved the way for Richmond, so that on April 4, 1822, he received his diploma at the first Commencement of the college. He presented a thesis on "Euonymus Carolinensis," (Indian arrow-wood), which received praise from the faculty. He began his career in Newtown, Ohio, and in 1825 was appointed surgeon of the Second Regiment, Ohio State Militia. Richmond did not abandon the pulpit. Every Sunday he preached in a little church in Cluff Road, near Newtown, Ohio, and it was during the service, Sunday evening, April 22, 1827, that Richmond was summoned to perform a surgical feat which will preserve his name for all time. He was called to see a colored woman who had been in labor about thirty hours, and was having almost continuous convulsions. The Little Miami River was in flood and he was obliged to row a skiff in order to reach his patient seven miles away. There he found a stout primipara with a septate vagina and undilated os, having regular labor pains that were followed by convulsions, fainting spells and progressive weakness. For four hours he endeavored to "prevent the convulsions and recruit the system," giving sulphuric ether and laudanum by the mouth, and applying flannel, wet with hot spirits, to the feet. As the patient's strength was giving out, and being unable to get assistance because of the flood and the darkness of the night, he got consent to operate, as the only means of saving his patient's life. He says:

"With only a case of common pocket instruments, about one o'clock at night, I commenced the Cesarean section. Here I must take the liberty to digress from my subject, and relate the condition of the house, which was made of logs that were green, and put together not more than a week before. The crevices were not chinked, there was no chimney, nor chamber floor. The night was stormy and windy, insomuch that the assistants had to hold blankets to keep the candles from being blown out. Under these circumstances it is hard to conceive the state of my feelings, when I was convinced that the patient must die, or the operation be performed."

Dr. Richmond employed the usual incision, but, having no assistance, he found great difficulty in delivering the child, it being large, and the mother very fat. The child's back presented at the incision through the placenta, and it was impossible to dislodge the head from the pelvis. The patient was unable to endure attempts at version, and the doctor, supposing that the child was dead from the detachment of the placenta, decided "that a childless mother was better than a motherless child," made a transverse incision across the back of the fetus and delivered it. The operation was completed in the usual way, drainage being left in the lower angle of the abdominal wound. The patient never complained of

pain, and "began work in twenty-four days from the operation, and in the fifth week walked a mile and back the same day." The case was reported by Dr. Richmond in "Drake's Western Journal of the Medical and Physical Sciences," Cincinnati, Ohio, 1830, vol. iii, p. 435.

When the cholera broke out in Cincinnati, in 1831, Richmond was one of the first physicians who volunteered to take care of the victims. He worked day and night, contracted the disease, recovered, but was broken in health and spirit, and in 1834 he settled in Pendleton, Indiana, with a view to recover his health. One year later he removed to Indianapolis, where he practiced medicine and preached the gospel. In 1842 he suffered an attack of apoplexy, from which he lost the use of his left leg. Thus disabled, he made his home with some of his children in Covington, Fountain County, Indiana, giving up practice and the ministry, but never losing interest in either of them. Dr. Richmond's wife died in 1854, and he died in October, 1855. A monument to his memory was dedicated at Newtown, Ohio, with appropriate ceremonies, April 22, 1912.

A. G. Drury.

RICKETTS, Howard Taylor (1871-1910), pathologist of Chicago and Philadelphia, was born at Findlay, Ohio, on February 9, 1871. He attended the University of Nebraska, where he graduated in Arts, in 1894, and then took his medical course at the North-Western University Medical School, graduating in 1897. He spent two years as an interne in the Cook County Hospital, Chicago, and after this was, in turn, fellow and instructor in pathology in Rush Medical College. In 1901 he went abroad for study and laboratory work, and on his return in 1902 was appointed associate professor of pathology in the University of Chicago. Shortly before his death he was called to the chair of pathology in the University of Pennsylvania.

He was the ideal investigator, with an imagination which suggested possibilities and with the ability to work them out by the facts. In three separate lines of investigation he did original work of great value, doing much to advance our knowledge. The first was in the study of Blastomycosis or Oidiomycosis. He made a comprehensive survey of the subject, added new facts, and brought its many aspects into one whole. The second subject was taken up, when in 1906, while on an enforced holiday, from overwork, he became interested in Rocky Mountain Spotted Fever. About this disease there was much mystery; it occurred in certain districts in the spring of the year. Ricketts proved the incorrectness of certain views held as to the etiology, and showed that the disease was conveyed to man by the accidental bite of an infected adult tick. As only adult ticks gain access to man, and they occur only in the spring, the curious seasonal prevalence was explained. He also showed the part played by the gopher in keeping up the infection. His third particular contribution concerned typhus fever, which he studied in Mexico. He proved that the disease known as tabardillo in Mexico, is typhus fever, that it is transmitted by the body louse, and that it could be conveyed to monkeys, in which animals he also produced an immunity. The importance of these researches, particularly the discovery of the conveyance of the disease by the louse, needs no emphasis. He did valuable work in the investigation of problems relating to infection and immunity and wrote extensively on them. His work "Infection, Immunity and Serum Therapy" was published in 1906, by the American Medical Association Press.

His death resulted from an attack of typhus fever, the disease which he was studying, in Mexico City, May 3, 1910. This disease has taken a heavy toll from the profession, and among them no man of more promise than Ricketts. His name is another well worthy to be added to the rôle of honor in the annals of Medicine. His medical contributions were published by the Chicago Pathological Society, under the title "Contributions to Medical Science by Howard Taylor Ricketts" (1911, University of Chicago Press). In this a short sketch of his life is given by Dr. Hektoen. Other notices are: "Journal American Medical Association," 1910, volume liv, page 1640, and "Boston Medical and Surgical Journal, 1910, volume clxii, page 657.

Thomas McCrae.

Ricord Family.

The Ricord brothers, Jean Baptiste, Alexander and Philippe, were grandsons of a distinguished physician of Marseilles, France, and sons of a once wealthy ship-owner, a member of the Compagnie des Indes, who fled to Italy during the French revolution, and from there to Guadeloupe, West Indies, finally settling in Baltimore, Maryland, in 1790.

Alexander Ricord was born in Baltimore, Maryland, in 1798, and died in Paris, France, October 3, 1876. He was educated in his native city, removed to France in order to study under Cuvier, and received his diploma as doctor of medicine in Paris, in 1824. He was assistant surgeon in the French navy, and correspondent of the Academy of Medicine, but devoted his life chiefly to natural history, received the decoration of the Legion of Honor in 1845, and contributed largely to scientific journals.

Jean Baptiste Ricord was born in Paris in 1777, and died in the island of Guadeloupe in 1837. He was educated in Italy, and settled in Baltimore with his father, having his medical education at the College of Physicians and Surgeons, New York, where he was in the same class with Theodoric Romeyn Beck. As his name is not to be found in the general catalogue of that institution, the inference is that he did not receive a degree. When his medical studies were finished in 1810, at the age of thirty-three, Dr. Ricord went to the West Indies for the purpose of making researches in botany and natural history. There he traveled and practiced medicine until he returned to New York. He was an accomplished scholar, musician and painter, and a member of various learned societies in France and the United States. Many of his writings were signed "Madiana," the name of his homestead in France. In addition to contributions to scientific and other journals, Dr. Ricord published "An Improved French Grammar" (New York, 1812), and "Recherches et expériences sur les poisson d'Amérique," illustrated by his own pencil (Bordeaux, 1826). He left many manuscripts that were not published.

Philippe Ricord, noted urologist, was born in Baltimore, Maryland, December 10, 1799. He was educated in Baltimore and Philadelphia, taking a course of scientific studies under his brother, Jean Baptiste Ricord, and beginning the study of medicine in Philadelphia. In 1820 he went to Paris, carrying with him a collection of plants and animals as a present to the National Museum. In March, 1826, he received the degree of M. D. and began to practice at Olivet, near Orleans, afterwards removing to Croüy-sur-Ourcq. In 1828 he returned to Paris and delivered courses of lectures on operative surgery, at La Pitié Hospital, supporting himself in this way. In 1831 he was appointed surgeon-in-chief to the Hospital de vénériens du Midi, a position he held until obliged to retire on account of age, in 1860. Here he made an international reputation as a genito-urinary surgeon; his researches on syphilis established a rational plan for treating that scourge of humanity; he differentiated gonorrhea from syphilis; he devised a new method of curing varicocele, and for performing urethroplasty he received the Monthyon prize in 1842. In 1852 Ricord became physician to Prince Napoleon, and was appointed consulting surgeon to the Emperor in 1869, attending him for the disease of the bladder from which he died. During the siege of Paris he was president of the Lazaretto, and gained fresh laurels, being raised to the rank of grand officer of the Legion of Honor, and receiving foreign decorations as well. Dr. Ricord wrote much, Fournier, his pupil and successor, editing many of his works, which were characterized by simplicity of style. His "Monographie du chancre," 1837, was a thorough and clear exposition of his doctrine. For many years he was known in Paris as "The great American doctor," and he always cherished a warm affection for his native land. He practiced even into his eighty-eighth year, when at last his mind gave way, and he died in Paris, October 21, 1889.

RIDDELL, John Leonard (1807-1867), physician, author and inventor, professor in the University of Louisiana, was born in Leyden, Massachusetts, February 20, 1807, of Scotch-Irish ancestry which could be traced back to the eighth century. He held his degrees of A. B. and A. M. from the Rensselaer Institute of Troy, New York, and began his career as lecturer on scientific subjects. In 1835 he was made adjunct professor of chemistry and botany in the Cincinnati Medical College, from which he received his M. D. in 1836. He published a catalogue of plants, in 1836, entitled "A Synopsis of the Flora of the Western States," the pioneer botany of that section of the country, and in 1836 he became professor of chemistry in the Medical Department of the University of Louisiana, a distinction which he enjoyed until his death.

His catalogue of Louisiana plants assures to him the discovery of several new, or unobserved, species, one genus being called for him, Riddellia (Riddellia tagetina, Nuttall). In 1838 the President of the United States appointed Dr. Riddell melter and refiner for New Orleans, as a recognition of the creditable work just performed in a scientific exploration conducted in Texas; his incumbency

in this office lasted until 1849. In 1844 he was one of a commission recommended by the governor and legislature to devise a means for protecting New Orleans from overflow from the Mississippi River. About this period he became devoted to microscopy and invented the binocular microscope, as noted on page 273, volume xvi, edition nine, of the "Encyclopædia Britannica." According to Herringshaw's "Encyclopedia of American Biography" he was the discoverer of the microscopical characteristics of the blood and black vomit in yellow fever.

Dr. Riddell was a frequent contributor to the "New Orleans Medical and Surgical Journar," among his publications being noted "Probable Constitution of Matter and Laws of Motion, as Deducible From, and Explanatory of, the Physical Phenomena of Nature," 1845, volume ii, and "Nature of Miasma and Contagion," volume xvi, 1859.

He died in New Orleans, October 7, 1867.

JANE GREY ROGERS.

RIDGELY, Frederick (1757-1824), surgeon of the Revolution, first instructor in Transylvania University, was born at Elk Ridge, Anne Arundel County, Maryland, May 25, 1757, receiving his academic training at the Academy of Newark, Delaware, and beginning to study medicine in his seventeenth year, under Dr. Philip Thomas, of Fredericktown. His studies were interrupted by the Revolution. At the age of nineteen we find him surgeon to a corps of riflemen raised in the upper counties of Virginia and adjoining Maryland. With these he arrived before Boston a few days after the Battle of Bunker Hill, June, 1775. He steadfastly followed the Army of Washington through the trying times of 1776, and in 1777 Maryland honored him by the surgeoncy of the Fourth Maryland Regulars. When the British Army evacuated Philadelphia he resigned to attend a course of lectures under Drs. Shippen, Kuhn and Rush. His friendship with Dr. Rush, to whom he bore, in appearance and manners, a striking resemblance, began prior to his matriculation and lasted for life. He was not permitted to remain long enough to obtain his degree, for early in 1779 he was appointed surgeon to a vessel about to sail with letters of marque and reprisal from that port. The ship made a short cruise off the coast of Virginia, when falling in with an enemy of superior size, she was chased into the Chesapeake and after a severe engagement, captured. As his vessel struck her colors, he jumped overboard and made his escape by swimming two miles to shore. He re-entered the Army and continued as medical officer until the close of the war.

After cessation of hostilities he began the practice of medicine between Annapolis and Baltimore, but being of an adventurous turn, he joined the tide of emigration westward, arriving in Lexington in 1790. Soon after he began to practice he was appointed surgeon-general to the army commanded by General Wayne, and served in the decisive campaign of 1794; finally bidding farewell to military life, he again began practice in Lexington, where he remained more than thirty years. He devoted much of his time to instruction, and his "shop" was thronged with pupils, many of whom afterwards became the most distinguished medical men in the west, among them, Benjamin Winslow Dudley (q. v.), the most successful lithotomist in the State, and Walter Brashear (q. v.), who did the first successful hip-joint amputation in the world.

To Ridgely is due the honor of having been the first clinical and didactic instructor west of the Allegheny Mountains. He, with Samuel Brown (q. v.), was the first teacher of "physic" in the Transylvania University. In 1799 he was made professor of materia medica, midwifery and practice of "physic" in the University. Dr. Charles Wilkins Short (q. v.) refers to "His unwearied assiduities in the discharge of his professional duties."

He died while on a visit to his daughter at Dayton, Ohio, on November 21, 1824.

AUGUST SCHACHNER.

RIGGS, John M (1811-1885), for whom Riggs' disease of the gums was named, and the first to extract a tooth under an anesthetic, was the seventh child of John and Mary Beecher Riggs. He was born in Seymour, Connecticut, October 25, 1811. His parents were both natives of Oxford, Connecticut, and were well-to-do farmers of Revolutionary stock and English ancestry. He had no middle name, but when in college he wrote his name with "M." No one knows why. When he was at home on a visit his father said to him: "I see you write your name with an 'M'; what does that stand for?" "Mankey," replied young Riggs. But he never told why. Young Riggs' early boyhood was spent at the home of his parents, where he attended a district school and assisted with the farm work, which, however, was distasteful to him. Being of a mechanical disposition, he was fre-

quently found engaged in building stone fences and walls about the farm. In those days facilities for obtaining implements were scanty; therefore, when a tool was needed about the farm, young Riggs went to the forge and made it. Thus he early acquired proficiency in blacksmithing and stone masonry.

He was of a studious turn, and in 1835 entered Washington (now Trinity) College at Hartford, with the idea of becoming an Episcopal clergyman. Dr. Riggs was a man of positive views, and generally had an opinion of his own, which he did not hesitate to express. When the graduating exercises were being held at Trinity College in 1837 the bishop who preached the baccalaureate sermon chose for his subject "The Trinity." At the close of his discourse Dr. Riggs advanced and greeted the bishop by saying: "I believe in one God, and one God only; I do not believe in three, and I'll be —— if I will preach it." The bishop, much astonished, informed him he would hardly qualify to preach the Episcopal faith. Upon receiving the A. B. degree young Riggs began teaching. He was principal of the Brown School, formerly known as the Stone School of Hartford. This position he filled most acceptably for two years, when, still desiring to better his condition, he took a partial course at the Jefferson Medical College at Philadelphia, and then turned his attention to dentistry, which he studied with Dr. Horace Wells (q. v.) at Hartford, where he began practice about 1840 and continued until his death. He was awarded especial honors by the Baltimore College of Dental Surgery, which conferred the honorary degree of Doctor of Dental Surgery upon him in 1879. He was also a clinical lecturer at Harvard University dental department. In 1849 he discovered or originated a method (entirely surgical) of treatment of the disease known to the profession as pyorrhoea alveolaris, and his methods attracted such attention that his name was given to the disease, and for years it has been and is still called Riggs' disease. His treatment required the use of small instruments, worked in his case with remarkable skill and deftness of touch, sometimes down to the extreme points of the roots of the teeth. Dr. L. C. Taylor says: "Dr. Riggs was so enthusiastic in the general hygiene of the mouth that he made the claim to me in 1876 that if we would clean the teeth well enough and as often as circumstances required, we would have no decay. Dr. Riggs may well be called the 'original father of hygienic care of the mouth'." He was a member of the Connecticut State Dental Association and its president in 1867, and a member of the American Dental Association, before which, in 1865, he gave his views and a clinic, and of the Connecticut Valley Dental Association, which he joined in 1865, and of which he was president in 1871-72.

Dr. Riggs was a participant at the first demonstration of the application of anesthesia to dental surgery at the office of Dr. Horace Wells, December 11, 1844, when Wells inhaled the nitrous oxid gas prepared by G. Q. Colton, and Dr. Riggs extracted the first tooth ever extracted under an anesthetic.

Dr. Riggs was never married. He was strictly a professional man and possessed little business ability, and was very careless in keeping his accounts. On October 25, 1885, he took to his bed with acute bronchitis and pneumonia, which caused his death November 11, 1885.

WALTER L. BURRAGE.

RILEY, John Campbell (1828-1879), of Washington, D. C., author of a text-book on materia medica, a son of Dr. Joshua Riley, of Georgetown, District of Columbia, he was born there on December 15, 1828, and graduated A. B. (1848) and A. M. (1851) from Georgetown College, District of Columbia. After receiving his medical degree from Columbian College, District of Columbia, in 1851, he immediately began to practice, and in 1859 succeeded his father in the chair of materia medica, therapeutics and pharmacy in the National Medical College, District of Columbia, continuing to lecture without interruption until within a short time of his death. His text-book of materia medica and therapeutics, with deserved reputation for its conciseness and suitability to the needs of the students, was translated into Japanese (Tokio, 1872). He was popular as a lecturer, and his great familiarity with his subject made his lessons of value and interest to his hearers. For many years he was dean of the faculty; he was a member of the Medical Society and Medical Association of the District of Columbia, and on the Committee to revise the Pharmacopœia of the United States, of which latter he was secretary. He was consulting physician to Providence Hospital, to the Central Free Dispensary and the Washington Eye and Ear Infirmary. His "Compendium of Materia Medica and Therapeutics," Philadelphia, 1869, was translated into Japanese at Tokio in 1872.

Assiduous devotion to duty may no doubt be accepted as one of the causes of his death. Uremic coma and convulsions from Bright's Disease were the final symptoms. He was much esteemed as a useful citizen and had many personal friends when he died on February 22, 1879.

DANIEL SMITH LAMB.

Ring, Charles Augustus (1854-1907), professor of obstetrics in the Medical School of Maine. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila., 1912, vol. ii, p. 324.

RISLEY, Samuel Doty (1845-1920), ophthalmologist and otologist of Philadelphia, was born January 16, 1845 in Cincinnati, Ohio, a descendant of that branch of the family which settled in Connecticut in colonial times. As a lad of seventeen he enlisted in the Iowa Volunteers and served throughout the Civil War. In 1865 he entered Iowa State University, leaving two years later to study medicine under Dr. Lucius French of Davenport; in 1870 he was graduated from the medical school of the University of Pennsylvania. Having selected ophthalmology as his specialty, he entered the Wills Eye Hospital as clinical assistant and the following year became chief of the eye clinic at the University of Pennsylvania, in association with William F. Norris (q. v.). Later he was lecturer on ophthalmoscopy. In 1890, he became surgeon to Wills Eye Hospital and alumni manager of the University Hospital. Risley also was ophthalmic and aural surgeon to the Episcopal Hospital during 1874-1882, professor of ophthalmology at the Philadelphia Polyclinic, and manager and ophthalmic surgeon to the Training School for Feeble-Minded at Elwyn.

Although he contributed to the literature of oto-rhinology, he wrote mainly on ophthalmology, and his "Rise and Progress of Ophthalmology in Philadelphia," read before the College of Physicians, was a masterful symposium. Among his one hundred and fifty publications, "Hygiene of the Eye" in the Norris and Oliver system was the most illuminating of its day; his painstaking research with B. A. Randall upon twelve hundred pupils from primary to high school grades resulted in "Weak Eyes in the Public Schools of Philadelphia" in which the change from astigmatism to myopia in a growing child, under improper ocular hygiene, was demonstrated, creating a world wide stir and stimulating the acceptance, by the public school boards of many cities, of his formulated equation for the number of square feet of window space necessary for the adequate lighting of lecture rooms. The "Comparative Value of the Mydriatics" is still one of the most precise and instructive of some two hundred investigations in that field. His appreciation of the bearing of general dyscrasiae upon ocular affections is a sane backward swing from the extreme claims of the too limited and mechanical view of the correction of errors of refraction and motility. His application of this to the care and even prevention of beginning cataract was a notable part of his sane and successful practice. In 1874 the Wagner Free Institute of Science bestowed its Ph. D. upon him on account of his work as professor of astronomy and the University of Iowa, gave its A. M., and the Susquehanna University, its LL. D. He was president of the American Academy of Medicine in 1900 and of the American Ophthalmological Society in 1908 and was a fellow of the College of Physicians of Philadelphia.

In 1871, Dr. Risley married Emma D. Thompson; she died in 1904. They had three daughters and two sons, one of whom, Dr. Norman Risley, an oculist of New Bedford, Massachusetts, died recently. In 1907, he married Julia Louise Robinson, by whom he had a son and a daughter. Active almost to the end, Dr. Risley died after an attack of lethargic encephalitis, March 31, 1920.

LLOYD B. WHITHAM.

Rives, Landon Cabell (1790-1870), obstetrician of Cincinnati. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 984.

ROBBINS, James Watson (1801-1879), early medical botanist, of Uxbridge, Massachusetts, was the first to describe "Potamogeton Robbinsii," a species of pondweed, and Asa Gray gave the plant his name. The son of Ammi Ruhama and Salome R. Robbins, he was born at Colebrook, Connecticut, November 18, 1801. He fitted for college with Reverend Ralph Emerson, of Norfolk, Connecticut, and after graduating from Yale in 1822, taught school in Enfield, Connecticut, and then served as a private tutor in the family of William L. Brent, of Pamunkey Creek, Maryland, Brent at that time being a member of Congress from Louisiana. Removing with Mr. Brent to Georgetown, D. C., he spent the year 1824 in his family. During

the two years following he had a school in the family of Dr. Chandler Payton, of Gordonsdale, Virginia, numbering among his pupils Robert E. Lee, later General of the Confederate armies, Dr. Robbins fitting him for West Point. Dr. Robbins acquired a love for the study of botany while in college and through life continued a devotee to this science, taking up the study of medicine with Professor Eli Ives (q. v.), one of the founders of the Yale Medical School, a pioneer botanist. Robbins received an M. D. from Yale in 1828; next year he made an extended tour through the New England States, collecting specimens of their flora, the expense of the expedition being borne by William Oates of Ipswich, Massachusetts, Robbins retaining one-half of the specimens collected as a recompense.

Dr. Robbins settled in practice in Uxbridge, Massachusetts, in 1830, continuing his residence in that town until 1859, all the time adding to his valuable herbarium while practicing medicine. He was a fellow of the Massachusetts Medical Society from 1836 to the time of his death. In 1859 he became physician to the Pewabic copper mines, on the shore of Lake Superior. Here he remained four years, practicing and botanizing and being in correspondence with the leading botanists of this country and Europe. To enlarge his botanical knowledge, an expedition was made through Michigan and Illinois, down the Mississippi to New Orleans and thence to Cuba, for a three months' stay, Robbins all the time collecting specimens. Returning to Uxbridge, he resumed the practice of medicine, in which he continued until his death, January 10, 1879, at the age of seventy-seven. It was said that he rendered valuable aid to Professor Gray in his botanical researches, especially in the genus Potamogeton. The plants collected by the government exploration of the fortieth parallel were submitted to him for classification and arrangement. At the time of his death he was engaged in the examination of a large collection of the flora of the state of California. Excessive modesty and a retiring disposition prevented his work from being generally known.

WALTER L. BURRAGE.

ROBERTS, Algernon Sydney (1855-1896), Philadelphia orthopedist, had an unfortunately brief professional career. He died in 1896, only nineteen years after his graduation in medicine. The verdict of prominent orthopedic men, like Dr. James K. Young, Dr. De Forest Willard (q. v.) and Dr. Newton M. Shaffer, as well as others like Dr. S. Weir Mitchell and Dr. W. W. Keen, was to the effect that he was not only a man of great promise, but that he left a distinct mark on orthopedic surgery.

His personal contributions to orthopedics were: "Club-foot; Talipes," "Roberts and Ketch in the Reference Hand-book of the Medical Sciences," William Wood and Company; "Pott's Disease," Keating's Cyclopaedia, vol. iii; "The Spinal Arthropathies" "Medical News," February 14, 1885; "Clinical Lectures on Orthopaedic Surgery, Club-foot," "Medical News," March 13 and 20, 1886; "Clinical Lectures on Orthopaedic Surgery; Knock-knee and Bow-legs, with remarks upon Rhachitis," "Medical News," February 4 and 18, 1888; "Flat-foot; A New Plantar Spring for its Relief," "Medical and Surgical Reporter," April 6, 1889; "Chronic Articular Osteitis of the Knee-joint, and Description of a New Mechanical Splint," "Medical News," July 26, 1884; "Deformity of the Forearm and Hand," "Annals of Surgery," February, 1886.

Dr. Roberts was born in Philadelphia, December 19, 1855. He was graduated in medicine from the University of Pennsylvania, Medical Department, in 1877, and received much of his inspiration and impetus from that school at a time when important changes in medical education were just taking place. Immediately upon graduation he received several hospital appointments. In connection with his position in the University Hospital, he personally established an orthopedic apparatus shop which has been continued with an endowment as the A. Sydney Roberts Apparatus Fund. He gave the first lectures upon orthopedic surgery delivered in Philadelphia. He became a fellow of the College of Physicians of Philadelphia, a fellow and vice-president of the American Orthopedic Association, a member of the Philadelphia County Medical Society, the Neurological Society, the state medical society, the American Medical Association, and a delegate to the International Medical Congress in London.

Dr. James K. Young of Philadelphia, who was an assistant of Dr. Roberts and who succeeded him in several hospital appointments, has provided an excellent biographical sketch as an introduction to a volume of Dr. Roberts' published writings, entitled "Contributions to Orthopedic Surgery," Philadelphia, 1898.

Dr. Roberts died at Haliden Hill, Rhode Island, August 17, 1896.

H. WINNETT ORR.

ROBERTS, John Bingham (1852-1924), of Philadelphia, prominent surgeon and author of medical treatises, was born in Philadelphia, February 29, 1852, the son of Caleb Cresson and Helen Bingham Roberts. He was graduated in arts from the University of Pennsylvania in 1871 and from the Jefferson Medical College in 1874; he also received the M. D. of the University of Pennsylvania in 1888. In 1882, Dr. Roberts proposed and assisted in the establishment of the Philadelphia Polyclinic and College for graduates in medicine, serving as secretary; in 1890, he became president and opened the Polyclinic Hospital in the same year. He resigned in 1899 but continued as professor of anatomy and surgery in the College until its merger into the Medico-Chirurgical College Graduate School of Medicine, University of Pennsylvania, in 1918, when he became professor of surgery in the new school. In 1920, he was made professor emeritus of surgery. During 1890-1900, he was also professor of surgery at the Woman's Medical College.

Actively interested in many medical associations, he served as president of the American Surgical Association, the American Academy of Medicine (1904), the American College of Surgeons (1920), the Philadelphia County Medical Society, and the Medical Society of the State of Pennsylvania. Among his contributions to surgical literature are: "Paracentesis of Pericardium," 1880, "Compend of Anatomy," 1881, "Surgery of the Human Brain," 1885, "Manual of Modern Surgery," 1890, "Modern Medicine and Homeopathy," 1895, "Fractures of Radius," 1897, "Modern Treatment of Fractures," 1899, "Deformities of the Face," 1900, "Treatise on Fractures" (with James A. Kelly), 1915, and "War Surgery of the Face," 1918.

Dr. Roberts died from injuries sustained when he was run down by a motor truck, November 28, 1924. He was survived by his wife, Mary Eleanor Roberts whom he married in 1897, and two sons and a daughter.

ROBERTS, Milton Josiah (1850-1893), of New York City, orthopedist, editor and teacher, was born in Ohio in 1850, was educated at Cornell University and at the University of the City of New York, where he took his M. D. in 1878. After serving a brief term as hospital interne, he took up his residence in New York, and as an assistant to Dr. Lewis A. Sayre (q. v.), became interested in orthopedic surgery. In this department he was professor in the Medical Department of the University of Vermont, and in the Post-Graduate Medical School, New York (1882-1887). In the interest of Listerian surgery, then coming into vogue, he founded a monthly publication, known as the "International Journal of Surgery and Antiseptics." Through its columns Roberts introduced to the profession not a few of his mechanical devices and new instruments which he had developed for use in bone and joint surgery. He was visiting orthopedic surgeon to the City Hospital and to Randall's Island, where he rendered valuable services in the treatment of deformed children. He was a member of the New York Orthopedic Society, New York Academy of Medicine, the New York State Medical Society, and the American Medical Association. His publications number ten titles in the Catalogue of the Surgeon-General's Library at Washington.

Dr. Roberts died of pneumonia and renal disease in New York City, April 26, 1893.

ROBERTS, William Currie (1810-1873), editor and writer of New York, was born in London, England, in 1810, and at the age of ten was brought to this country, where democratic customs and habits were so readily engrafted upon his nature that but few knew he was of foreign birth. He did not have the advantage of a collegiate education, but great attention was given to his mental training and in 1828 he began to study medicine with the distinguished surgeon, Valentine Mott (q. v.). During the years 1828, 1829, 1830, he attended medical lectures at the Geneva Medical College, and at the medical department of Rutgers' University; during the winter of 1830-31 at Philadelphia, and was graduated at the College of Physicians and Surgeons, New York, in 1832.

In 1835, in conjunction with several of his medical friends, he founded the New York Infirmary for the Diseases of Women and Children, doubtless the first special institute of its character established in New York; but, after a brief though useful existence, its doors were finally closed on account of lack of funds. In 1839 he served as physician at West Point; in 1844 he was physician to the Northern Dispensary, having charge of the department of Diseases of Women and Children and Nervous Disorders. In 1841, for

about a year, he edited the "New York Medical Gazette" and in this are to be found two of his papers: "Contributions to the Literary History and Pathology of Cholera Infantum" and "Thymic Enlargement." In 1846 he started the "Annalist," a journal which he continued to edit until 1848. His other literary efforts were the editing of four or five numbers of "Wood's Addenda to the Medico-Chirurgical Review," between July, 1847, and April, 1849, and in 1834, in connection with Dr. James B. Kissam, he translated Bourgery's "Minor Surgery." In 1835 he translated the work of the Chev. J. Sarlandière, ex-surgeon French Army and of the Military Hospital of Paris, which is entitled, "Systematized Anatomy: or Human Organography, in Synoptical Tables, with Numerous Plates for the Use of Universities, Faculties, and Schools of Medicine and Surgery, Academies of Painting, Sculpture and of the Royal Colleges." This is a large folio volume, beautifully illustrated with fifteen folio plates. Dr. Roberts' first monograph, a popular essay on "Vaccination," appeared in 1835, signed, "A Physician."

Dr. Roberts married in 1832 Matilda, daughter of Martin Hoffman, of New York. She died in 1839 leaving him two sons and a daughter. He died in December, 1873, having suffered for about a year from an organic affection of the heart.

ROBERTSON, Andrew (1716-1795), army surgeon of Virginia, was born in Scotland in 1716, and graduated from the University of Edinburgh, entering the British Army as a surgeon and serving three years in Flanders, and being present at the battle of Fontenoy in 1745. Ten years later he came with his regiment to America and went on the disastrous expedition against Fort Du Quesne. He escaped the carnage of Braddock's defeat with twenty men, who made their way, subsisting on acorns alone, to Dunbar's camp, to which the remnant of the Army under Colonel Washington had retreated. Soon after his return he resigned his commission and emigrated with his wife and child to Virginia, landing at Indian Banks in Richmond County, where he was entertained by a wealthy Scotch merchant, Mr. Glasscock. He prescribed, at the request of her father, for Mr. Glasscock's little daughter, who was then sick with measles, and it is said that this, his first patient, became his fourth wife in 1771. Dr. Robertson settled in Lancaster County and for many years enjoyed an extensive practice, acquiring a high reputation. In addition to fame he also acquired wealth, and was specially noted for his charity and attention to the indigent sick. He continued in active practice to the day of his death, which occurred on March 1, 1795.

He made several contributions to medical literature, and some of his articles were published in the "Medical Inquiries and Observations," London.

ROBERT M. SLAUGHTER.

ROBERTSON, Charles Archibald (1829-1880), ophthalmologist of Albany, New York, was born in Mobile, Alabama, on the fifteenth of October, 1829, being the son of Archibald T. Robertson, of New London, Connecticut, and Sarah Carnico, of Beverly, Massachusetts. His father was of Scotch, his mother of French and English descent. He studied at the Beverly Academy and Phillips Exeter Academy, at Exeter, New Hampshire, entering Harvard College in 1846, from which he received an A. B. in 1850. He began his medical studies at the Tremont Street Medical School, and was a special student of diseases of the chest, under Dr. Henry I. Bowditch (q. v.), when he also took up studies in skin diseases, under Dr. Silas M. Durkee. He attended lectures at and received his diploma from the Jefferson Medical College, Philadelphia, in 1853. Returning to Boston, he studied diseases of the eye and ear at the Perkins Institution for the Blind and at the Massachusetts Charitable Eye and Ear Infirmary, studies that were also pursued at Wills Hospital in Philadelphia. The next year and a half were spent in Europe for professional study and general travel; for four months he was under the instructions of the noted aurist of St. Mark's Hospital in Dublin —Sir William R. Wilde. At Paris he devoted himself to the teachings of Desmarres and Sichel, giving his time and studies to the clinics of these great masters. Robertson, on his return to this country, began practice with a preparation which is the fortune of few. The department which he selected was the diseases of the eye and ear, beginning at Boston in 1855, and soon after removing to the State of New York.

In 1861 he joined the medical staff of the Army, and was appointed surgeon of the One Hundred and Fifty-ninth Regiment of New York volunteers. He served with distinction in that regiment until 1863, being for a portion of the time division-surgeon in General Grover's Division, at Port Hudson. Owing

to ill health he resigned and returned north to resume practice in 1863, settling temporarily at Poughkeepsie, then removing to Albany, where he remained in practice till the time of his death, being the first regular oculist in this section of the state. He was surgeon in charge of the department of diseases of the eye and ear at St. Peter's Hospital, and ophthalmic and aural surgeon of the Albany Hospital. For years he was attending oculist at the Troy Hospital, and afterwards surgeon-in-chief of the Eye and Ear Relief. He held ever a leading place among American oculists, and was one of the founders of the American Ophthalmological Society; was a member of the International Ophthalmological Society, also of the American Otological Society, the Medical Society of the State of New York, and president of the Medical Society of the County of Albany. His literary taste was marked and his style clear, vigorous and incisive. His method of thought was simple and direct and moved with independence. His medical writings consisted of reports of cases and monographs.

Dr. Robertson married Ellen A. Fuller, of Cambridge, Massachusetts, in 1853.

He died April 1, 1880, of chronic pleurisy, which had confined him to his house and bed for nearly a year.

JAMES S. MOSHER.

ROBERTSON, William (1784-1844), founder of the Montreal School of Medicine, second son of James of Kindrochet, Perthshire, Scotland, a member of an old family in the Highlands, saw action during the Irish Rebellion, graduated in medicine in Edinburgh before he was of age, and as ship surgeon took passage for New York and New Orleans where he studied yellow fever. Returning to Scotland, he was appointed assistant surgeon to the 49th Regiment in Canada. On the way over, in 1806, the ship was wrecked off Nova Scotia, and he was cared for by Sir William Campbell, Chief Justice of Ontario, whose daughter, Elizabeth Amelia, became his bride in six weeks and later bore him twelve children. Settling in Canada, Dr. Robertson became surgeon to the 41st Regiment; served during the War of 1812; and in 1815 retired on half pay and began a practice—soon the largest in Montreal. In 1821, he was one of seven appointed by the city to assume the construction of the Montreal General Hospital. The next year finds him one of the famous quartette of doctors, William Robertson, William Caldwell, John Stevenson, and Andrew Holmes (q. v.), founding the Montreal School of Medicine in 1824 which, in 1829, became the Faculty of Medicine of McGill University. Robertson then was appointed head of the Faculty and professor of midwifery and diseases of children and was the first profesor in the University to lecture and conduct systematic teaching.

In 1842, he sought renewed health by visiting his native heath, but after an invalidism of two years, died July 18, 1844.

R. F. RUTTAN.

ROBINSON, Beverley (1844-1924), a general practitioner of New York City, author of essays on clinical medicine and the treatment of ordinary diseases, was born in Philadelphia, March 22, 1844, the son of Moncure and Charlotte Taylor Robinson. When he had taken his A. B. at the University of Pennsylvania he enlisted as a private in the Pennsylvania state militia. In 1872 he received an M. D. from the University of Paris, France, and after a year of study abroad settled in New York in practice, and was lecturer on clinical medicine at the Bellevue Hospital Medical College, 1877-1882, being made professor of the same subject in the latter year. At one time he spent six months at the Throat Hospital in London, England, receiving a diploma and considering himself a specialist in laryngology for a short time. He wrote a paper on nasal catarrh and allied diseases and another on inhalers and inhalants, but he gravitated back to general practice, serving the public as consulting physician to St. Luke's and the City hospitals, and writing frequently for the medical press on a variety of matters affecting the medical profession and the public health. His expression of opinion on these subjects was characterized by a mellowness and deliberation of his feelings and utterance that were most impressive. He had a host of warm friends. In 1922 he published "Every Day Reminiscences and Scenes, Grave and Gay, from the Retrospect of an Old Medical Practitioner", in "American Medicine," vol. xvii, 379-388. There are many entertaining stories in it of the life of a busy practitioner with a fashionable following in the great city of New York. Dr. Robinson took time from his engrossing professional duties to interest himself in prison reform, to the service of which he devoted his pen and his influence. He was a firm believer in the powerful effects of high personal character in the individual

and believed that cultivation of integrity of purpose, common sense and honor would bring to an end many of the evil and needless controversies of the day. He was, moreover, of a deeply religious nature, believing that religion should consist not only in forms and ceremonies but in everyday life and devotion to the principles of Christianity. In his professional eminence and private life he was a figure to inspire admiration for the rapidly disappearing general practitioner in medicine.

Dr. Robinson married Anna E. Foster of New York, April 8, 1875. They had two children.

He died at his home in New York, June 21, 1924, at the age of eighty.

WALTER L. BURRAGE.

ROBINSON, Charles (1818-1894), physician, lawyer, Governor of Kansas, was born in Hardwick, Massachusetts, July 21, 1818. His father was a farmer, a strong abolitionist, a descendant of John Robinson of Plymouth Colony. Charles was educated at Hadley and at Amherst College; his medical education was obtained at the Berkshire Medical Institution, where he took his M. D. in 1843, and at Woodstock, Vermont. He practiced at Belchertown and at Pittsfield, and opened a hospital at Springfield, Massachusetts. Dr. Robinson went to California by the overland route in 1849 and edited "Settler's and Miner's Tribune" in Sacramento in 1850. He took an active part in the riots of 1850 as an upholder of squatter sovereignty, was wounded and "while under indictment for conspiracy and murder" was elected to the Legislature. He was subsequently discharged by the court without trial. On returning to Massachusetts in 1852 he conducted the "News" in Fitchburg till June, 1854; then went to Kansas as confidential agent of the New England Emigrants' Aid Society, and settled in Lawrence, Kansas. He was a member of the Topeka convention that adopted a free-state constitution in 1855, and under it was elected Governor in 1856. He was arrested for treason and usurpation of office, tried on the latter charge and acquitted. He was elected Governor by the free-state party in 1858; the third time in 1859 under the Wyandotte constitution, and entered on his term of two years when Kansas became a state in 1861. While in office he organized most of the regiments for the Civil War and was known as the War Governor. He became superintendent of Haskell Institute, Lawrence, in 1887, and was instrumental in founding the University of Kansas.

Dr. Robinson married Sarah Tappan Doolittle, author, October 30, 1851, at Belchertown. She was the author of "Kansas and Its Exterior and Interior Life."

He died at his home near Leavenworth, Kansas, August 17, 1894.

WALTER L. BURRAGE.

ROBINSON, Fred Byron (1854-1910), anatomist and clinical surgeon of Chicago. The parents of Byron Robinson, William and Mary, were of English stock. They came to America in 1845, settling on a farm near Hollandale, Wisconsin. Byron Robinson was born there in 1854 and lived the life of a son of a small Wisconsin farmer until he went away to enter the University of Wisconsin. His education began in the little red country school, except that in those days in central Wisconsin the house was built of logs and was free of paint. When the log school had taken him as far as it could he went to the Mineral Point Seminary, through which he worked his way. He next entered the University of Wisconsin, from the literary department of which he was graduated with the degree of B. S. in 1878. During his senior year his application was rewarded by an appointment as assistant in the department of chemistry. In the autumn of 1878 he began work as a teacher in the high school at Ashland, Wisconsin. After that he taught at Black Earth, Wisconsin. While teaching he took up the study of medicine under Dr. U. P. Stair, as preceptor. His medical work was done at Rush Medical College, from which he received the degree of M. D. in 1882. No hospital interneship was possible by reason of his slender resources; therefore he went at once into a country practice at Grand Rapids, Wisconsin. Between 1882 and 1888 he divided his time between practicing medicine at Grand Rapids, gaining experience, as a foundation for his life work, and study in Europe, laying another part of the foundation for his professional career, and incidentally spending his savings. He returned from Europe in time to take up the teaching of anatomy and clinical surgery in the medical college of Toledo. In 1891 he came to Chicago and became a professor of gynecology in the Chicago Postgraduate Medical School. Later he became associated with the Illinois Medical College as professor of gynecology and abdominal surgery. He was for many years on the staffs of the

Woman's Hospital of Chicago and the Mary Thompson Hospital for Women and Children.

In 1894 he married Dr. Lucy Waite, head surgeon of the Mary Thompson Hospital,

His death occurred March 23, 1910, when he was at an age where he should have been just in the prime of life. On May 23, 1910, President Van Hise of the University of Wisconsin, members of the various colleges and hospitals with whom Dr. Robinson had been connected and members of different medical societies held public memorial exercises in the Whitney Opera House, Chicago.

While Byron Robinson was clinical surgeon in large practice, his fame rests upon his studies in anatomy and gross pathology. Dr. Senn said of his work: "Dr. Robinson's additions to our knowledge of the structures of the biliary and pancreatic ducts, the uretoovarian circle (Robinson's circle), the ureters (Robinson's three ureteral isthmuses), the great sympathetic nerve (the abdominal brain), and the peritoneum are of far reaching and scientific value. In the last edition of Da Costa's 'Gray's Anatomy' Dr. Robinson's name appears no less than forty times." He was the author of two volumes on practical intestinal surgery, a large volume on the peritoneum, a six hundred and sixty page book on the abdominal and pelvic brain and four books on various gynecological subjects. He worked four years on his chart illustrating the sympathetic nerve. The two men who more than any others influenced the life of Dr. Robinson were Lawson Tait and Nicholas Senn (q. v.). He came under the influence of the former when a young man. Those who knew Dr. Robinson in the early 90's had no trouble in recognizing the influence of Tait in Robinson's brusqueness of manner, intolerance of sham, outspokenness and habit of direct thinking, and fondness for knowledge of anatomy. In the later years of his life he was more influenced by Senn. Like Senn he burned out his life by hard work, outliving his long-time friend and preceptor by only a few years.

He was one of the most diligent men that I have ever known. Up to the very end of his life he dissected, did operative work on the cadaver and attended and made autopsies. He never permitted his office and operative work to take all of his time and energy, but, having set aside a part of his time for deadhouse and dissecting-room work, he adhered to his schedule. He had a good physique, a capacity for sustained effort, a resistless energy, a disregard of the point of view of those around him and an incapacity for appreciating the allurements of glamour and acclaim. He often neglected the sensibilities, the refinements or the prides of those around him. To them he was not generous, while, at the same time, he was not ungenerous. His mind was intent upon what he was trying to do, and it would not be diverted to any other consideration. It is easy for one, when in a philosophic vein, to understand all this, and yet failure to be understood and failure on his part to see the point of view of others lessened his opportunities, increased the difficulty of his work and robbed him of some merited reward.

WILLIAM A. EVANS.

ROBINSON, William Chaffee (1822-1872), of Portland, Maine, was born in Charlton, Massachusetts, November 27, 1822. Working hard as a boy, and as the result of the training of poverty, he developed great self-reliance and perseverance, and was powerfully ambitious to succeed. When almost a youth he was a teacher to pupils who were nearly all older than himself. At the age of twenty-three he studied medicine with Dr. John Ford, of Norwich, Connecticut, and was graduated at the New York University Medical School in 1849. Being then at the age of twenty-seven, Robinson made the acquaintance of a musician in Portland, of the same family name, went to that city, and established himself in a very promising locality, taking his chances with the other doctors. He obtained the position of City physician, which gave him an opportunity to ensure a large circle of political and influential friends for clients. In that position he had great success, gained in popularity, patronage and renown, and finally became one of the best and most beloved medical men. After seven years he was able to marry and soon obtained all the practice to which he could possibly attend. In 1866 he was chosen lecturer on materia medica at the Medical School of Maine, and professor in 1868. Two years later he was chosen professor of obstetrics and diseases of women, serving till his death in that position. In all of these positions he gained great local fame, and his numerous students carried away cheerful and instructive remembrances of his lectures. He was tall and handsome, shaved his upper lip, wore a long beard, and was famous for his witty remarks. He was an active member of the Maine Medical Association, and among his various papers contributed to its meetings

may be mentioned "A Case of Lithotomy in a Child of Twelve," and another one on "Materia Medica," Overwork in the year 1869 brought upon him an attack of paralysis, prostrating him for many months, yet he was finally able to resume practice. After another few months, however, gangrene of the left foot ensued, and the disease made constant progress despite amputation at the knee. With very remarkable fortitude he struggled on, conscious to the last day of his life, which was June 30, 1872.

JAMES A. SPALDING.

ROBY, Joseph (1807-1860), anatomist of Baltimore, a native of Boston, was born August 25, 1807. Graduating a Phi Beta Kappa man at Brown University, Providence, Rhode Island, in 1828, he began to study medicine in Boston under Drs. Jackson and Channing, distinguishing himself as an insatiable reader. He took his M. D. from Harvard University in 1831, joined the state medical society and settled in Boston. After serving Bowdoin and Dartmouth in a professorial capacity he moved to Baltimore in 1849 to accept the chair of anatomy in the University of Maryland. Roby's happiest days were passed in his "den" at the college, and he lingered around this spot during the last years of his life, as if drawn thither by some fascination, while the deadly consumption was consuming his frail body until a fatal hemorrhage cut short the slender thread of life on June 3, 1860. He was buried in Mount Auburn Cemetery, Cambridge, Mass. Many important improvements were made during his connection with the Baltimore school, and largely through his efforts, as, the introduction of gas into the dissecting-room, compulsory dissection and attendance upon clinics, and instruction in histology, pathology and the use of the microscope. He held the professorship of anatomy and surgery at Bowdoin College, Maine, 1838-1842; of theory and practice of medicine and pathological anatomy, Dartmouth College, New Hampshire, 1841-1849; of anatomy and physiology, University of Maryland, 1849-1859, and emeritus professor 1859-1860.

He left a widow and children when he died in 1860. EUGENE F. CORDELL.

ROCHESTER, Thomas Fortescue (1823-1887), professor of the practice of medicine in the University of Buffalo, was born in Rochester, New York, October 8, 1823, son of T. H. Rochester, Mayor of the city, and grandson of Nathaniel Rochester (1752-1813), born in Westmoreland County, Virginia, who was in the Continental Army, was prominent in the industrial and political life of North Carolina, Maryland and New York, and for whom the city of Rochester (formerly Falls Town) was named, and of which he was a founder. Thomas Fortescue received the degree of A. B. at Geneva College in 1845, and in 1848 was graduated M. D. at the University of Pennsylvania with a thesis entitled "Sulphuric Ether in Obstetric Practice." He served at Bellevue Hospital for a year, then went to Europe to study for a year and a half, and in 1851 settled in New York to practice. In 1853 he accepted the chair of practice of medicine in the University of Buffalo, and had a large consulting and general practice; he was attending physician to the Buffalo General Hospital and to the Sisters of Charity Hospital. He was president of the New York State Medical Society (1875-1876), and of the Buffalo Fine Arts Academy.

He wrote: "The Army Surgeon," Buffalo, 1863; and "Medical Men and Medical Matters in 1776," Albany, 1876.

Socially he was delightful, of fine appearance and charming manners. He had many friends and wielded a large influence in the community.

In 1852 he married Margaret Monroe, daughter of Bishop Delancey, first bishop of the diocese of Western New York; they had five children, one of whom, Dr. Delancey Rochester, was his father's successor in the chair of practice in the University of Buffalo. Dr. Rochester died at Buffalo, May 24, 1887.

M. D. MANN.

Rockwell, William Hayden (1800-1873), alienist, superintendent of the Brattleboro Asylum, Vermont. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 990.

RODGERS, John Kearny (1793-1851), the eldest son of a physician of Scotch descent, John Kearny Rodgers was born in the City of New York in 1793, and fortunately had a kindly biographer in Dr. S. D. Gross. When Rodgers was a Princeton student under Dr. Stanhope Smith (with whom he was not a favorite) the latter one day told him in a fit of anger that if he did not mend his ways he might as well shut up his books, for he could never become useful or dis-

tinguished, judging from his present behavior. To this the future surgeon promptly replied: "The world shall see, sir," and indeed the world did see. His ambition was stimulated, his dormant energies roused. He graduated A. B. at Princeton in 1811 and began his medical studies under Dr. Wright Post (q. v.), professor of anatomy in the College of Physicians and Surgeons, New York, where Rodgers graduated in 1816, yet even before that he had acted as demonstrator of anatomy for his master. After serving as house surgeon to the New York Hospital he went to London to study and became much interested in ophthalmic surgery, and very soon after his return established with his friend, Dr. Edward Delafield (q. v.), and others, the New York Eye Infirmary. In 1818 he was appointed demonstrator of anatomy in the College of Physicians and Surgeons, New York, and four years after surgeon to the New York Hospital, an office he had much coveted, and retained up to his death. As an operator his crowning triumph was the ligation, October 14, 1845, of the left subclavian artery just internal to the scalenus muscle on account of aneurysm, a feat which up to that time was universally regarded as impracticable. (N. Y. Jour. Med. and Collat. Sci. 1846, vii, 219.) True, the patient did not recover, but the operation was masterly and nothing was left undone to insure a favorable result. Conscientious in dealing with his patients, he never operated merely for the sake of operating. In consultations he was the wise counsellor and always a sympathizing and trusted friend and physician.

His death, November 9, 1851, was caused by a rare disease, phlebitis of the liver, followed by peritonitis. It is to be regretted that he left no record of his vast experience save the publication of a few brief medical papers. One of them is: "Ligature of the Left Subclavian Artery Within the Scalenus Muscle for Aneurysm," 1846.

RODMAN, William Louis (1858-1916), Philadelphia surgeon and founder of the National Board of Medical Examiners, was the son of General John Rodman, who for many years was Attorney-General of Kentucky. William was born in Frankfort, that state, September 27, 1858. He grew up in an ordered and cultured home and had his preliminary education at the Kentucky Military Institute, receiving there the degree of A. M. in 1875. The study of medicine was begun under the preceptorship of his uncle, Dr. James Rodman, and his cousin, Dr. W. B. Rodman, and he took his M. D. from the Jefferson Medical College, Philadelphia, in 1879. Then he served as interne in Jefferson Hospital, and entered the United States Army as acting assistant surgon, being stationed at Fort Sill for nearly two years. His army service gave him a military carriage that he bore through life.

In 1882 he married Beth C. Stewart, daughter of Dr. J. Q. A. Stewart, a Kentucky alienist. They had three children, a son, J. Stewart, following in his father's footsteps. After practicing for two years in Abilene, Texas, Dr. Rodman moved to Louisville and became demonstrator of surgery in the medical department of the University of Louisville, also clinical assistant to Dr. David W. Yandell (q. v.). Here he stayed from 1889 to 1893, when he took the chair of surgery in the Kentucky School of Medicine, Louisville. In September, 1898, having accepted the professorship of the principles of surgery and clinical surgery in the Medico-Chirurgical College of Philadelphia, he moved to that city to spend the rest of his life. From 1900 to 1908 Dr. Rodman held also the chair of surgery and clinical surgery in the Woman's Medical College of Pennsylvania at Philadelphia. One of his pupils there speaks of him as being a very good teacher, his ideas being logically arranged and well expressed. As a surgeon he was an irritable but skilful operator.

He had much public spirit, and served as president of the American Association of Medical Colleges in 1902 and 1903; his activities in this organization made possible the founding of the National Board of Examiners, for he was deeply interested in this project of standardization of examination for medical licensure and was instrumental in securing the financing of the work, and he addressed medical meetings in the promotion of the undertaking for several years, living to see it well established. He had a clear-cut, dignified style in speaking, set off with the grace and force of one whose native bent for oratory had been developed by practice. Dr. Rodman was active in the affairs of the American Medical Association, acting as chairman of the section of surgery in 1897 and delivering the oration, on gastric ulcer, in 1900, and he was a member of the board of trustees from 1900 to 1903. Finally, he became president of that organization in 1915, and died while yet in office, March 8, 1916, from pneumonia.

He wrote a paper on "Cancer of the Breast," read before the British Medical Association in 1904, and a monograph on "Diseases of the Mammary Gland," which appeared in 1908, besides furnishing chapters to Keen's "System of Surgery" and Bryant's "Practice of Surgery," and articles for the medical journals. He was an authority on the surgical treatment of mammary cancer, and he was interested in the Society for the Control of Cancer.

ROE, John Orlando (1848-1915), laryngologist, of Rochester, New York, the son of Stephen Smith Roe and Hannah Sophronia Randall, was born at Patchogue, Long Island, February 3, 1848. His early education was gained at the schools of his native town, at the Hudson River Institute, at the Wilbraham Academy of Massachusetts, and at the University of Michigan, Ann Arbor. Entering upon the study of medicine at the medical department of the last-named institution, he received the degree of M. D. in 1870. Coming to New York, he matriculated at the College of Physicians and Surgeons, receiving his diploma in the class of 1871, and securing a prize for his graduating thesis. He remained in New York for a year, taking graduate courses, and returned to Rochester in 1872, where he at once entered upon the special practice of diseases of the upper air passages. He soon recognized the necessity for a more thorough course of training, and to secure this he went abroad, where he devoted two years of particularly earnest work in the clinics of Vienna, London and Berlin. Returning to Rochester, Dr. Roe quickly made a position for himself which was not long in being generally recognized. He acquired a large practice, and was for many years laryngologist to the Rochester Hospital. He was elected a fellow of the American Laryngological Association at its first meeting, held in New York City, June 10, 11 and 12, 1879. He was elected president of the Association in 1898. He had also been at different times president of the Medical Society of the State of New York, of the Central New York Medical Association, the Rochester Academy of Medicine, and the Rochester Pathological Society. He was one of the founders of the Rochester Academy of Medicine, and was deeply interested in the work of building up a medical library for the use of the members.

Dr. Roe was a member of the Seventh International Medical Congress in London, England; the Eighth International Medical Congress in Copenhagen, Denmark; the Ninth International Medical Congress in Washington, D. C., on which occasion he was secretary of the section in laryngology; the Tenth International Medical Congress in Berlin, Germany, and the Pan-American Medical Congress in Washington D. C. He received the degree of LL. D. from his alma mater, the University of Michigan, in 1913.

In the rectification of nasal deformities he was skilful, especially in the submucous method as applied to the septum and the nasal bones.

The productions of his pen show admirable literary ability combined with ripe scholarship. His early contributions, especially in the department of the neuroses of the upper air passages, are classic. Through him and a few other members of the American Laryngological Association the vasomotor disturbances of the nasal region were carefully studied long before the subject had attracted serious attention abroad.

In 1895 Dr. Roe married Miss Jane Pomeroy of Troy, Pennsylvania, who survived him.

He died at his home in Rochester, New York, December 24, 1915.

ROGERS, Arthur Curtis (1856-1917), of Minnesota, a pioneer and leader in work for defectives, was born near Decorah, Iowa, July 17, 1856, son of Ansel Rogers and Cynthia Benedict. He received the degree of B. S. from Earlham College, Richmond, Indiana, in 1877 (the college gave him an LL. D. in 1905). He became steward in the State School for Feebleminded, Glenwood, Iowa, and grew so interested in the work that he determined to study medicine, and entered the State University of Iowa, graduating M. D. in 1883. He became head physician and principal of the State School for Indians, Forest Grove, Oregon, and two years later (1885) took up his life work as superintendent of the Minnesota School for Feeble-minded and Colony for Epileptics, Faribault, holding this throughout his life. During his superintendency the school grew from about fifty inmates to more than 1,600, with a teaching force of some 300.

He was secretary and treasurer of the American Association for the Study of the Feeble-Minded and of the American Association for the Study of Epilepsy; he was chairman of the Committee on Defectives, National Conference Charities and Corrections in 1889 and in 1902, and chairman of a sub-committee on defectives of the Committee on Eu-

genics, American Breeders' Association. He was president of the Minnesota Conference Charities and Corrections, 1898, and of the Minnesota Academy Social Science, 1911. He was a member of the commission to revise the Minnesota laws relating to children. He was editor-in-chief of the "Journal of Psycho-Asthenics."

In 1882 Dr. Rogers married Phoebe Coffin, of Columbia, Ohio, the date of the marriage being the same as that of his birth, July 17.

His death, due to pernicious anemia, occurred at the University Hospital, Minneapolis, Minnesota, January 2, 1917.

ROGERS, Henry Raymond (1822-1901), one of Dunkirk's most prominent citizens, who lived to be the oldest physician in Chautauqua County, New York, was born in Winslow, Maine, in 1822, and was a graduate of the Jefferson Medical College in Philadelphia in 1851. He became distinguished for his scientific investigations, and his original views of matter and the laws which govern it attracted the attention of scientific men. His theory was that all physical phenomena, without exception, are transformations of electrical energy. His articles on astronomy and physics had a wide circulation both in the United States and Europe and provoked much discussion. He was a member of the Chautauqua County Historical Society and the American Association for the Advancement of Science. For some years before his death, however, he left off practicing in order to devote all his time to literary work. He wrote among other papers: "New and Original Theories of the Great Physical Forces," 1878; "Cholera, Its Nature and Cure," published in 1903.

He died at his home in Dunkirk, New York, in 1901, after a short illness.

ROGERS, James Blythe (1802-1852), chemist and physician, the eldest son of Dr. Patrick Kerr Rogers (q. v.), was born in Philadelphia, February 11, 1802, and died there, June 15, 1852. He was educated at William and Mary College and at the University of Maryland in 1822, and soon became professor of chemistry in Washington Medical College in Baltimore, then in the Cincinnati Medical College, then in the Franklin School of Philadelphia, and in 1847-52 filled the chair of chemistry in the University of Pennsylvania. For several years Dr. Rogers assisted in the chemical and geological surveys of Virginia and Pennsylvania and published some valuable papers in the scientific journals and, with his brother Robert, was editor of the last American reprint of Edward Turner's "Elements of Chemistry," also William Gregory's "Outlines of Organic Chemistry," in one volume (1846). S. D. Gross (q. v.) says of him, "he was a brilliant teacher, and decidedly the most excellent lecturer on chemistry, I have ever listened to." A brother was Professor William B. Rogers, who assisted in founding the Massachusetts Institute of Technology, and was its first president, and other brothers were Robert E. Rogers, (q. v.) professor of chemistry in the Jefferson Medical College, and Henry D. Rogers, state geologist of Pennsylvania and regius professor of natural history in the University of Glasgow.

WALTER L. BURRAGE.

ROGERS, John Coleman (1781-1855). Coleman Rogers, as he was called generally, was born March 6, 1781, in Culpeper County, Virginia. In 1787 his father emigrated to Kentucky, and settled in Fayette County, at a place known as Bryant's Station, about five miles from Lexington. Coleman Rogers was the seventh among eleven sons and one daughter. Although six feet two inches in height and weighing usually one hundred and eighty pounds, he was one of the smallest of the family. In early life he suffered from bronchial trouble. But little is known of his history prior to his twenty-first year, but it is probable he went only to the local schools. At the age of twenty-one he began to study medicine with Dr. Samuel Brown (q. v.), of Lexington. In 1803 he went to Philadelphia (making the journey on horseback in twenty-three days), where he remained eighteen months for lectures at the University of Pennsylvania. While there he was the private pupil of Dr. Charles Caldwell (q. v.). Although qualified, poverty prevented his graduating before leaving Philadelphia. On his return to Kentucky he settled in Danville, and formed a partnership with Dr. Ephraim McDowell (q. v.). In November, 1805, he married Jane Farrar, and in 1810 returned to Fayette County, where he remained until 1816, when he again went to Philadelphia and eventually received an M. D. in 1817 from the University of Pennsylvania. While there he was offered the position of adjunct professor of anatomy in the medical department of Transylvania University; this he declined. In 1818 he removed to Cincinnati, Ohio, where he became associated with Dr. Daniel Drake

(q. v.) in practice, and was a colleague of Drake in the Medical College of Ohio, and one of the original incorporators of that institution. He was vice-president and professor of surgery at its organization. In 1821 he removed to Newport, Kentucky, then a village opposite Cincinnati; settling finally, 1823, in Louisville, Kentucky, where he remained. He was for ten years surgeon to the Marine Hospital in Louisville.

In 1832, in connection with Dr. Harrison, Dr. Powell and Dr. A. G. Smith, he organized the Louisville Medical Institute and was appointed professor of anatomy. For more than fifty years he was in active and successful practice.

He died, February 16, 1855, aged seventy-four years.

A. G. Drury.

ROGERS, Joseph Goodwin (1841-1908), constructor and superintendent of Indiana hospitals for the insane, was born in Madison, Indiana, November 23, 1841, and was the son of Dr. Joseph H. D. and Abby Goodwin Lane Rogers. His father was a giant in stature and of great force of character as befitted a pioneer physician in Indiana and Kentucky at an early day. His mother was a gentlewoman of refined and cultivated tastes. From his father he inherited a sturdy, forceful and strong character; from his mother refined tastes, high ideals and an artistic temperament. His education was largely derived from his mother, as at the early age of eight he suffered from Pott's disease and for many years was confined to bed. He became a diligent student and an omnivorous reader of good books and was self-taught to a remarkable degree. When eighteen he began to study medicine under his father's dictation, later at the Cincinnati College of Medicine, and Bellevue Hospital Medical College, New York, from the latter receiving his M. D. in 1864. He served as a surgeon in a military hospital until the close of the Civil War, and then went abroad for two years of travel and study. He fitted himself to practice as an ophthalmologist and upon his return, entered upon a successful career at Madison, Indiana, for many years. In 1879 he was offered the superintendency of the Indiana Hospital for the insane at Indianapolis, which, after much hesitation and at great personal sacrifice, he accepted as a duty owed to the public. For four years he devoted himself to the reorganization and development of the hospital and freed it from political and partisan interference. He proved to be too much in advance of public opinion and he retired with honor at last rather than sacrifice his high ideals of right and duty. His special fitness for hospital management, however, had been proved, and in 1883 he was selected by the Governor of Indiana, and a newly appointed commission, medical engineer for the erection of three hospitals for the insane. He entered upon his duties with great enthusiasm and energy and at the end of five years had planned and erected the Northern Hospital at Logansport, the Eastern Hospital at Richmond, and the Southern Hospital at Evansville, Indiana, three modern hospitals, fully abreast of the most advanced ideas of hospital construction. Singularly enough they were exponents of three distinct hospital types, the pavilion, the cottage and the radiate plans respectively, and stand today as monuments of his ability and versatility. When he had completed his labors as medical engineer, he was offered the choice of the superintendency of whichever one of the hospitals he might prefer. He chose the hospital at Logansport, and from May, 1888, until the day of his death, continued in medical charge of it. Under his skilled direction the Northern Hospital, in physical economy, humane methods and medical care, reached the highest development. It rarely falls to the lot of any one man to plan and build a hospital and afterward to direct and develop it for a period of twenty years. He never rested from his labors and was devoted to his work, body and soul.

Amid all his varied duties and lines of activity, he remained essentially a physician whose professional attainments were of the highest order and he ever kept abreast of the progress of general medicine and psychiatry.

His writings include a long list of reports, state papers and monographs, all of which were carefully prepared, thoroughly treated and adequately expressed in classic English. In 1885 he received the honorary degree of Ph.D. from Hanover College. In 1900 he was president of the American Medico-Psychological Association at the Richmond meeting and delivered an illuminating address on "Hospital Construction." For four years he filled the chair of materia medica and therapeutics at the Indiana Medical College at Indianapolis.

In June, 1872, he married Margaret Watson of Bedford, Pennsylvania, who with three daughters and two sons survived him. His home life was perfect and in it as husband

and parent he found the greatest happiness of his life.

He died, April 11, 1908, of nephritic disease after a long illness at the Northern Indiana Hospital, Logansport.

HENRY M. HURD.

ROGERS, Lewis (1812-1875), noted teacher of medicine of Louisville, was born in Fayette County, near Lexington, Kentucky, October 22, 1812, the son of Joseph and Anne Early Rogers. David W. Yandell (q. v.) called Lewis "the most practical of all scientific teachers, the most scientific of all practical teachers" he had known. He had his A. B. from Transylvania University in 1831 and in that year the same degree from Georgetown College. His M. D. was from the University of Pennsylvania in 1836. The Louisville Medical Institute was opened in 1836-7 and he became assistant to the chair of clinical medicine. He was also assistant to the chair of clinical medicine in Louisville Medical Institute, 1836-1849; professor of medicine and therapeutics, medical department of University of Louisville (former Medical Institute), 1849-1856-7; professor of theory and practice of medicine, medical department, University of Louisville, 1857-1867. During the term of 1867-68 he again occupied the chair of materia medica and therapeutics; but resigned at its close on account of an iritis that had troubled him for some time. This iritis finally necessitated iridectomy, which was performed by Dr. Agnew.

His writings included: "Introductory Lecture before the Medical Class of the University of Louisville," delivered November 4, 1850, Louisville, 1850; "Facts and Reminiscences of the Medical History of Kentucky" (an address before the Kentucky State Medical Society), Louisville, 1873; "Climate in Pulmonary Consumption, and California as a Health Resort," 16 pages 8°, Louisville, 1874.

Lewis Rogers was about six feet two inches tall, but of spare build. He was brilliant, humorous, practical and scientific; a shrug of his shoulders often expressed more than a sentence. His painstaking observation and logical reasoning qualified him for the accurate diagnosing for which he was noted.

In 1839 he married Mary Eliza Thurston and had seven children, one of whom, Coleman, became a doctor.

His final illness was a malignant disease of the liver; first diagnosed by himself on account of certain nodules that appeared on the ribs. He died June 17, 1875. Yandell said, "He left an armor none can wear." His portrait was in the possession of his daughter, Mrs. George Gaulbert, of Louisville.

RICHARD ALEXANDER BATE.

ROGERS, Patrick Kerr (1776-1828), professor of natural history and chemistry at William and Mary College, eldest son of Robert and Sarah Kerr Rogers, was born in Ireland, in 1776. His early education was obtained from an aunt, Margaret Rogers, who taught a school on his paternal estate. The small schoolhouse had walls of clay, a roof of thatch and clay seats covered with a bit of carpet. In spite of these primitive surroundings, he there laid the foundation of a broad education. Later his classical education was carried on by an uncle, who was a clergyman. Growing up, he entered a counting house in Dublin, and in 1798, the year of the Irish Rebellion, he wrote articles hostile to the government and was obliged to flee to Londonderry, in order to escape arrest. In those days many Irish refugees fled to Philadelphia, and Rogers went there from Londonderry, arriving at Philadelphia in August, 1798, having been eighty-four days on the way. He studied chemistry with James Woodhouse, famous for commercializing coal for the State of Pennsylvania, and in 1799 studied medicine with Rush, Shippen, Wistar and Barton. His friendship for Barton was so great that he named his son William Barton Rogers. In 1802 he received an M. D. from the University of Pennsylvania, his thesis being entitled "Liriodendron tulipifera."

In 1801 he married Hanna Blythe, daughter of James Blythe, of Glasgow, and she is described as "an affectionate, cheerful woman." In 1803 he tried hard to practice medicine, but owed $3,000 in small debts, contracted in studying for his degree. Later in that year his father died and Rogers went back to Ireland to settle his estate. On his return he brought back enough money to pay off his indebtedness, but leaving him with nothing to live on beyond what he could earn. In order to improve his financial condition, Rogers started a lending library, of several thousand volumes, mostly loaned by friends. This was a failure and at the end of a couple of years he found himself in debt for about $4,000 for rent, advertising, etc. He then started a full course of chemical lectures for popular audiences; this was not successful and undermined his practice. What business

had a doctor to talk on chemistry? What good could that do to his patients? He was so low spirited that nothing but sensitiveness prevented his seeking relief in benevolent charities. Friends at last induced him to try practice elsewhere and he went to Baltimore, but even there was pursued by creditors. In 1819 he was elected orator by the Medical and Chirurgical Faculty of Maryland and on May 21, 1819, applying for a professorship in the University of Virginia, his qualifications and capacity for teaching were finally recognized and he was appointed professor of natural history and chemistry at William and Mary College, Williamsburg, Virginia, in place of Robert Hare (q. v.), who had resigned. He settled in Williamsburg in October, 1819, and lived there the rest of his life, dying of malarial fever, August 1, 1828.

He was an earnest teacher, made all of his apparatus for experiments and illustrated them himself and was much helped in his work by his five sons, who were unusually clever with wood working and in fashioning metal for tools. Four of these sons became famous as scientists: William Barton, founder of the Massachusetts Institute of Technology and its first president; James Blythe (q. v.) and Robert Empie (q. v.), holders of M. D. degrees, professors of chemistry in Philadelphia; and Henry Darwin, Regius Professor of Geology and Natural History in the University of Glasgow.

JAMES A. SPALDING.

ROGERS, Robert Empie (1813-1884), chemist of Philadelphia, was born in Baltimore, Maryland, March 29, 1813. The middle name "Empie" was assumed by him "as a lasting token of his greatful appreciation of parental care bestowed upon him at William and Mary College after the death of his mother . . . . . by the Reverend Doctor Adam P. Empie and his wife." His father, Patrick Kerr Rogers, (q. v.), came to Philadelphia from Ireland in August, 1798. The early education of Robert was directed by his father, and upon his death by his brothers, James and William, at a school conducted by them at Windsor, Maryland, where he remained until 1828, when he matriculated at Dickinson College, leaving there to continue his studies at William and Mary College. In 1831 he went to New England and was employed in railway surveying and later in delivering lectures on chemistry in New York City, resuming surveying near Boston, Massachusetts, in 1833. In the fall of 1833 he entered the Medical School of the University of Pennsylvania and became a pupil of Professor Robert Hare, (q. v.) and in March, 1836, received his medical degree. The title of his graduating thesis was "Experiments on the blood, together with some new facts in regard to animal and vegetable structure illustrative of many of the most important phenomena of organic life, among them respiration, animal heat, venous circulation, secretion, and nutrition." It was published in the "American Journal of the Medical Sciences" (vol. xviii, p. 277). Most attention was given the phenomena of respiration. It received from the faculty to which it was presented the recognition it so well deserved. After the attainment of the doctorate it soon became apparent that the practice of his profession was not to his taste. He gave himself wholly to chemistry, and from 1836 to 1842 served as chemist to the first Geological Survey of Pennsylvania, his brother Henry being the head of that survey. He was acting instructor of chemistry in the University of Virginia, 1841-42, when elected professor of general and applied chemistry and materia medica in the same University, a position he held until 1852. On March 13, 1843, he married Fanny Montgomery, daughter of Joseph S. Lewis of Philadelphia, Pennsylvania.

During this period, in conjunction with his brothers, James B. (q.v.) and William, he was active in various chemical investigations of unusual merit that were published in the scientific journals. With his brother James he compiled, from the works of Turner and Gregory, a volume designed to be a textbook on chemistry; it included both inorganic and organic chemistry, and appeared in 1846. The first shock in the way of dissolution of the close affinity of these interesting brothers happened in 1852, when James, then professor of chemistry in the University of Pennsylvania, was claimed by death. But his work was to be transferred to a brother, for in August of the same year Robert was elected to fill his place and in 1856 became the dean of the medical faculty.

In 1855 he published his American edition of Lehmann's monumental work on physiological chemistry. In the years immediately following he was engaged in expert work of various kinds, and from 1862 to 1863 was an acting assistant surgeon, U. S. A., assigned to the Satterlee Military Hospital in Philadelphia, where in January of the latter year he sustained the loss of his right hand while

showing a woman the dangers which beset her in feeding a steam mangle. A deeper sorrow came to him when his wife died, Febuary 21, 1863. He remarried in April, 1866, Delia Saunders of Providence, R. I.

About the time of the removal of the University of Pennsylvania to the west side of the Schuylkill River, certain proposed changes in the administration of the medical school caused more or less discontent among the professors. Dr. Rogers, after serving for a period of a quarter of a century, quietly resigned, and accepted in 1877 an election to a similar chair in Jefferson Medical College. This position he held until 1884, when he became emeritus professor, but he died shortly after, in the same year, September 6, aged seventy-one years. His second wife had preceded him the year before.

Dr. Rogers was a member of the Academy of Natural Sciences of Philadelphia and was most active in its affairs. He helped to organize the Association of American Geologists and Naturalists in 1840, which in 1847 became the American Association for the Advancement of Science. He was a member of the American Medical Association; the American Philosophical Society and served in the council; a fellow of the College of Physicians; chemist to the gas trust of Philadelphia from 1872-1884; member of the annual U. S. Assay Commission 1874-79; member of the Franklin Institute, and its president 1875-1879.

He was an original member of the National Academy of Sciences.

Besides his literary contributions, Doctor Rogers was also "author of many inventions, notable among them, the Rogers and Black steam boiler, and of several modifications and improvements of electric apparatus."

Dr. Rogers was popular among men; he was considerate of others; he had an intense interest in the welfare of his fellow beings. "He was a man of courage, ever ready to serve in any emergency, and it is no little matter to know that three times in his life he rescued, at imminent peril to himself, from certain death persons wholly unknown to him." As a teacher he was beloved by his students. His lecture-room was always crowded. His gift of diction and his dexterity in experiment were very superior attractions, "and, what is more, he always showed a deep, sincere, personal interest in the every-day life and conduct of those whom he taught."

EWING JORDAN.

ROGERS, Stephen (1826-1878), practitioner of New York City and of Chili, South America, and author of a very early work on extrauterine pregnancy, was born at Tyre, Seneca County, New York, in January, 1826. His parents were poor farmers and Stephen worked on the farm and finally put himself through the Seneca Falls Academy, paying his board by keeping the village store. He taught school and was able to take a one year course at the Lyons Union School and studied medicine under a Doctor Pierce of that town and at the Columbus Medical College, where he received a medical degree. He was appointed chief surgeon to the Panama Railroad Company, and was on the Isthmus until the railroad was finished, losing his health and going to Havana, Cuba, to recuperate. His industry and savings enabled him to pay all the money he had borrowed for his education and to discharge the debt on his father's farm. He had a most active mind and while convalescing perfected himself in the Spanish language, so that when he was appointed chief surgeon to the corps of engineers who were constructing the Southern Railroad of Chili he was able to pass an examination with honor at the University of Chili, Santiago. There he married a daughter of Honorable Samuel F. Haveland in 1857.

Returning shortly afterwards to New York City, he practiced until 1875. In 1867 he published his most important work, "Extra Uterine Foetation and Gestation and the Early Signs Which Characterize It," 16 pages, Collins, Philadelphia. From his work and that of his associates in the coroner's office in New York, he reached the conclusion that death from rupured extrauterine pregnancy was not infrequent, contrary to the views on the subject that were held at that time; a survey of the literature showed the reports of many cases and these were detailed; he thought that extrauterine foetation previous to the third month was always fatal. The symptoms and signs were carefully described and the proposition established that when the diagnosis has been made there is no choice of methods of treatment; the peritoneal cavity must be opened and the bleeding vessels tied. Rogers deserved well of the profession for laying down at this early date the rules for life saving that are in force today, but it was left for the advent of asepsis before his advice was generally adopted. In addition to the work mentioned, he wrote several papers on medico-legal subjects that were read before the Medico-Legal Society of New York.

notably on "Hereditary Diseases of the Nervous System" and "Can Choloform Be Used to Facilitate Robbery," and "The Influence of Methomania (Dipsomania) upon Business and Criminal Responsibility."

His health failing, Doctor Rogers was obliged to seek a change of climate and returned to Chili in 1875, as United States Commissioner to the International Exhibition of Chili, settling in Santiago, but visiting New York with his wife in 1876 to report upon his commission and to attend the Centennial Exhibition at Philadelphia. He had a large practice in Santiago when he died while on a trip to Valparaiso, May 23, 1878.

Dr. Rogers was president of the Medico-Legal Society of New York for two years, a member of the New York Academy of Medicine and of the New York County Medical Society and an honorary fellow of the Obstetrical Society of Berlin.

ROHE, George Henry (1851-1899), psychiatrist of Maryland. His parents, John and Mary Fuchs Rohé, were natives of Bohemia of humble origin. Their son was born in Baltimore on the twenty-sixth of January, 1851, and educated in the public schools, afterwards studying medicine with Doctor F. Erich and taking his M. D. at the University of Maryland in 1873. For some years he was connected with the United States Signal Service, but while in Boston studied dermatology under Doctor E. Wigglesworth (q. v.), and after leaving the Signal Service became assistant to Doctor Erich, professor of gynecology in the College of Physicians and Surgeons and was also appointed lecturer on dermatology. Appointments followed quickly: the professorship of obstetrics; of therapeutics and mental disease; superintendent of Springrove Hospital for the Insane; and also of an asylum which he organized at Sykesville, Maryland.

He contributed largely to dermatology, but his work culminated in the field of psychiatry, and he began the great work of planning a hospital for mental diseases upon the most advanced ideas. Dr. Rohé's contributions to medical literature were numerous and useful: The most important were his "Textbook on Hygiene," first edition, 1885, third edition, 1894; "Practical Manual of Skin Diseases," 1885-86, and (with Lord) 1892; "Electricity in Practical Medicine and Surgery" (joint author with Liebig), 1890; in addition to those, he was associate editor of the "Independent Practitioner," 1882, and of the "Annual of Universal Medical Science," 1890, and editor of the "Medical Chronicle," 1882-85. Among other offices he was president of the American Association of Obstetricians and Gynecologists, 1893-94; president of the Medical and Chirurgical Faculty of Maryland, 1893-94; president of the Maryland and American Public Health Associations, 1898-99. The honorary degree of A. M. was conferred upon him by Loyola College, Baltimore.

Dr. Rohé possessed a phenomenal memory accompanied by great readiness in applying his knowledge. He was a most industrious reader and acquired a knowledge of several languages. His self-confidence was unbounded and there was no position or duty which he did not consider himself competent to fill.

For a year prior to his death he had symptoms of cardiac trouble and his death came very suddenly on February 6, 1899, while he was attending the National Prison Congress at New Orleans.

He left a wife who was Miss Mary Landeman, and one child, a daughter.

EUGENE F. CORDELL.

ROLPH, John (1793-1870), pioneer Canadian lawyer and physician, founder of medical colleges, was born at Thornbury, Gloucestershire, England, on March 4, 1793. His parents moved to Canada when he was a small boy, but left him in England to prosecute his studies. During the summer of the year 1812 he crossed the Atlantic, to rejoin his parents in Canada, going by way of New York. Before he reached New York, war had been declared between the United States and Great Britain and the ship in which he sailed was captured by an American cruiser. Young Rolph obtained a passport from President Madison, to proceed to Canada. Reaching Buffalo, he was detained for a time and, while waiting, occupied his attention by trying to solve a problem in Euclid; someone observed that he was making unusual characters upon paper and decided that he must be a spy, making a sketch of the position of the United States forces and he was taken back to Greenbush by the authorities. It was some time before he could convince them that he was not a spy, but after the battle of Queenston he was allowed to cross over into Canada. He served during the war as paymaster of his Majesty's Militia forces in the London District and after the war returned to England where he studied law and medicine conjointly at Cambridge.

In due time he was called to the Bar of the Inner Temple, and then studied medicine under Sir Astley Cooper and at Guy's and St. Thomas' hospitals, before they were separated into two institutions. He became a member of the Royal College of Surgeons, England, and remained in England until 1821, when he returned to Canada, making his residence there in the town of Charlotteville, County Norfolk. In 1821 he was also called to the Bar of Upper Canada. In 1824 he moved to Dundas and there he practiced both law and medicine. Mr. Clarke Gamble Q. C. says of him: "My first introduction to Doctor Rolph was at the assizes in London, about the year 1827, when he came into Court carrying a pair of saddle-bags in his arms, one side being filled with surgical instruments, vials and packages of medicine, etc., and the other with briefs, legal documents and books. He would attend to a case in Court, and when through, would catch up his saddle-bags, ascend the court-house steps, mount his horse which had been tethered near by and ride off to visit a patient." In 1828, incensed with what he considered an unjust decision, he threw off his gown, and with it his legal practice, settling wholly to medical work in Victoria, eighty-nine miles from Toronto. A little incident which occurred there gives a glimpse of Rolph's character. Two men had been condemned to death for stealing an ox. The gallows were ready, but Rolph was determined to ride into Toronto and intercede with the Lieutenant-Governor. The swiftest horse in the village was borrowed and after a few words to the officiating minister, the doctor sped away. The time of death drew near, the doomed men mounted the scaffold, the minister—an old circuit rider—was asked to pray; kneeling, he began softly to husband his resources: half an hour, an hour passed and the sun-baked crowd grew restless, the condemned were clearly annoyed. Murmurings arose, yet still the prayer came in husky voice from parched lips; no one heeded the words; his real prayer was: "Hasten Dr. Rolph's coming." At the end of an hour and a half, uproar began, when a shout was heard: "Here comes Dr. Rolph." Too exhausted to speak, Rolph rode to the foot of the scaffold and held up the reprieve.

In 1831 he moved to York, afterwards incorporated as the city of Toronto, and went on its medical board, and in 1834 he married Grace Haines of Kingston. His connection with the Mackenzie Rebellion of 1837 made his hurried flight from Canada a necessity, but in 1843 he was able to return from Rochester and the reward of five hundred pounds for his capture was withdrawn. He settled down again and opened a medical school for which he obtained, in 1851, an act of incorporation; this became the medical department of Victoria University, with Rolph as dean. When the session of 1856-57 opened, his colleagues, owing to differences which had arisen, resigned in a body and for two weeks Rolph was professor-of-all-work, supported by the college board. Later on the chairs were all filled, but the seceders obtained a right to retain the title of "Toronto School of Medicine" and as such continued their work. This college also, indirectly, owing its origin to Dr. Rolph and both joining with the Trinity Medical College, formed eventually the medical department of the University of Toronto. He received from the University of Victoria the degrees of M. D. and of LL. D.

Dignified, handsome, courtly in manner, a profound thinker, with a subtle intellect, equally fitted to cope with the intricacies of legal, political, or medical problems, he was a remarkable man, and his fame as a brilliant lecturer and teacher remains undimmed even to this generation. He died at Mitchell, Ontario, October 19, 1870, at the age of eighty-three.

WILLIAM CANNIFF.

ROMAYNE, Nicholas (1756-1817), founder of the College of Physicians and Surgeons of New York. The fact that Nicholas Romayne is described as "often unpopular with the profession" makes one imagine what was really the case, that Romayne "was a man of very strong intellectuality and vigorous personality." The biographical materials are but scanty. The son of a silversmith he was born in the City of New York, September, 1756, and had his early education at Hackensack in New Jersey. At the beginning of the Revolutionary War he went abroad and finished his medical studies in Edinburgh, afterwards spending two years in Paris, London and Leyden. "His return from Europe to New York," says Dr. S. L. Mitchill (q. v.), "excited considerable conversation both here and in Philadelphia; he was reported to have improved his opportunities with singular diligence. In London and Edinburgh he went through the course of study required by the university statutes and published a dissertation in Latin 'De Generatione Puris' which he composed himself 'without the aid of a "grinder," or hired translator'." Then James Thacher (q. v.) goes on to say that when

Romayne was appointed trustee of the new medical board formed after the war he found an opening for his talents as teacher, and "his superior attainments in literature and medicine elevated him with high notions and filled him with contemptuous ones of some who had been less fortunate in education." The first post-bellum faculty of professors did not accomplish much. Romayne resigned but had success as a private teacher of medicine. Anatomy, practice of physic, chemistry and botany were all taught by this extraordinary man with such success that he drew hearers even from Canada. Then he went to Europe again to get in touch with everything new and was admitted a licentiate of the Royal College of Physicians of Edinburgh, the first American to receive that honor. In 1797 he embarked in Blount's conspiracy and spent some time in jail as a result. In 1806 an act was passed for incorporating medical societies. "By a sudden and singular change of sentiment Dr. Romayne was called from his retirement and elected first president of the Medical Society of the City and County of New York, and next year delegate to the State Medical Society in Albany, afterwards being chosen president. He was in his element planning many reforms, and when the regents of the university were to act under the provisions of the Act for providing a College of Physicians and Surgeons, even though Romayne was assisted by numerous and powerful supporters, he may be considered as the leading agent and the person without whose urgency the work would not have been completed. He was rewarded by being selected, in 1807, as the first president, and he gave instruction in anatomy and the institutes of medicine.

Roymane would have been, says one who knew him well, the most eminent medical man in New York, but he indulged in financial speculating and became involved in embarrassments detrimental to his profession.

He published an address before the students of the New York College of Physicians and Surgeons on "The Ethnology of the Red Man in America" (1808).

He died in New York, July 20, 1817.

ROOSA, Daniel Bennett St. John (1838-1908), New York ophthalmologist and otologist, the son of Charles Bennett and Amelia Foster Roosa, was born in Bethel, New York, April 4, 1838, and entered Yale expecting to graduate in 1860, but poor health upset his plans. He turned at once to the study of medicine, obtained his degree at the University of the City of New York in 1860, and was at once appointed for merit, an interne in the New York Hospital. Before he had completed his entire year of service, he acted for a short time as assistant surgeon in the Civil War, finished his term at the hospital, and then spent a year of study in Europe. Coming home he again went into army service, and finally, settled for general practice in New York. Some time in 1865 he began to devote his time exclusively to the practice of the diseases of the eye and ear, and continued in those specialties for the rest of his life. For eighteen years he was professor in both of those branches of surgery, in the University of the City of New York. At the end of that time he was compelled to decide in which of them he should continue to lecture, since the scope of both had expanded so broadly that no man could hope to cover successfully both fields. He decided on ophthalmology, and continued his lectures on that branch in the Manhattan Eye and Ear Infirmary, of which he was a founder, in the New York Postgraduate Medical School and Hospital, and incidentally for five years he lectured on both of his original specialties at the Medical School of the University of Vermont. Altogether his course of instruction in the diseases of the eye and ear embraced forty-four years of steady activity. As a teacher and lecturer he was plain and simple in his illustrations, and unhesitating in his opinions. As a conservative pioneer he remained unswerving in his objection to the perforation of every irritated drum, to the exenteration of every inflamed mastoid bone, to the removal of immature cataracts, to the extraction of both in the same patient in rapid succession, and to the cutting of eye muscles for errors of refraction.

Dr. Roosa was held in high esteem by his colleagues all over the country, as was shown by his election to the presidency of the American Otological Society, to that of the International Otological Congress, to that of the New York Ophthalmological Society, and to the high position of president of the New York State Medical Society. In all of these positions he obtained excellent papers for presentation, led the members into animated discussion, and accomplished good results for the profession and the public by forwarding improvements of the public health and obtaining proper registration and recognition of the profession. The following anecdotes throw light on the character of Dr. Roosa: Many patients flocked to him during his lec-

tures in Vermont, and one morning his assistant said to him: "You will have to hurry a bit this morning for as many as thirty patients are already waiting for you." "I have no time to hurry," was his quiet reply. When a friend remonstrated with him on his expressing an intention to make his yearly visit to Europe longer than usual, this time for three months of vacation, and said: "I cannot see how you can afford to lose all of three months' practice," he replied briefly: "I cannot afford to work as I do, more than nine months in the year."

He was a fluent talker in debate, famous as an after-dinner speaker; his hospitality was abundant but unobtrusive, his home life was beautiful; in his work he was a man of method. He was an excellent teacher but not an expert operator. As a writer of medicine Dr. Roosa stands out very eminent in his two specialties. He translated the "Hand-book of Otology" written by Von Troeltsch (1863), and one on the eye by Stellwag (1867), and he composed a text book of his own on the ear (1866), which, simple in style and illustrated with cases from his practice, was well thought of by the profession.

He wrote a great many papers on the ear, such as a very early instance of aural suppuration from improper use of the nasal douche, another on aural suppuration extending into the cervical connective tissue, one on panotitis, (at that time a very rare and unknown disease), a third on the effect of mumps on the organ of hearing, and finally one on the effect of noises on healthy ears. Buried also amongst the unmeaning title of "Clinical Cases," may be found mention of deafness from a kiss on the ear, vertigo from syringing hot water into the meatus, and syncope after a Politzer inflation of the middle ear.

Amongst his papers on the eye mention may be made of the fact of his persistent arguments that blepharitis was not a skin disease of the eyelids, but an irritation due to the result of uncorrected astigmatism, whilst his brochures on lenses and on defective sight and his primers on eye and ear diseases all deserve mention as proving his right to be called an active literary pioneer in otology and ophthalmology.

Take him all in all, Dr. Roosa was a man remarkable for his vigorous expressions of opinion in those two specialties which began to flourish at the time when he started in practice, specialties he assiduously and successfully cultivated during the rest of his medical life.

Dr. Roosa was twice married, first to Miss Mary Blake, and after her death in 1878, to Mrs. Sarah Haughwont Howe. He died suddenly in his seventieth year, while still in active practice, March 7, 1908.

JAMES A. SPALDING.

ROSS, George (1834-1892), of Montreal, wise clinician, and authoritative teacher, was born in Montreal, March 11, 1834, the second son of Arthur Ross, Seigneur of Beau Rivage, who was son of David Ross, King's Counsellor. Ross was vice-dean and professor of medicine in the medical faculty of McGill University from 1889 to 1891, professor of clinical medicine from 1872 till 1889, and professor of hygiene from 1871 till 1873. In 1862 he began the study of medicine at McGill, having previously graduated in Arts with honors and the Chapman gold medal. In 1866 he graduated in medicine, and won the Holmes gold medal for general proficiency. His connection with the Montreal General Hospital began in 1866, when he was appointed apothecary. Among other places to which he was elected were those of president of the Medico-Chirurgical Society of Montreal, of the Canadian Medical Association, vice-president of the American Association of Physicians, and governor of the College of Physicians and Surgeons of Quebec. He died, unmarried, in November, 1892.

George Ross was an authoritative teacher, a wise clinician with a keen instinct for diagnosis, and implicit confidence in his judgment once it was formed. He had skill and experience, literary taste and niceness of expression and courtesy for all. He wrote extensively upon aneurysm. He was co-editor of "The Medical and Surgical Journal," Montreal, and "The Medical Journal," Montreal.

ANDREW MACPHAIL.

ROSS, James Frederick William (1857-1911), professor of gynecology in the University of Toronto, was born in Toronto, August 16, 1857, where his father, Dr. James Ross, for many years held the largest obstetric practice. On his mother's side he was descended from the old Highland of Macintosh. In early life he attended the model school, and later, Upper Canada College, and was graduated in Medicine at the University of Toronto in 1877. After a year as house surgeon in the Toronto General Hospital, he went to England and entered the London Hospital. Here he came under Dr. Hughlings Jackson and Sir Jonathan Hutchinson, by whom he was

profoundly influenced. Later he worked in the laboratories of Ludwig in Leipzig and Virchow in Berlin. He also came into contact with Martin and with Schroeder. In 1880 he was in Vienna, Munich and Paris, before returning to London. After a short period of general practice in Toronto, he decided to specialize in gynecology, and for further training went to Lawson Tait, in Birmingham. He returned to Toronto, and in 1882 married Adelaide M. Gooderham. Resuming practice, he taught in the Woman's Medical College and in the medical department of the University of Toronto. In the latter institution he became associate professor of gynecology in 1897, and succeeded to the chair in 1903, which he held until his untimely death, November 17, 1911. He was chief of the gynecological service at the Toronto General Hospital, and in 1904 was president of the Ontario Medical Association. For many years he held the important position of medical director of the Manufacturer's Life Insurance Company. He took an active part in the formation of the Toronto Academy and became its first president, 1907-1909. He was a fellow of the Edinburgh Obstetrical Society, and was president of the American Association of Obstetricians and Gynecologists in 1897. Dr. Ross was the first physician in Ontario to devote himself entirely to abdominal and pelvic surgery. His enthusiasm was communicated to others, and today there are hundreds of surgeons in practice who date back their initial impulse toward this most progressive of all specialties to his work and teaching. He was a man of unusually good, clear judgment in adopting and rejecting surgical procedures. While the circumstances of his life made it unnecessary for him to labor, yet he was one of the most zealous of surgeons, and continually disciplined himself by visits to eminent surgeons, by study and by writing.

Driving his car in the country to keep a professional engagement, the car skidded and was upset, while he and the man with him were pinned to the frozen ground beneath. With his chest crushed by the steering wheel, he insisted that his chauffeur should first be taken to the hospital. He died of pneumonia, two days later, November 17, 1911.

N. A. Powell.

ROSS, Joseph Presley (1828-1890), founder of the Presbyterian Hospital in Chicago, was born in Ohio, in 1828, and after school and a short experience in business he worked under Dr. G. V. Dorsey, and graduated in medicine at the Ohio Medical College, Cincinnati, in 1853. His appointments included: physician to the City Hospital and professor of clinical medicine and diseases of the chest, Rush Medical College. When the great fire of 1871 utterly destroyed the latter, his energy in getting plans and funds for a new college and hospital was the main factor in their re-erection. Yet he felt the city hospital accommodation was not sufficient. Especially was this true of the private hospitals for a better class of patients than the paupers, housed in the County Hospital. He resolved that his own religious denomination should possess a hospital like those already maintained by the Presbyterians in the older cities of this country. He secured a donation of $10,000 from his father-in-law, Tuthill King; another, of $15,000, from the faculty of Rush Medical College, to which he afterwards added $5,000 from his own pocket. At last, largely through the influence of Dr. Hamill, a legacy of $100,000, from the estate of Daniel Jones, insured the completion of the edifice. After a prolonged illness he died on June 15, 1890.

ROSSE, Irving Collins (1847-1901), alienist, author and medico-legal expert, was born at East New Market, Dorchester County, Eastern Shore, Maryland, October 2, 1847, of Anglo-Scotch descent. He attended St. James' College, Annapolis, for three years, then West Point Military Academy for another year. Turning his attention to medicine, he left the academy, studied with Dr. Alexander H. Bayley, of Cambridge, taking his medical degree in 1866 from the University of Maryland. For a time he studied in London, Berlin and Paris. In later life he received an honorary A. M. from Georgetown University, and a rather large number of honorary degrees from various institutions in Europe.

His life as a doctor began with his entry into the position of clinical assistant in the Baltimore Infirmary, where he served with marked distinction, but resigned to enter the United States Army; as army surgeon he lived at various posts throughout the west and south. Once he was quarantine officer for Georgia, and in this capacity was present on Tybee Island during the outbreak of cholera there. A little later he was appointed quarantine officer at Brazos, Texas, and also saw much service on the staff of General Henry Hunt, in North Carolina, during the troubles with the Klu Klux Klan. Rosse was at one

time professor of nervous and mental diseases in Georgetown University. He was also vice-president of the Medico-legal Society of New York, and a member of numerous social, literary and scientific clubs and associations.

Dr. Rosse was an extensive writer, and his literary work was valuable both for its contents and its form. He assisted in the preparation of the "Medico-Surgical History of the Rebellion." Later he had in charge the force which compiled the "Index-Catalogue of the Surgeon-general's Library," doing much personal work. He wrote voluminously, too, as correspondent for the "New York Herald" and the "San Francisco Examiner," and contributed numerous scientific articles to the press of this and of various foreign countries. He was one of the crew on the famous ship "Corwin" which sailed in 1881 to the relief of the "Jeanette." While on this cruise he ascended the supposedly inaccessible Herald Island, and was the first human being in history to set foot on Wrangel Island. For these and other exploits he was created a fellow of the Royal Geographical Society of England. On his return he wrote two books: "The Cruise of the 'Corwin' " and "The First Landing on Wrangel Island." One of the most remarkable of Dr. Rosse's writings is an article on "Personal Identity," contributed to volume i of Witthaus and Becker's "Medical Jurisprudence, Forensic Medicine, and Toxicology." This article displays the widest range of scholarship combined with profound and original research. He wrote much on medico-legal topics. A list of his writings may be found in the catalogue of the Surgeon-general's Library at Washington, D. C.

The titles of some of his writings were: "Borderland Insanity"; "Neuropathic States Involving Doubt," 1890; "The Neuroses from a Demographic Point of View"; "Washington Malaria and Politics as Genetic Factors," 1889; "Triple Personality"; "Sexual Hypochondriasis and Perversion of Genetic Instinct," 1892.

Dr. Rosse was a great athlete and once, when crossing the Atlantic, persuaded the captain of the steamer to stop the vessel while he took a plunge in the ocean. On another occasion, when quarantined in a small boat for a number of days, with only a single companion, he used to stand upon his hands to relieve the tedium. He had very little to say to those who did not interest him, but was affable and communicative in the presence of those whose tastes were similar to his own. He did not like animals, and was not fond of children. He loved books, but did not collect, or keep, them. He used to say he had his library in his head, and, certainly, whatever he read he stored in his mind most carefully. He delved but little in other fields than the scientific, but, in that realm of never-ending spaces, his range was wide indeed. In the fields of mental and nervous diseases, medical jurisprudence, geographical exploration, and, most of all perhaps, in the province of editing and general authorship, Dr. Rosse's work possesses high and enduring value.

He married when forty-seven years of age, Florence James, of New York, a granddaughter of General Worth, and had one child, a son. Dr. Rosse died of ptomaine poisoning at Washington, D. C., May 3, 1901.

THOMAS HALL SHASTID.

ROTCH, Thomas Morgan (1849-1914), Boston pediatrician, father of modern scientific infant feeding, was born in Philadelphia, December 9, 1849. His father was Rodman Rotch of New Bedford, and his mother Helen Morgan of Philadelphia. His great-grandfather, Samuel Powel Griffitts (q. v.), was a prominent physician in Philadelphia, and held the professorship of materia medica in the University of Pennsylvania from 1791 to 1796. Rotch received the degree of A. B. from Harvard University in 1870, and that of M. D. from the Harvard Medical School in 1874. While a student in the medical school, in 1873, he took the first prize of the Boylston Medical Society with an essay entitled, "The Emigration of the White Corpuscle in Inflammation." He served as medical house officer at the Massachusetts General Hospital in 1874, after which he studied medicine in Berlin, Vienna and Heidelberg for two years, returning to Boston to begin practice there in October, 1876.

Soon after his return to Boston he was appointed on the medical staffs of the Boston Dispensary and the Boston City Hospital, with both of which he was intimately connected for many years. At the time of his death he was physician emeritus to the Boston Dispensary and consulting physician to the Boston City Hospital. He soon became identified with both the Infants' Hospital and the Children's Hospital and did the greater part of his hospital work at these institutions. At the time of his death he was the senior visiting physician at both the Children's Hospital and the Infants' Hospital and medical director

of the Infants' Hospital. During the latter years of his life he devoted much of his time and energy to the Infants' Hospital, and his chief interest was the planning and erection of the new home for this institution known as the Thomas Morgan Rotch, Jr. Memorial Building. It was completed just before his death, and one of the saddest incidents connected with his career is that instead of delivering the first lecture in the new building, as he had anticipated for many years, his funeral was held there.

Rotch was one of the founders of the American Pediatric Society and its third president, in 1891. He was the first president of the New England Pediatric Society in 1908, and was also president of the Suffolk District Medical Society and of the Boylston Medical Society, as well as a councillor of the Massachusetts Medical Society. He was also a member of the Association of American Physicians, as well as of many other scientific organizations. He was consulting physician to the Infants' Hospital of London, to which position he was appointed in 1902. Dr. Rotch became identified with the teaching of Pediatrics early in his career and delivered the first systematic course of lectures given on this subject in the Harvard Medical School in the school year of 1879-80, the title being "The Prognosis, Diagnosis and Treatment of Diseases in Children." Harvard University established a chair of pediatrics in 1888 and Dr. Rotch was the first incumbent with a seat in the faculty and the title of assistant professor, the first position of the sort in the country. He was appointed full professor in 1893, filling the chair at the time of his death. Under his guidance and as the result of his untiring energy, the department of pediatrics became one of the most important in the school. It was undoubtedly the best organized department of pediatrics in America and for many years served as a model for those in other medical schools.

Dr. Rotch was perhaps most widely known for his work in connection with the feeding of infants. He did more than anyone else in America to put infant feeding on a rational basis, and was without question the founder of modern scientific infant feeding. In connection with his efforts in this direction he conceived the idea of the milk laboratory. The first laboratory for the modification of milk for babies was established in Boston in 1891 under his direction. His experimental work in relation to the diagnosis and treatment of pericardial effusion in connection with the fifth right inter-space, which was done early in his medical career, attracted considerable notice as an original investigation and has stood the test of time. Dr. Rotch also made a study of the development of the bones, as shown by the Roentgen ray, in relation to the grading of children in schools and elsewhere, showing that the stage of development of the bones is a better index of maturity than the age of the child. He also did a large amount of work in developing the use of the Roentgen ray in connection with the diseases of children and babies, and published, in 1910, a book of considerable size and largely illustrated, entitled: "The Roentgen Ray in Pediatrics."

Dr. Rotch contributed largely to the periodical literature of pediatrics and in addition published, in 1895, a large text-book on the diseases of children, entitled: "Pediatrics." This work went through many editions and was one of the standard works on the subject after the death of the author. From the beginning he consistently emphasized in all his teaching the importance of the knowledge of the normal infant and child in order to appreciate and properly treat the sick child, and always laid great stress on the prevention as contrasted with the relief of disease. He was a leader in the campaign for the reduction of infant mortality, for the improvement of the milk supply and the introduction of rational methods of infant feeding and was more fortunate than most men in that he lived to see his methods, which were at first derided and for a long time strenuously opposed, generally adopted throughout the United States.

In 1874, Dr. Rotch married Helen Rotch, the daughter of William J. Rotch and Emily Morgan, of New Bedford. They had one son, Thomas Morgan Rotch, Jr., born May 21, 1878. He died March 13, 1902, within a year after having received his A. B. degree from Harvard University. Although Dr. Rotch bore up bravely under this affliction and did not allow it to interfere in any way with his work, he never fully recovered from the blow. Mrs. Rotch, who had always been more or less of an invalid and a constant source of anxiety to him, became hopelessly ill in 1910. The severe strain consequent upon her illness wore on him heavily and indirectly was the cause of his death. She survived him but a few months.

Unbeknown even to his own family he had had a valvular defect of the heart for a number of years. His heart eventually yielded

to the strain of overwork and worry and, in February, 1914, dilatation took place. He continued bravely at his work, however, in spite of his handicap, but finally collapsed and died of a terminal pneumonia, March 9, 1914.

JOHN LOVETT MORSE.

ROTHROCK, Abram (1806-1894), pioneer physician of Pennsylvania, was born on April 19, 1806, in Derry Township, Mifflin County, in that state, in what was then a heavily wooded and wild part of the state. He was accustomed from his early childhood to the hard work of an outdoor life, being well acquainted not only with farm work, but also the duties in his father's tannery. One winter's morning at three a. m., Dr. Edmund Burke Patterson, of Lewistown, was returning from a long call and noting the light in a farm house stopped in to warm himself. He found the young boy lying on the floor in front of the huge old fireplace and studying by its light an English grammar. The doctor asked him if he understood it, and receiving an affirmative, gave him a sentence to parse, and being pleased with his ability to do so, he questioned him further concerning his work. The outcome was that he asked him to come and make his home with him in Lewistown and become his office boy. After a consultation with his parents the offer was accepted and he worked for the doctor and went to school. In 1826 he studied under Dr. Patterson, remaining with him until his death, when he continued his medical work under Dr. James Culbertson. In the winter of 1828-29 he attended a course of lectures at the University of Pennsylvania and then, owing to a lack of the necessary funds, returned to Mifflin County. At this time the canal, which for many years served as the great artery of traffic till the railroad rendered it obsolete, was in process of construction and the young student served for a couple of years as a sort of contract surgeon for the workmen, earning in this way the money for the continuance of his medical education. He then re-entered the University of Pennsylvania and in 1835 graduated and started in on his life work in Mifflin County, settling down to a general practice in McVeytown where he continued almost to the day of his death, on September 9, 1894.

Dr. Rothrock was in the habit of sending his cases of incipient tuberculosis to the "Coalings," as the coal hearths were called, where the charcoal was burned. Anyone who has seen the most primitive of cabins occupied by the charcoal burners, can readily see that it must have been the life in the open air far more than the smoke of the smoldering charcoal that effected the cure. Built either round or square at their base and with the roof running to a single point, like an Indian wigwam, they were constructed of a layer of logs covered over with leaves and dirt as a thatch with one side left open for the huge stone fireplace and with a door resting up against another side. Within, a crude platform served as bed; there were tables and chairs, but no windows and the only other articles of furniture were the cooking utensils and the tools of the occupants. An excellent shelter they made for snakes, too, and the custom of the wood choppers was to leave a toad in the cabin when they left. If on their return the little tenant was at home it was a good sign, but if he was not to be seen a careful search was next in order to get rid of the snake that had killed it. It can readily be seen that patients sent to such sanitoria were apt to take the fresh air cure most faithfully and many cures were the result, though they were in those days generally supposed to be due to some particular virtue of the smoke from the burning pits.

Two years after coming to McVeytown, in 1837, the doctor married Phoebe Brinton, daughter of Joseph and Jane Trimble, of Concord, Delaware County, Pennsylvania, and had three children, two daughters, Ann Amanda and Mary and one son, Dr. Joseph Trimble Rothrock, (q. v.) who rendered great service, not only in medical but also in scientific work.

He was a member of the State Medical Society, holding the position of first vice-president of this latter organization in 1878.

Of magnificent health and unusual muscular strength, he worked with a persistence and energy that would have killed or broken down the average individual. And this life he continued to lead, until death called him as he was nearing his eighty-ninth year. A most devout member of his chosen church (the Presbyterian) it was remarkable to see how so busy a man found time to attend regularly.

ADDISON M. ROTHROCK.

ROTHROCK, Joseph Trimble (1839-1922), botanist, dendrologist, the father of Pennsylvania forestry, was born at McVeytown, Mifflin County, Pennsylvania, April 9, 1839, the son of Dr. Abram (q. v.) and Phoebe

Rothrock. His mother, like her relative Dr. William Darlington (q. v.), was fond of botany, and from her Joseph inherited his love of nature. His early education was interfered with by lack of vigorous health; life in the open air seemed a necessity. At sixteen, he entered the village school, and a years later, Freeland Seminary, now Ursinus College, Pennsylvania. A physical breakdown was again a call to out-of-door work, which inspired his preparation for forestry work. He entered Academia, Juniata County, and fitted himself to enter the Lawrence Scientific School at Harvard University. In 1860, he became a special pupil in botany under Asa Gray, (q. v.) working in the herbarium, and attending the lectures by Louis Agassiz and Jeffries Wyman (q. v. to both). Education was interrupted once more by the Civil War, into which he entered as a corporal in Company D, 131st Pennsylvania Infantry. After serving nine months, he was severely wounded at Fredericksburg. Upon recovery, he was commissioned captain of Company E, 20th Pennsylvania Cavalry and served six months. Rothrock entered the medical department of the University of Pennsylvania in the fall of 1864, but the following year, he joined the expedition under the auspices of the Collins Overland Telegraph Company to British Columbia and Alaska to establish telegraphic communication via the North Pacific route with Asia. Leaving the expedition before its work was finished, he shouldered his rifle and with some pemican walked 400 miles back to civilization, maintaining himself all the way. He returned to medicine in 1866, was graduated in 1867, and immediately accepted the professorship of botany in the State Agricultural College of Pennsylvania, which he retained for two years.

In 1869, Dr. Rothrock moved to Wilkes-Barre, Pennsylvania, where he had a good practice and took an active part in establishing the Wilkes-Barre Hospital. In 1873, another break in health obliged him to abandon his medical practice and accept a position as botanist and surgeon to the Surveys West of the 100th Meridan, being assigned to duty in Colorado. In January, 1874 he reported to the Luzerne County (Pennsylvania) Medical Society upon treatment of tuberculosis by outdoor life in the West, observing that those who went west and lived in cities generally died, while those who roughed it on the prairies or in the mountains got well. The next year, he was put in charge of a small scientific division in New Mexico and Arizona and was associated with the distinguished ornithologist, Henry W. Henshaw. At this time, Dr. Rothrock made a dozen sets of plants, which averaged about 1,100 species each. In 1875, he was assigned to the California division. At the request of the trustees, he took charge of the Wilkes-Barre Female Institute, October 15, 1876, but resigned when he was elected professor of botany in the University of Pennsylvania in February, 1877. He held his professorship of botany from 1877 until 1891; during this period the writer was a student of botany in his spring course. Meanwhile Rothrock gave a course of summer lectures on botany and forestry in Horticultural Hall, Fairmount Park, Philadelphia, under the Michaux Fund, established by the great visiting botanist in 1856 in recognition of kindnesses received. His first audience was "the janitor and two others." He was awkward at first, but in time became an interesting and forceful lecturer. He toured Pennsylvania and won thousands of adherents to reforestration and sequestration of her vast non-agricultural tracts, especially the mountain sides. A further natural outcome of his doctrine was the increased use of the public domain for campers, health seekers, and vacationists.

Rothrock was a pioneer in conducting summer schools for young people, having established one for weakly boys on the North Mountain, Luzerne County, Pennsylvania, in 1876, where, with the aid of Eugene C. Frank, an artist, Mr. Stevens of Maryland, Lewis H. Taylor of Wilkes-Barre, and Mr. Kaufman, physical director, as assistants, their minds as well as bodies were cultivated. This project was continued until 1878, when the writer joined Taylor and Frank in taking over the equipment, camping and tramping, and teaching physical culture, natural history, and drawing to some nineteen husky boys.

From 1893 to 1904, Rothrock was Commissioner of Forestry for Pennsylvania and was closely identified with the Department until it reluctantly accepted his resignation because of failing health a few months before his death. In 1902, he founded near Mont Alto the South Mountain Camp Sanitorium for Consumptives, which he superintended until it was turned over to the State Health Department in 1907. As a big game hunter, he went often to Maine. On his last trip in the autumn of 1921, he brought home two deer. He devised an improved pemican,

a compressed fruit and meat cake, which proved satisfactory to explorers. Previously, the North American Indians had incorporated service berries with meat, and currants had been added by the Greely Relief Expedition.

In May, 1869, Dr. Rothrock married Martha E. May, of West Chester, Pennsylvania. Two sons, Doctors Addison May and Harry A. Rothrock, and a daughter, Elizabeth Rothrock, survived him.

On June 2, 1922, after a two-day's illness, Dr. Rothrock died at the age of eighty-three. The Pennsylvania State Forest District, comprising 474,880 acres, is now held as his lasting memorial. Along the edge of the South Mountain Forest Reserve runs the Lincoln Highway from Gettysburg to Chambersburg.

The Rothrock Herbarium was purchased by the Field Museum of Natural History, Chicago, in 1909. It consisted of 22,207 specimens, representing his own collection from sixteen states and countries and extensive exchanges with some thirty-five persons. He was a member of the American Philosophical Society; the Academy of Natural Sciences of Philadelphia; and the Chester County Historical Society.

Some of the best known of his writings are: "The Botany of the Wheeler Expedition," 1878; "Medical Botany of North America;" "Flora of Alaska," 1867; "Revision of North American Guarineae," Proc. Amer. Acad.; "Vacation Cruisings," 1884; and "Pennsylvania Forestry Reports," 1895-97. He also signs the report on the lichens collected by Dr. T. H. Bean in Alaska, Proc. U. S. Nat. Mus., 1884, and worked in conjunction with Henry Willey, listing some 110 species. He was one of the editors of "Forest Leaves."

Dr. Rothrock had a most interesting personality, highly keyed, nervous, eager, vivacious; he was tall, spare, and rugged, with a contagious smile, ever ready to impart and gain information, generous in judgment but hating shams. Attention was at first distracted by a frequent spasmodic twitching of the facial muscles on one side, but this was soon overlooked as interest in the topic developed.

HOWARD A. KELLY.

ROW, Elhanon Winchester (1833-1900), surgeon of Virginia, instrumental in securing the passage of the act creating the Medical Examining Board, was born in Orange County, Virginia, on November 8, 1833, and after a common school education, taught in a school in Alexandria, Virginia. He read medicine under Dr. David Pannill, of Orange County, then entered the University of Pennsylvania and graduated in 1858, settling in his native county. At the beginning of the Civil War he joined the Orange Rangers as a private, but was soon commissioned surgeon of the Fourteenth Virginia Cavalry, a position he filled until the surrender at Appomattox. In 1883-84 he was a member of the State Legislature and did noble work in procuring the passage of the act creating the Medical Examining Board. In 1888, as the well earned reward for his work in the Legislature, he was elected president of the Medical Society of Virginia, and the following year was made an honorary member of the society. Returning home after the war, he settled at his county-seat, where he continued to practice until his health failed. The writer was intimately acquainted with Dr. Row and can give testimony as to his real work as a friend, a citizen and a physician.

He married about 1880, a Miss Newman of Orange County, and an only daughter survived him, his wife and two infant children dying some years before his own decease. For the last two years of his life he was in failing health and unable to do much work. In May, 1900, his strength gave way entirely and on the twenty-third of that month, he rested from his labors.

He was not a writer; his only contributions to medical literature that we are aware of is his address as president of the State Society, entitled "Medical Reform," "Transactions of the Medical Society of Virginia," 1889, and a paper, "Case of Bowel Obstruction, Profound Shock, Death," ibid., 1899.

ROBERT M. SLAUGHTER.

ROWAN, Walter Hawthorne (1875-1917), leading southern hygienist and sanitarian, was born in Wesson, Mississippi in 1875, son of James A. Rowan, M. D. He was graduated at the University of Tennessee and received his M. D. at Memphis Medical College in 1902; he studied medicine, also at Rush Medical College and at the College of Physicians and Surgeons, New York. He began his public health work as a field worker for the Rockefeller Foundation Commission (1910-1912); in 1912 he was appointed the first state sanitary inspector for Mississippi, serving until 1914, when the International Sanitary Commission appointed him director of sanitary work in Guatamala, but he was forced to retire because of ill health. Early

in 1916 he was made superintendent of the Mississippi Tuberculosis Sanitarium. Greatly interested in this work, he applied himself to every detail, particularly to the selection of the site at Magee, Simpson County, and to the construction of the new sanitarium. He was active in the Mississippi State Medical Society and worked with untiring zeal and energy for the upbuilding of this organization as well as for the development of the activities of the State Board of Health.

In 1894 he married Helen McKenney of Texas, who with one daughter, survived him. After an illness of several months Dr. Rowan died at Jackson, Mississippi, August 7, 1917.

OSCAR DOWLING.

ROWE, George Howard Malcolm (1841-1916), superintendent of the Boston City Hospital, the son of Jonathan Philbrick and Maria Louise Morrison Rowe, was born in Lowell, Massachusetts, February 1, 1841, and died in Boston January 30, 1916. He was descended from Richard Rowe, a London merchant, who came to Boston in 1638. His mother inherited the Scotch blood of the exiles from the siege of Londonderry, who settled in New Hampshire and from whom have sprung so many sterling men and women to be found all over this country. Dr. Rowe was fitted for college at Phillips Exeter Academy and graduated from Dartmouth in 1864 and from the Harvard Medical School in 1868. During his college life he became interested in psychology and after receiving his diploma saw service in the Hartford (Connecticut) Retreat for the Insane, then became assistant superintendent of the Massachusetts School for the Feeble Minded, and later assistant physician to the Pennsylvania Hospital for the Insane. He was assistant superintendent at the Boston Lunatic Hospital in South Boston when he was called to the Boston City Hospital as superintendent and medical director in 1879, a position which he occupied nearly thirty years, until compelled to retire by reason of failing health.

Practically Dr. Rowe's entire professional life was devoted to the administration and development of the Boston City Hospital. It is his monument. He not only carried forward the plans of his predecessor, Dr. Edward Cowles, but he inaugurated many new ones, which went far toward placing the hospital in the front rank of municipal institutions. He was a good business man of sound judgment. His familiarity with every detail of hospital construction and administration, his broad and far reaching views of the needs of the institution and his comprehension of the trend of modern philanthropic work made him an authority and for many years he was in the forefront of these activities.

The "Hospital Roundtable," an association composed of hospital superintendents, was established by Dr. Rowe and proved to be very popular. Its object was the interchange of ideas and experiences in all matters pertaining to hospital construction and administration. Being a leader in this work, Dr. Rowe was president and also held the same office in the Association of Hospital Superintendents of America and Canada. He was much interested in his alma mater and was president of the Alumni Association of Phillips Academy. He wrote numerous articles upon topics pertaining to hospitals, public health, training schools for nurses and other subjects. He belonged to numerous societies, as the Massachusetts Medical Society, American Medico-Psychological Association, the Boston Society for Medical Improvement. He was a member of several philanthropic associations, also of the St. Botolph, the University, Beacon and Eastern Yacht Clubs. He was connected with the Congregational Church.

Dr. Rowe was a man of broad culture with fine tastes in art, music and literature, besides being a clever organist. He was positive in his opinions and had the courage of his convictions. Brusque in speech, he was not always tactful, but was honest and dependable, loyal to his friends and delightful in the presence of his intimates. There was no deception in his make up. He was a forceful man who did things and did them well.

Dr. Rowe was unmarried and lived with his sister, the only surviving member of his immediate family. For some years he was invalided by arteriosclerosis and diabetes, complicated toward the last by malignant disease of the mouth and throat, which was temporarily relieved by operation. The final affection was bronchopneumonia of rather brief duration. At his death he was within two days of his seventy-fifth birthday.

GEORGE W. GAY.

RUPPANER, Antoine (1825-1892), pioneer laryngologist, was born in Switzerland in 1825. Through Agassiz's (q. v.) interest and cooperation, he took his medical degree at Harvard in 1858 and began practice in Boston, specializing in laryngology. About the year 1866, he moved to New York; his office

there attesting his penchant for collecting objects of art, finely bound books, and choice curios.

His papers on laryngology to journals were among the first of their kind in this country. His best known writings are "The Treatment of Neuralgia by Subcutaneous Injections," 1860; "Hypodermic Injections in the Treatment of Neuralgia, Rheumatism, Gout, and other Diseases," 1865; "Principles and Practice of Laryngoscopy and Rhinoscopy in Diseases of the Throat and Nasal Passages," 1868; "On the Removal of Enlarged Tonsils without cutting, with 123 cases," 1869; "Practical Laryngoscopy. Four Cases of Morbid Growths within the Larynx," 1870.

He died in Pittsburgh, Pennsylvania, on August 2, 1892.

RUSCHENBERGER, William Samuel Waithman (1807-1895), writer of Philadelphia, was born on a farm near Bridgeton, New Jersey, September 4, 1807, educated in New York and Philadelphia and at the age of nineteen he entered the United States Navy as surgeon's mate and was ordered to the Pacific Coast. But after a short stay he returned east and entered the medical department of the University of Pennsylvania, whence he graduated in 1830. In the following year he was commissioned surgeon in the navy. As surgeon he made a number of cruises to various parts of the world. Ruschenberger was an able writer. In 1834 he published "Three Years in the Pacific" and in 1838, "A Voyage Around the World." These books were widely read and were republished in England. In 1854 appeared "Notes and Commentaries During Voyages to Brazil and China." One of his best known works is "An Account of the Institution and Progress of the College of Physicians of Philadelphia During 100 Years," which appeared in 1887. His "First Books on Natural History," a series of eight small volumes, were very popular in their time and contributed more than any other work to popularize the natural sciences in this country.

Ruschenberger was a member of the American Philosophical Society, of the College of Physicians of Philadelphia, of the Academy of Natural Sciences of Philadelphia, and of a number of other societies. He died in Philadelphia, March 24, 1895. His portrait is preserved in the hall of the College of Physicians of Philadelphia.

ALBERT ALLEMANN.

RUSH, Benjamin (1745-1813). "The American Sydenham," as he was termed by Lettsom, was born in Byberry Township, Philadelphia County, on December 24, 1745. His family were English Quakers, but, curiously enough, both his father and grandfather were gunsmiths. After going as a boy to the academy kept by the Reverend Samuel Finley, later president of Princeton College, at Nottingham, he entered Princeton, where he received the degree B. A. in 1760. He spent the subsequent six years as an apprentice to Dr. John Redman (q. v.), one of the most prominent physicians of Philadelphia, and during this time translated the "Aphorisms of Hippocrates" into English and kept a medical notebook from which was subsequently derived the only account written by an eye-witness, of the yellow-fever epidemic which occurred in 1762 in Philadelphia. He also was one of the ten pupils who attended the first course of lectures on anatomy given by Dr. William Shippen, Jr. (q. v.).

In 1766 he entered the medical school of Edinburgh University and took his M. D. there in 1768, his graduation thesis being called "De Coctione Ciborum in Ventriculo." Thacher says it was written in classic Latin, and adds quaintly "and I have reason to believe without the help of a grinder of theses." While he was at Edinburgh, President Finley, of Princeton College, died, and the trustees elected the celebrated Dr. Witherspoon, of Paisley in Scotland, as his successor. The latter at first declined the appointment, but the trustees appointed young Rush as their deputy, and his solicitations at length prevailed on the eminent Scotchman to accept the position. From Edinburgh, Rush went to London and from thence to France to study, returning to Philadelphia in 1769. In the same year he was elected professor of chemistry in the college of Philadelphia, thereby rendering complete the medical faculty of the first medical school established in what is now the United States. The other teachers were John Morgan, William Shippen, Jr., and Adam Kuhn (q. v. to all). Clinical lectures in association with their teaching were also given at the Pennsylvania Hospital by Dr. Thomas Bond (q. v.).

Upon the death of Dr. John Morgan (q. v.) in 1789, Rush succeeded him as professor of the theory and practice of medicine in the College of Philadelphia. When, in 1791, that institution was merged with the University of the State of Pennsylvania to form the University of Pennsylvania, Dr. Rush was ap-

pointed professor of the institutes of medicine and clinical medicine. In addition to his public teaching Dr. Rush had a large number of private students, and it has been estimated that in the course of the forty-four years in which he was actively engaged in teaching he instructed 2,250 pupils. His lectures, judging from the notebooks of his pupils and from the statements of those who heard the lectures, were models of lucidity and comprehensiveness. He had the gift of imparting to his students some share of his own wonderful enthusiasm and thirst for knowledge. The prevalent medical teaching of his day was that of Cullen. Diseases were classified and every disease was supposed to possess an appropriate specific treatment. Underlying principles were entirely disregarded in an effort to build up a purely artificial classification of diseases and their treatment. Rush attacked the prevalent theories of medicine at once. He proclaimed the importance of the principles upon which a correct knowledge of the practice of medicine could only be based. "In his public instructions, the name of the disease is comparatively nothing, but its nature everything. His system rejects the nosological arrangement of diseases, and places all their numerous forms in morbid excitement, induced by irritants, acting upon previous debility. It rejects, likewise, all prescriptions for the names of diseases, and by directing their application wholly to the forming and fluctuating state of diseases, and of the system, derives from a few active medicines all the advantages which have been in vain expected from the numerous articles which compose European treatises upon the materia medica. This simple arrangement was further simplified by considering every morbid state of the system to be of such as neither required repletion or stimulation."

The author of the above quotation then goes on to state in pathetic terms what an advantage this has given the students who have studied under Benjamin Rush over those who, like himself, had been obliged to learn by the old methods.

One marked peculiarity in Rush was his readiness to acknowledge an error and retract opinions proven erroneous by subsequent researches or events. One of his active and enquiring mind, continually employed in original researches and constantly by his writings and teaching endeavoring to advance medical science, was bound to err sometimes, and it redounds to his credit that when such mistakes were seen, he promptly acknowledged the fault.

His therapeutic standbys were the lancet and calomel. The latter he called Sampson, and his enemies in derision were wont to say "because it has slain its thousands." It was in the yellow fever of 1793 that Rush had the efficacy of these two therapeutic agents especially impressed upon him and the lesson he then learned as to their value, he never allowed himself to disregard. He states that he and other physicians of Philadelphia had been completely nonplussed in their efforts to find a method of treatment which seemed in any way to control the course of the disease. In this extremity he found among some papers in his library a manuscript which had been prescribed to him by Dr. Franklin years previously. It was an account of the yellow fever of 1741 in the Province of Virginia, written by a Dr. Mitchell. In it the latter put forth the strongest claims of the value of free purgation in the treatment of yellow fever, even where the disease was accompanied by an extreme degree of debility, and a very feeble pulse. Rush, upon reading Mitchell's manuscript, reasoned that the feeble pulse seen in so many cases was the result of debility from "an oppressed state of the system." He proceeded to immediately put his ideas into effect by administering enormous doses of calomel and jalap to all his patients. In addition to this he practiced copious venesection, put the patient upon a low diet and used applications of cold water to the surface of the body, combined with the drinking of large quantities of water. He also advised that the temperature of the sickroom be low.

Rush hastened to impart his ideas to his fellow practitioners, and, indeed, to the public at large. The results achieved by his methods were certainly most gratifying. An oft-quoted statement is contained in his notebook for September 10. "Thank God! out of one hundred patients whom I have visited or prescribed for this day, I have lost none." He was overwhelmed with patients, and at length was himself taken ill and underwent a course of his own treatment. After his recovery he resumed his labors and remained at them until the epidemic was ended.

He shared the common fate of the famous in stirring up detractors. By his proclaiming his belief that the yellow fever was the result of filth in the streets of their city and not an importation, he caused the greatest anger among the citizens of Philadelphia. His

most infamous assailant was William Cobbett, in his "Peter Porcupine's Gazette." Rush sued him for defamation of character, and, having won his suit, gave the $5,000 which the law awarded him to the poor. Another famous quarrel in which Rush was involved occurred in the yellow-fever epidemic of 1797. Rush again published and adhered to his views on the efficacy of bleeding and purgation and also to the claim that the disease arose from the filthy condition of certain parts of the city. The "United States Gazette" published a very severe article on Rush, which he supposed had been written by a Dr. Ross. John Rush, son of Benjamin, wrote a bitter reply to Dr. Ross, and after some further interchange of literary hostilities proceeded to cane him. Dr. Ross challenged Dr. Benjamin Rush to a duel, as he declared him responsible for his son's actions. Rush refused the challenge and published the whole correspondence in the newspapers. One result of the controversy over the yellow fever in 1797 was the founding of the "Academy of Medicine of Philadelphia" by the adherents of Dr. Rush. The latter resigned from the College of Physicians, but always protested that he bore no ill-will towards that body. Dr. Physick was the first president of the new society.

In 1783 Dr. Rush was elected physician to the Pennsylvania Hospital, a capacity in which he served until his death. During that time he never missed a daily visit and was never more than ten minutes late. Morton's "History of the Pennsylvania Hospital" contains a most interesting account of his many services to that institution, particularly the reforms and advanced methods advocated by him in the treatment of the insane.

Dr. Rush served in a number of important political and military capacities. He was a member of the Provincial Congress of 1776, and as such signed the Declaration of Independence. On April 11, 1777, he was appointed by Congress, surgeon-general of the medical department of the Continental Army. Of his military services but little information is ascertainable. He became involved in the Conway cabal, being an ardent partisan of Gates and Samuel Adams in their criticism of what they termed the Fabian policy of Washington. With the downfall of the cabal Rush realized that his prospects for advancement in the Army were shattered, and wisely retired to the field of professional activity in which he had occupied so prominent a position. One invaluable result of his military experience remains in his pamphlet entitled "Directions for Preserving the Health of Soldiers," which was published by order of the Board of War. It is an excellent exposition of the rules of military hygiene and camp sanitation. He refused to draw any salary for his military services. In 1799 he was appointed Treasurer of the United States Mint, a position which he held until his death, when his son was appointed to succeed him.

Among his many activities may be mentioned his membership in the American Philosophical Society, before which he read a number of communications and of which he was at one time vice-president. He was chief among the founders of the Philadelphia Dispensary in 1786, the first dispensary established in this country. He assisted in founding the institution now known as Franklin and Marshall College, at Lancaster, Pennsylvania, and also in the founding of Dickinson College, at Carlisle, Pennsylvania.

Three subjects which were particularly near to his heart were the freeing of the negroes, the abolition of the death penalty, and the restriction of the immoderate use of alcohol and tobacco. On all these subjects he wrote many disquisitions and delivered frequent addresses.

He was very active in founding the Bible Society, and also in many other projects for the furtherance of religion; St. Thomas' Church, a large negro place of worship, was founded through his activity.

When he was a young man he wrote in stilted phrase to Dr. Ramsay: "Medicine is my wife; science is my mistress; books are my companions; my study is my grave; there I lie buried, the world forgetting, by the world forgot." In the latter part of his life he had put away this preternatural gravity and after having married a wife and begot thirteen children by her he writes in treating of the causes of insanity "celibacy is a pleasant breakfast, a tolerable dinner, but a very bad supper. The supper is not only bad, but, eaten alone, no wonder it sometimes becomes a predisposing cause to madness." His wife, whom he married in 1776, was Miss Julia Stockton, of a New Jersey family.

In addition to his printed works, which were published in seven volumes, Rush edited editions of some of the most famous English works on medicine, including those of Sydenham. Among his writings, besides those which have been already mentioned, there are several worthy of special note. He

wrote of the disease we now term thermic fever, describing it with great accuracy in "An Account of the Disease occasioned by Drinking Cold Water in Warm Weather." There are also a number of other treatises by him on climatic affections, all possessing distinct value. Probably his best known book is his "Medical Inquiries and Observations on the Diseases of the Mind." Pepper stated that "His more elaborate addresses and orations are admirable, and some of them, as those on Cullen and on Rittenhouse, and his address on 'The Influence of Physical Causes on the Moral Faculties' are splendid performances." John Shaw Billings (q. v.) said of Rush's writings that they "Excel in manner rather than matter."

In Ramsay's sketch is included the accompanying letter, written by Mrs. Rush to Dr. Mease (q. v.), shortly after her husband's death, describing his last illness.

"At nine o'clock in the evening of Wednesday, the fourteenth of April, 1813, Dr. Rush, after having been as well as usual through the day, complained of chilliness and general indisposition, and said he would go to bed. While his room was prepared and a fire making, he became so cold that he called for some brandy and drank it; he then went to his room, bathed his feet in warm water, got into a warm bed, and took some hot drink; a fever soon came on, attended with great pain in his limbs and in his sides; he passed a restless night, but after daylight a perspiration came on, and all the pains were relieved except that in his side, which became more acute. He sent for a bleeder, and had ten ounces of blood taken from his arm, with evident relief. At ten o'clock Dr. Dorsey called and saw him, heard what had been done, and approved of the treatment; observed that his pulse was calm, but rather weak, and advised him to drink plentifully of wine whey, which was immediately given to him. He remained the rest of the day and on Friday with but little apparent disease, though never quite free from fever, and always complaining when he tried to take a long breath. On the morning of Saturday he awoke with an acute pain in his side, and desired that the bleeder might be sent for; to this I objected on account of the weak state of his pulse. I proposed sending for Dr. Dorsey, but Dr. Rush would not consent to his being disturbed; he reminded me of his having had a cough all the winter, and said 'this disease is taking hold of my lungs, and I shall go off in a consumption.' At eight o'clock Dr. Dorsey saw him and, upon feeling his pulse, objected to his losing any more blood, and called in Dr. Physick, who agreed in the opinion that bleeding was improper. The pain in his side, however, continuing, and his breathing becoming more difficult, Dr. Physick consented to his losing three ounces of blood from his side by cupping; this operation relieved him so that he fell into a refreshing sleep, and towards the evening of Saturday his fever went off, and he passed a comfortable night, and on Sunday morning seemed free from disease. When Dr. Physick saw him, he told me that Dr. Rush was doing well, that nothing now appeared necessary but to give him as much nourishment as he could take; he drank porter and water and conversed with strength and sprightliness, believing that he was getting well, until about four o'clock in the afternoon when his fever returned, but in a moderate degree. At five o'clock Dr. Physick and Dr. Dorsey visited him, and found him not so well as in the morning, but did not appear to apprehend what so soon followed, for at that time nothing was ordered different from the morning. At nine o'clock they again visited him, when they found him so low as to apprehend a fatal termination of his disease. Stimulants of the strongest kind were then administered; you, my friend, know with how little effect!"

A detailed list of his writings can be seen in the "Surgeon-general's Catalogue," Washington, District of Columbia.

FRANCIS R. PACKARD.

RUSH, James (1786-1869), son of the distinguished Benjamin Rush (q. v.) and younger brother of the statesman, Richard—he who was minister to England, Secretary of the Treasury of the United States and Minister to France, also an appointee of President Jackson to receive in England the bequest of Smithson establishing the Smithsonian Institution in Washington—was born March 1, 1786 in Philadelphia. James was a graduate of Princeton in 1805, studied medicine at Edinburgh, and received his M. D. from the University of Pennsylvania in 1809 with a thesis "On the Uses of the Omentum." He then went abroad and again in 1876 returned to Europe, going as far as Egypt.

Rush practiced for a few years in Philadelphia and lectured privately, and then gave up medicine for scientific and literary pursuits. His wife was the versatile and highly educated Phoebe Anne Ridgway, gen-

erally called "Madame Rush," daughter of Jacob Ridgway whose house in Philadelphia became noted for its lavish and distinguished entertainments. From modest beginnings they received in their later years, from his wife's family, "an immense fortune" of a million dollars. After his wife's death in 1857, he lived in comparative seclusion and ultimately willed his fortune to establish the Ridgway Branch of the Philadelphia Library, with sundry conditions, including the republication of his books each decade for fifty years, which made the trustees hesitate to accept their charge.

His chief work, "The Philosophy of the Human Voice," 1827, has been held by some to be incomprehensible but by others to be the best work on the subject in the language. He also wrote "Rhymes of Contrast on Wisdom and Folly," "Hamlet, A Dramatic Prelude," 1834, and "Outline of an Analysis of the Human Intellect," 1865.

He died May 26, 1869.

RUSS, John Denison (1801-1881), pioneer physician for the blind, and penologist, was born in Chebacco (now Essex), Massachusetts, September 1, 1801. He received an A. B. from Yale College in 1823, studied medicine at Boston, New Haven, Paris, London and Dublin, receiving his M. D. from Yale in 1825, and began to practice in New York in 1826. From 1827 to 1830 he was almoner of the supplies sent from Boston to Greece, and superintendent for fifteen months of a hospital which he established at Poros. On his return to New York in the latter year he engaged in the practice of medicine, and March 15, 1832, began the instruction of three blind boys, at his own expense, soon increasing the number to six. He was invited to organize the New England Asylum for the Blind, chartered in 1829, but as he declined, Dr. Samuel Gridley Howe (q. v.) received the appointment, and Dr. Russ was appointed superintendent of the New York blind institution in March, 1832. He instructed his pupils in basket making, rug weaving and similar trades, so that they might become self-supporting. Finding that the alphabet, maps and figures in use in European institutions were very cumbrous and expensive, he invented a phonetic alphabet of forty-one characters, sufficiently like those of the Roman alphabet, to be read with little difficulty by seeing persons, to which he added twenty-two suffixes and prefixes, and proposed to print books for the blind, in raised type of these characters. He also greatly simplified the mathematical characters for the blind. His maps continued in use but his figures were ultimately superseded by the Braille process.

Dr. Russ was active in the organization of the New York Prison Association, and was for several years its secretary, serving also gratuitously for five years as its agent for investigating cases of detention. He also took an active part in bringing about the reform in the penitentiary at Blackwell's Island, New York Harbor, and the erection of the new workhouse. In 1849 he prepared a petition to the legislature, requesting it to make some provision for the proper training of vagrant children; and in 1851 the juvenile asylum was incorporated, Dr. Russ being appointed the superintendent, a position he held until 1858 when he resigned, to live in Brooklyn. He died, March 1, 1881, at Pompton, New Jersey.

RUSSELL, John Wadhams (1804-1887), pioneer surgeon of Ohio. His grandfather was Captain John Russell, who commanded a privateer brig in 1778; his father, the Hon. Stephen Russell, of Litchfield County, Connecticut; his mother, Sarah Wadhams, of Goshen, Connecticut. John Wadhams was born in Canaan, Connecticut, January 28, 1804. As a boy he went to the common schools of Litchfield, then entered Hamilton College in 1821, with the intention of taking a complete course, but in 1823, health failing, he was compelled to go to South Carolina, where he recovered and began the study of medicine under Dr. Sheridan. In 1824 he attended a course of lectures in the medical department of Yale College, and the year following, a course in Berkshire Medical Institution of Pittsfield, Massachusetts. The following year he studied medicine with Dr. George McClellan (q. v.) of Philadelphia. In 1826 he entered Jefferson Medical College, and in 1827 took his M. D. there, the same year beginning practice at Litchfield, Connecticut, in partnership with Dr. Abbye, filling, meantime, the office of demonstrator of anatomy in the medical department of Yale College. In 1828, by the advice of his physician, he removed to Ohio, with the hope "that the malarial climate might ward off a tendency to consumption." He settled first in Sandusky, Erie County, but finding the lake winds too harsh, moved, during the same year, to Mt. Vernon, in Knox County, where he remained constantly engaged in practice

until 1887. He was one of the founders of the Ohio State Medical Society, of which he became president in 1862.

He wrote and delivered many addresses before the State Medical and other societies, but, from lack of appreciation of his own ability and learning, published few or none. In 1876, at the meeting of the International Congress of Physicians and Surgeons, Professor Gross introduced him as "the man, who, but for his extreme modesty, would have been the leading surgeon of the world."

Dr. Russell was of medium height and rather stout. He was lame, a disability resulting from an injury in childhood. He had dark hair, dark complexion, aquiline features, and piercing black eyes. In manner he was cheerful. He was a fine conversationalist, but inclined to be abrupt and rather positive. He had the caution of the proverbial Connecticut Yankee, and before performing a dangerous operation, to avoid suits, made it a custom to have the patient sign a proper instrument dividing responsibility and assuming for himself no more than he considered just. During his practice of sixty years he performed many of the capital, and most of the minor operations of surgery, operating for stone in the bladder more frequently than any other surgeon of Ohio of his day, and, though his facilities were meagre as compared with those of the present, he never lost a case. He preferred the suprapubic operation, and used it in several cases, but, swayed by custom, more frequently chose the lateral perineal route. In the early days of his practice it was impossible to obtain necessary instruments, and he was often compelled to devise such as he needed. For special purposes he made models of dough and forged the instruments himself, or had a silversmith copy them in silver or other metal.

In 1828 he married Eliza Beebe, daughter of the Hon. William Beebe, of Litchfield, Connecticut. They had five children, William B.; Sarah, who died in infancy; John Wadhams, Jr.; Ann Eliza; Isaac Wadhams. All of the sons were at some time partners of their father, but died early. His grandson, Dr. John E. Russell, was his partner during the last six years of his life.

Dr. Russell died of uremia, March 22, 1887, in Mt. Vernon, Ohio.

A portrait is in possession of his great grandson, Lecky H. Russell, M. D., of New York.

STARLING LOVING.

SACHS, Theodore Bernard (1868-1916), public health worker, and tuberculosis specialist, of Chicago, whose untimely death retarded the progress of municipal tuberculosis work in that city, was born in Dinaberg, Russia, May 2, 1868, son of Bernard and Sophia Sachs, of Jewish faith. He was a graduate of the Kherson High School and received his degree in law in 1891, from the Imperial New Russian University of Odessa. His removal to America in 1891 was doubtless prompted by a winter's exile, imposed upon him and several fellow-students because of their participation in a debate disapproved of by the local authorities. As soon as possible after his arrival in Chicago he was naturalized. His life in Russia made him a staunch defender of the oppressed, and a fearless, painstaking, tireless laborer for the poor. He worked his way through the medical department of the University of Illinois, taking his degree in 1895. He received the highest Freshman honor, the Faculty Medal, for the first year, and an appointment as instructor in internal medicine (1901-1904). Dr. Sachs was secretary for the Imperial Russian Commissioner to the World's Fair, also was employed for a short time at the Chicago Law Institute. After a two years' internship at the Michael Reese Hospital, Dr. Sachs took an office at 12th and Halsted Sts. in order to serve the sick poor, both in private practice and in the clinics of the Jewish Aid Dispensary. He died poor, though admittedly a leading diagnostician, sanitarian and consultant, in the detection, treatment and prevention of tuberculosis. From the first, he was interested in tuberculosis, so that a survey of his life becomes as well a study of the tuberculosis movement in Illinois.

He was an attending physician at Michael Reese and Cook County Hospitals; in 1915 a member of the Hygiene Reference Board of the Life Extension Institute, and in 1916 a Fellow of the Institute of Medicine of Chicago. In 1900, he established a tuberculosis clinic at the Jewish Aid Dispensary, the first in Chicago to be devoted exclusively to the examination and treatment of pulmonary tuberculosis; here he served over ten years. In 1903 he began the first of three intensive studies of the prevalence and incidence of tuberculosis among children of tuberculous parents in a small congested area near his office. The first two studies covered periods of 18 and 24 months; charts of these surveys made in collaboration with his wife, Sena Louise Wilson, received honorable mention at

the International Tuberculosis Congress in Washington in 1908. The third report involved the study of several hundred children. (See the "Journal of the American Medical Association" for October 24, 1908.)

In 1905 he was attending physician for the Glencoe Camp, the first in Illinois for poor tuberculous patients. From these crude beginnings developed a winter camp at Dunning and the Edward Sanitarium at Naperville, of which he was director and examining physician from 1906 until his death. From this period on, Dr. Sachs gave the greater part of his time to his free tuberculous work, serving as director and president of the Chicago Tuberculosis Institute; from 1909 as secretary and president, respectively of the board of directors of the Municipal Tuberculous Commission; as director, vice-president, chairman of committees, and in 1915-16 as president of the National Association for the Study and Prevention of Tuberculosis; attending physician of the Chicago-Winfield Sanitarium, examining physician for the Jewish National Consumptives' Hospital in Denver; founder and first president of the Robert Koch Society for the Study of Tuberculosis, and chairman of various local committees in state, county and local tuberculosis work. Two of the most important of these were a Committee on Factories, the first systematic campaign for medical examination of employees, covering in all more than 250,000 workers and an Advisory Committee on County Tuberculosis Institutions.

Although one of the first men in Illinois to recognize the sociological and economic significance of tuberculosis, Dr. Sachs was primarily a physician. He never saw the disease apart from the patient, but he was quick to recognize the need for public control of so vast a problem, and while he was meticulous in his insistence upon proper diagnosis and treatment in each case, he constantly worked for larger opportunities for prevention. In 1906 he investigated and denounced in print the county care of advanced consumptives. His charges were denied and ridiculed, but six years later he presented a far more drastic report to the National Association for the Study and Prevention of Tuberculosis, as chairman of its committee on the investigation and standardization of the institutional care of the advanced consumptive, which was approved and later recommended as a national standard. Not discouraged by the lack of public and professional support, nor by the failure to secure an appropriation for a State sanitarium in 1905, Dr. Sachs early saw the advantage of the Glackin Law, introduced into the Illinois Legislature in 1908, and assisted in conducting a successful referendum campaign for the Chicago Sanitarium in 1909. The Glackin Law permits cities and villages, after a referendum vote, to levy special taxes for the construction and maintenance of tuberculosis sanatoria.

As a member of the first municipal tuberculosis commission, he was instrumental in having the clinics and dispensary staffs of the Chicago Tuberculosis Institute given over to the city, preventing needless duplication of effort in the experimental stage of clinic and home-follow-up work. As rapidly as possible, all paid employees qualified for their posts by civil service examinations which were conducted with the same scrupulous regard for the welfare of the work so characteristic of Sachs and his associates. The establishment of a municipal institution in which the poorest consumptive could receive adequate, scientific treatment had been for years his chief hobby. As chairman of the Committee on Plans, he made extensive trips at personal expense to large sanatoria to digest and embody the best in his Chicago plans. Constantly, from 1911, when funds first became available, until 1915, when the doors of the Sanitarium were thrown open, Dr. Sachs devoted from two to six hours of every working day to the details of site, plans, specifications, inspection of work in progress, conferences, equipment, organization and personnel in the organization.

More alarmed by the fate of the institution to which he had given his life, than by gross calumnies as to personal dishonesty and mismanagement, Dr. Sachs committed suicide at the Edward Sanitarium by taking an overdose of morphine, on April 2, 1916, vainly hoping that his death might arouse the citizens of Chicago to the real significance of the political mismanagement of the tuberculosis problem. He left this letter:

"To the People of Chicago:

The Chicago Municipal Tuberculosis Sanitarium was built to the glory of Chicago. It was conceived in the boundless love of humanity and made possible by years of toil. No institution was ever planned more painstakingly, or built more honestly. Every penny of the people's money is in the buildings, equipment and organization. The city council of Chicago should make a most thorough inquiry into the entire history of the institu-

tion, and the Community should resist any attempt of unscrupulous contractors to appropriate money which belongs to the sick and the poor. Unscrupulous politicians should be thwarted. The institution should remain as it was built; unsoiled by graft and politics—the heritage of the people. In the course of time every man and woman in Chicago will know how Dr. Sachs loved Chicago, and how he has given his life to it. My death has little to do with the present controversy. I would not dignify it. I am simply weary. With love to all,

Theodore B. Sachs."

He was given a public funeral attended by thousands, and was buried in the grounds of the Edward Sanitarium at Naperville. The Finance Committee of the Chicago City Council made a thorough inquiry into the affairs of the Municipal Tuberculosis Sanitarium and reported April 30, 1917, completely exonerating Dr. Sachs and his associates of any misuse of public funds.

EDNA L. FOLEY.

SAGER, Abram (1810-1877), of Ann Arbor, Michigan, was born at Bethlehem, Albany County, New York, December 22, 1810. His father, William Sager, was a farmer of German ancestry, who settled in New York at an early age. Abram studied medicine with Professors March and Ives at Albany and New Haven, Connecticut, but was graduated M. D. from Castleton Medical College, at Castleton, Vermont, in April, 1835. For a time he practiced in Detroit, Michigan, then at Jackson, but finally settled at Ann Arbor. In 1837 he was made chief of the botanical and zoological departments of the Michigan Geological Survey. The zoological specimens which formed the basis of his report laid the foundation for the present zoological collection of Michigan University Museum. The Sager Herbarium in the University Museum contains 1,200 species and 12,000 specimens. He also prepared and placed in the museum of the medical department a valuable collection illustrating the comparative craniology, neurology and embryology of the vertebrata. From 1842 to 1855 he was professor of botany and zoology in Michigan University; in 1848 he was made professor of theory and practice of medicine; in 1850 professor of obstetrics and diseases of women and children—a place occupied till he was made emeritus professor in 1874. He resigned his chair because he disapproved of the actions of the regents in connecting homeopathy with the medical department. For several years before his resignation Dr. Sager was dean of the medical department. In 1852 the University gave him the honorary A. M. In 1874 Dr. Sager was elected president of the Michigan State Medical Society, and was a member of the Obstetrical Society of Philadelphia, and the New York State Medical Society. His success as a teacher was gained in spite of natural defects in the way of an inferior physical appearance, an unpleasant voice and a temperament shrinking from publicity; the intrinsic merit of his subject matter and the weight of his personal character fixed the attention of his audience.

In 1838 he married Sarah E. Dwight, of Detroit, Michigan, and had eight children, five of whom survived him. He died in Ann Arbor, Michigan, August 6, 1877, from phthisis pulmonalis.

Many of his papers are to be found in the files of the "Peninsular Medical Journal."

LEARTUS CONNOR.

ST. JOHN, Samuel (1813-1876), an eminent chemist of New York City, was born in New Canaan, Connecticut. Of his early education there is no information; that it was thorough we know from the fact that he was the valedictorian of his class in Yale College, where he took his A. B. in 1834. The two years succeeding were devoted to the study of law, and a third to the duties of a tutor in Latin, when a sudden attack of hemoptysis warned him of the necessity of rest and a change of climate. Accordingly he traveled for a year in Europe, and immediately upon his return in 1838 was elected to the professorship of chemistry, geology, and mineralogy in the Western Reserve College, at Hudson, Ohio. In 1851 he was called to the chair of chemistry and mineralogy in the Western Reserve Medical College at Cleveland, a position which he filled with eminent success. Also he was professor of chemistry and geology at Kenyon College, until called in 1857 to the chair of chemistry in the College of Physicians and Surgeons, New York City. This latter position he occupied continuously until his death at New Canaan, in the house in which he was born, September 6, 1876.

St. John received no special medical education, and was never a practicing physician, but received the degree of M. D. from three distinct institutions, viz.: the Castleton, Vt. Medical College, in 1840; the Western Reserve Medical College, in 1851, and the College of

Physicians and Surgeons of New York, in 1857. He was likewise honored with the degree of LL. D. by the Georgetown College of Kentucky, 1849.

While a man of thorough scientific education and attainments, Dr. St. John was extremely modest and reserved. Dr. John C. Dalton, (q. v.), his colleague and friend, has described him as "a man whom no breath of suspicion ever touched, and whose integrity was a natural and essential part of his organization." His son, Dr. Samuel B. St. John, became an ophthalmologist in Hartford, Connecticut.

HENRY E. HANDERSON.

SALISBURY, James Henry (1823-1905), of New York State, was a zealous microscopist, pioneer in the germ theory of disease and early writer in the field of phyto-pathology, and one who, while making no other noteworthy find, yet often stood on the threshold of many of our most important discoveries; he accomplished everything short of success. He was born at "Evergreen Terrace," Scott, Cortland County, New York, October 13, 1823. Coming of sturdy ancestors, who came over from England about 1644, he was the second son of Nathan Salisbury and Lucretia A. Babcock. He had his early education under Samuel Woolworth at Homer Academy, in Cortland County; in 1846 he received the degree of Bachelor of Natural Sciences at the Rensselaer Polytechnic Institute; in 1852 that of Master of Arts from Union College; in 1850 M. D. at Albany Medical College. In 1846 he was appointed assistant, and in 1849 principal chemist of the New York State Geological Survey, serving until 1852. In 1848 he was elected a member of the American Association for the Advancement of Science; in 1857 of the American Antiquarian Society; in 1878 he was made president of the Institute of Mycology.

Salisbury won a prize gold medal from the Young Mens' Association of Albany for the best essay on the "Anatomy and Histology of Plants" (1848), and the prize of three hundred dollars for the best essay on "The Chemical and Physiological Examinations of the Maize Plant, during the Various Stages of its Growth," offered by the New York State Agricultural Society, and published in the New York State Agricultural Reports for 1849. He lectured on elementary and applied chemistry in the New York State Normal School (1851-1852).

His work in microscopic medicine was begun in 1849. He was a pioneer in advocating the germ theory of disease. In 1860 he began a series of investigations to discover if possible where blood was made, and the office or offices it played in the organism; after much labor he determined that the spleen was the great blood gland and the mesenteric and lymphatic glands were the lesser agents. (American Journal of Sciences, 1866, v. 51, 307-340).

In 1864 he went to Cleveland, Ohio, to aid in establishing the Charity Hospital Medical College, and lectured there on physiology, histology and the microscope in disease (1864-1866). He published numerous analyses of various vegetables and fruits (1850-1861) and wrote on phyto-pathology. He wrote on "Blight in Apple, Pear, and Quince Trees and the Decay in their Fruit" (1863); on "Chronic Diarrhoea arising in armies due to the state of the food" (1864); "The Probable Source of Camp Measles, Found in the Fungi of Wheat and Rye Straw"; and again on inoculating the human system with straw fungi to protect it against measles (1862); a description of two new algoid vegetations, the probable specific causes of syphilis and gonorrhoea (1873); two parasitic diseases in sucking kittens and sucking puppies (1875); "Pus and Infection" (1878); a study of ancient earth and rock writing (1863); in addition many other papers on microscopic subjects.

In 1860 Dr. Salisbury married Clara, daughter of the Hon. John T. Brasee, of Lancaster, Ohio.

SALISBURY, Jerome Henry (1854-1915). Jerome Henry Salisbury, professor of chemistry and editor, was born in Fitchburg, Wisconsin in 1854. He graduated at Wisconsin University in 1876 and was valedictorian of his class; he graduated in medicine at Rush Medical College in 1878, soon after becoming professor of chemistry in the Northwestern University Women's Medical School, Chicago, Later he was appointed assistant professor of chemistry, then assistant professor of medicine in Rush Medical College; also he was professor of medicine at the Illinois Postgraduate School. He collaborated with Dr. Frank Billings in the Section on General Medicine of the "Practical Medicine Series" and with Professor C. S. N. Hallberg on the "Physician's Manual of the Pharmacopeia." From 1907 until his death he was on the

editorial staff of the Journal of the American Medical Association.

He died at his home in Wheaton, Illinois, May 14, 1915.

Salmon, Daniel Elmer (1850-1914), former chief of the Bureau of Animal Industry of the United States Department of Agriculture. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1015-1016.

SANDS, Henry Berton (1830-1888), of New York, exercised an important influence over the development of surgery in America; he held a great teaching position in the strategic centre of our country; he wrote well; his interests were catholic, he had an extensive experience, and was a valued consultant. He brought perityphlitis a step farther on its way than did William Parker (q. v.). All who knew him intimately felt that they were dealing with a surgeon of extraordinary ability and were deeply impressed in a manner which cannot now be defined. Sands was born in New York City September 27, 1830, and spent his entire active life there; his father was long known as one of New York's trusted apothecaries. Henry studied at the local high school, and then went to the College of Physicians and Surgeons, where he graduated in 1854, to enter Bellevue Hospital at once as an interne (1854-55). He then went abroad for a year, and on returning was appointed demonstrator of anatomy in his college, and settled down in New York to build up a general practice (1856).

He took a great interest in pathology during the earlier years of his professional work and covered a wide range of subjects. He was president of the pathological society, and a member for thirty-one years. He was also a president of the New York Medical and Surgical Society. From 1867-70 he was a partner of Willard Parker, and through this happy association was gradually weaned from all interest other than surgery, for which he was so admirably fitted by his special training in anatomy and pathology. In 1867 he was made professor of anatomy in his college, and in 1879 professor of surgery, sharing the chair with Markoe. He was attending surgeon to the New York Eye and Ear Infirmary (1861-63); to St. Luke's Hospital (1866-76); to Bellevue Hospital (1863-83); and to Roosevelt Hospital (1876-88). He was an earnest advocate of a continuous service and at his insistence it was adopted at the Roosevelt, as at the German Hospital in Philadelphia, and later at the Johns Hopkins, Baltimore. For the last five years of his life he held only the position at the Roosevelt. From the year 1854 until 1888, the year of his death, Dr. Sands acted as preceptor to 495 students. Among them we find the names of Allan McLane Hamilton, Edward L. Trudeau, William T. Bull, Charles B. Kelsey, William S. Halsted, Frank Hartley, Andrew J. McCosh, H. Allen Starr, George S. Huntington, Alexander Lambert, and Reed B. Bontecou. He wrote on monocular amaurosis in 1866, and on an operation for septic peritonitis due to perforation of the appendix in 1888. His various papers in the interval cover a wide range of subjects: fracture, anchylosis, ligation of the carotid, gleet, tracheotomy, and stricture, and above all, perityphlitis.

In his well-known article on Perityphlitis ("Annals of the Anatomical and Surgical Society of Brooklyn," vol. ii, 1880, p. 249), he refers to Parker's plan of opening the abscess, and then on a basis of an experience with twenty-six cases, he urges earlier interference. He gives an accurate description of the symptoms, attributing the disease to the cecum or the appendix. He treated eleven by operation and in but one failed in opening the abscess; only one died after refusing an early operation, as urged. He commonly operated in the second or third week, and exposed the transversalis fascia, using a hypodermic needle to find the pus. The paper closes with tables of all his cases. He focused his attention upon perityphlitis-appendicitis and made it easily recognizable, and led men up to the door of the more aggressive surgery which followed R. H. Fitz's paper (q. v.). Sands himself even went further than these late abscess operations in making a diagnosis of "acute septic peritonitis caused by perforation of the vermiform appendix" and operating within forty-eight hours; he found the appendix perforated, trimmed the margins of the opening, washed out the affected area, and closed the wound with a drain and the patient recovered. ("New York Medical Journal," 1888, page 197). Sands was a consultant in the cases of President Garfield, General Grant and Roscoe Conkling. In early life he was an organist in a leading church and ever retained a warm interest in music, and was a member of the New York Philharmonic Society.

In 1856 he married Sarah M. Curtis, by whom he had two children, Dr. Robert A.

and Josephine, who survived him. He was married a second time in 1875 to Mrs. J. Reamey, the daughter of Peter Hayden; one son born of this union survived him.

He was trim in appearance, keen, and his eyes looked so bright through his clear glasses, and he acted with such decision, that he impressed and cheered his patients from the moment his quick step was heard coming up the stairs until the door of his coach was heard to snap vigorously as he drove off. In the winter of 1885-86 he had a slight cerebral lesion and reduced his work, resigning his position in the Roosevelt in the spring of 1888. He died in his fifty-ninth year, on Sunday, November 18, 1888, as he was going to his home with Dr. A. A. Smith, to meet a company gathered for a musical afternoon.

HOWARD A. KELLY.

SARGENT, Dudley Allen (1849-1924), of Cambridge, Mass., well known director of physical training, was born in Belfast, Maine, September 28, 1849 the son of Benjamin and Caroline Rogers Sargent. He was graduated A. B. from Bowdoin College in 1875 and A. M. in 1887; in 1894, he received her honorary Sc. D. He took his medical degree from Yale in 1878. From 1879 to 1889, he was assistant professor of physical training at Harvard, from 1879 to 1919, director of the Hemenway Gymnasium; from 1881 to 1916, director of the Normal School of Physical Training for women and girls in Cambridge, and after 1916 president of its successor, the Sargent School for Physical Education, and of the Sargent Camp for girls at Peterborough, New Hampshire. He invented much of the modern gymnasium apparatus.

Dr. Sargent was the author of "The Handbook of Developing Exercises," 1886, "Universal Test for Strength, Speed, and Endurance," 1902, "Health, Strength, and Power," 1904, "Physical Education," 1906, and many articles on his specialty.

Dr Sargent was a thickset man below the average in height and in his earlier years wore a full beard. He arrived in Cambridge soon after the opening of the new Hemenway Gymnasium in 1879 and immediately took an active interest in developing the instruction of the students in the use of the apparatus and in physical examinations. He gave little talks in the trophy room and when the stated exhibitions took place in the gymnasium performed feats of daring on the triple-barred échelle, it being rumored that he had been attached to a circus not long before. His rocking chair act was the envy and wonder of the entire student body. Seating himself in a rocking chair on a single bar of a trapeze, with both arms extended to balance himself, he gradually hitched the chair forward until it rested on the bar at the tips of the rockers. This was when Sargent was in the thirties. In later life he devoted much time to the physical education of women and to writing.

He married Ella Fraser Ledyard of Brooklyn, New York, April 7, 1881. He died of heart disease at Peterborough, N. H. July 21, 1924.

SARGENT, Fitzwilliam (1820-1889), writer of Philadelphia, father of John Singer Sargent, the artist, was born in Gloucester, Massachusetts, May 17, 1820. His family was noted in the military; civil and artistic annals of the country. The earliest known ancestor in America came from Gloucester, England, before 1678; another was Epes Sargent, a colonel in the militia before the American Revolution and a justice for thirty years; Paul Sargent (1745-1828) was an officer in the Revolution and afterwards a judge; Winthrop (1753-1820) fought in the Revolution and was adjutant-general during the Indian Wars.

Fitzwilliam Sargent was a graduate of Jefferson College, Cannonsburg, Pennsylvania, and then entered the University of Pennsylvania, graduating in medicine in 1843 with a thesis on "Nitrate of Silver." He wrote "On Bandaging, and Other Minor Operations of Minor Surgery," Philadelphia, 1848; the book passed through several editions and was translated into French and Japanese; an edition was published with an additional chapter on military surgery in 1862. He edited Robert Druitt's "Principles and Practice of Minor Surgery," 1848, and James Miller's "Principles of Surgery," 1852. Sargent was surgeon to Wills Eye Hospital, Philadelphia, 1852-1858. In 1864 he wrote a pamphlet entitled "England, the United States and the Southern Confederacy," published in London.

He married Mary Newbold in 1855, gave up his medical practice, went to live in Europe, wintering generally in Italy or the South of France, on account of his wife's health. He died at Bournemouth, England, April 27, 1889. John Singer Sargent, (1856-1925) the distinguished artist, his son, was born in Italy in 1856. Other members of this noted family were: Winthrop (1825-1870), author of genealogical and historical works; Henry (1770-1845), who studied under Ben-

jamin West, and painted "Christ's Entrance into Jerusalem" and the "Landing of the Pilgrims;" Henry Winthrop (1810-1882), a famous horticulturist; Lucius Manlius (1786-1867), author and lecturer and zealous advocate of temperance; Horace Binney (1821-1908), brigadier-general in the Civil War.

Dr. Lucis Manlius Sargent (1826-1864), son of Lucius Manlius, was born in Boston, September 15, 1826; his mother was a sister of Horace Binney. He was graduated at Harvard University in 1848 and took his M. D. there in 1857, then was appointed house-surgeon and dispensary physician at the Massachusetts General Hospital; he became surgeon to the Second Massachusetts Volunteers in May, 1861, resigned in the autumn and became captain in the First Massachusetts Cavalry. He took part in the Battles of Kelly's Ford, Antietam, South Mountain, Fredericksburg, and Chancellorsville. He was promoted to be lieutenant-colonel, was severely wounded in an engagement on Meherrin River, and died near Bluefield, Virginia, December 9, 1864.

Others were John Osborne Sargent (1811-1891), lawyer and author, who while a student at Harvard University founded, with his brother Epes, and Oliver Wendell Holmes, the "Collegian;" Epes Sargent (1813-1880), editor, poet and dramatist, author of the popular poem, "Life on the Ocean Wave;" and Charles Sprague Sargent (1841-1927), officer in the Civil War, author of books on forestry and professor of arboriculture at Harvard University.

SARGENT, Joseph (1815-1888), founder of the Worcester (Massachusetts) Society for Medical Improvement and instrumental in the building of the Worcester Lunatic Hospital and the Washburn Memorial Hospital, was the son of Col. Henry Sargent, and was born in Leicester, Massachusetts, December 15, 1815. After graduating from Harvard College in 1834 he studied medicine one year with Dr. Edward Flint, of Leicester, and three years at a private school in Boston, of which Dr. James Jackson was the head, also attending lectures at the medical schools of Harvard University and of the University of Pennsylvania, Philadelphia. After receiving his M. D. from Harvard in 1837, he spent one year as house physician in the Massachusetts General Hospital, two years in study in Paris, and in 1840 opened an office in Worcester. In 1850 he spent another year in Europe, and again in 1868. For forty-eight years Dr. Sargent was a leader in the medical profession, holding in turn all the offices in the district Society. He was councillor in the State society for a long time, and in 1874-76 vice-president. He was one of the original members of the Boston Society for Medical Observation, and the first out-of-town member of the Boston Society for Medical Improvement. To his exertions also is largely due the present prosperity of the City Hospital, of which he was trustee from 1871 to 1886, serving at the same time as a member of the consulting staff. He was in addition trustee of the Memorial Hospital, of the Lunatic Hospital and of Clark University, and a member of the Antiquarian Society.

He married Emily Whitney, September 27, 1841.

Dr. Sargent brought to Worcester a store of knowledge and skill, which made him pre-eminently the most conspicuous member of the medical profession in Central Masachusetts. He died in Worcester, October 13, 1888.

LEMUEL F. WOODWARD.

SARRAZIN, Michel S. (1659-1734), early Canadian physician and naturalist, was born at Nuits, in Bourgogne, France in 1659, and came to Canada in 1685. Returning to France in 1694 he took a degree in medicine at Rheims and came back to Quebec in 1697, having the title "medecin du roi." In 1699 he was created physician-in-chief of all Canada and was elected as well a corresponding member of the newly established Académie des Sciences of Paris, with the special duty of making a study of the plants and animals indigenous to Canada. His salary was a bare 600 livres, without recompense from his patients. Sarrazin was a member of the Supreme Council of Quebec in the year 1707.

About 1712 he married Marie Anne, the daughter of François Hazeur, fils, and had seven children. He died in Quebec, September 9, 1734, of a malignant ship fever caught in the wards of the Hotel Dieu, at Quebec, of which he was attending physician. His widow received a pension from the King; his sons, who were regarded as protégés of the State, were then studying medicine in Paris. He wrote: "Description of the Castor," "Memoirs of the Academy of Sciences" (1704); "A Letter on the Mineral Waters of Cap de la Madeleine," Memoirs of Trevoux" (1736); "Description of the Water or Musk Rat of America," in Paris

"Documents," and a description of the plant which was named for him.

There seems to be some confusion among the botanists as to which Sarrazin the plant "Sarracenia" was named for. It was first named and described by J. M. Tournefort in "Institutiones rei herbariæ," second edition, Paris, 1700, thus: "Sarracena Canadensis foliis cavis et auritis. Saracenam appelavi a Clarissimo D. Sarrazin, Medicinæ Doctore, Anatomico et Botanico Regio insigni, qui eximiam hanc plantam pro summa qua me complectitur bene volentia e Canada misit." Linnaeus in his Genera Plantarum, 1753, established the genus ascribing it to Tournefort. The latter (on pp. 37, 38) gives great credit to Dr. Jean Antoine Sarrazin for his magnificent edition of Dioscorides and his notes on plants. As no initials are given to this Dr. Sarrazin, many writers have assumed that Dr. Jean Antoine is the one meant. But he was born in Lyons, France, April 25, 1547, and died there November 29, 1598, ten years before Tournefort was born. It was impossible, therefore, for him to have sent the plant to Tournefort.

HOWARD A. KELLY.

SARTWELL, Henry Parker (1792-1867), the physician-botanist for whom was named the plant-genus "Sartwellia," was born at Pittsfield, Massachusetts, April 18, 1792, and died November 15, 1867, at Penn Yan, New York. He began the practice of medicine early in life, and was a surgeon in the United States army in the War of 1812. He afterwards made his home in Ontario County, New York, and about 1830 settled at Penn Yan, in an adjoining county, where he continued his medical practice for the remainder of his life. He devoted much of his time for many years to the study of botany, and particularly to the large and difficult genus "Carex." He issued sets of these plants, under the title "Carices Americae Septentrionalis exsiccatae," of which the first part appeared in 1848 and the second in 1850; the third part was in course of preparation at the time of his death, but was never published. Dr. Sartwell was also the author of a "Catalogue of plants growing without cultivation in the vicinity of Seneca and Crooked lakes, in western New York," published in 1845 in the fifty-eighth annual report of the Regents of the University of New York.

In 1864, Hamilton College conferred upon him the degree of Ph. D.; and at about the same time he sold to that institution his very extensive private herbarium, containing not only the results of his own collecting for many years, but numerous specimens secured by exchange with Buckley, Torrey, Barratt, Boot, and other botanists. His most intimate asociate in the study of sedges, Professor Chester Dewey, (q. v.), of Rochester, New York, survived him only one month.

JOHN H. BARNHART.

Satterlee, Richard Sherwood (1798-1880), surgeon, United States Army. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1019 and 1020.

SAXE, Arthur Wellesley (1820-1891), California physician, botanist and artist, was born at Plattsburg, New York, October 20, 1820. He had only a common school education, but studied painting with a good artist, and as a medical student, painted pictures, chiefly portraits, to pay his way through the Vermont Academy of Medicine at Castleton, where he took his M. D. In May, 1850, he went to California and was in the mines until 1852; in 1854 he is heard of as a resident doctor in Santa Clara County, California, and this place remained his home until his death at Pasa Robles, in May, 1891. He was president of the State Medical Society and of the State Horticultural Society and owned a large collection of roses and rare bulbs; he took botanical excursions through California and the Sandwich Islands. He did work as a physician, was a skilful surgeon and was reputed to be clever in the use of obstetric forceps and difficult cases of catheterization, two important accomplishments in his day. His report on leprosy—the result of study in the Sandwich Islands—was read before the State Medical Society in 1880. He made his most extensive study of flowers and plants of California in conjunction with Kellogg. Two plants were named after him, "Rumex Saxei" and "Clarkca Saxeana," or Green Petunia; after his death a tree in the park at Santa Clara was called the "Saxe Tree" in his memory.

During his stay in the Sandwich Islands, Saxe became a warm friend of King Kalakaua, and was his guest at court; he painted a picture of the burning crater of Mauna Loa, doing most of the work at midnight, at which time the flaming crater presented the best appearance. Much of his work was destroyed

in the San Francisco fire, but his brother, Dr. Frederick Saxe of Oakland, California, had a small book of water-color sketches of flowers and plants made at odd moments.

HOWARD A. KELLY.

SAY, Benjamin (1756-1813), early Philadelphia physician and humanitarian, was the son of Thomas Say (1709-1796), noted member of the Society of Friends, and was the father of Thomas Say (1787-1834), the distinguished naturalist. Benjamin Say was born in Philadelphia, in 1796, was educated at Friends' schools, and then entered the University of Pennsylvania, graduating M. D. in 1780. He was an apothecary, like his father, as well as a physician. A sympathizer with the colonists during the American Revolution, he was classed with the "fighting Quakers," organizers of the Society of Friends. "The Monthly meeting of Friends, called by some Free Quakers, distinguishing us from the brethren who have disowned us." He was a fellow of the College of Physicians of Philadelphia, and was one of the twenty-eight signers of the original constitution of the College, January 2, 1787, and was treasurer from 1791 to 1809. He was a member of the Pennsylvania Prison Society and president of the Pennsylvania Humane Society. From 1808 to 1811 he was a member of the United States Congress.

Dr. Say was author of "Spasmodic Affection of the Eye" (1792). He was twice married. He died in Philadelphia, April 23, 1813.

HOWARD A. KELLY.

SAYRE, Lewis Albert (1820-1900), of New York, who has been called the father of American orthopedic surgery, was born on February 29, 1820, at Bottle Hill, now Madison, New Jersey, the son of Archibald Sayre whose ancestor, Thomas, came to this country from Leighton Buzzard, Bedfordshire, England, and settled at Lynn, Massachusetts, about 1638. His mother was Martha Sayer (not Sayre). His father dying when he was twelve years old, the boy went to Lexington, Kentucky, where he was brought up by his uncle, David A. Sayre, a wealthy banker, who hoped he would enter the ministry and assume charge of a church in Lexington, which he, in a great measure, had built. The young man, however, when he had finished a course at Transylvania University, set his heart on becoming a doctor, and returning east entered the College of Physicians and Surgeons in New York, having as his preceptor Dr. David Green. He received his diploma in 1842, and was immediately appointed prosector of surgery under Professor Willard Parker (q. v.), a position he held until 1853, when he was made emeritus prosecutor. In 1853 he was appointed surgeon to Bellevue Hospital and in 1859 surgeon to the Charity Hospital on Blackwell's Island.

He was one of the founders of the Bellevue Hospital Medical College in 1859 whose motto "Clinica Clinice Demonstranda" was the underlying feature of the teaching in the new institution, its faculty believing that medicine and surgery must be taught by living demonstrations instead of theoretical disquisitions. In this institution he held the chair of orthopedic surgery and fractures and luxations till its amalgamation with the New York University in 1898 when he became emeritus professor of orthopedic surgery, his son, Dr. Reginald Hall Sayre, succeeding him in the active professorship. He was also one of the founders of the New York Academy of Medicine, New York Pathological Society, and the American Medical Association. Of the last he was elected vice-president in 1866, and president in 1880. In his presidential address he suggested the substitution of the "Journal" for the previously printed "Transactions," a suggestion that was adopted the following year.

Although chiefly known for his contributions to orthopedic surgery, Dr. Sayre from 1860 to 1866 held the office of resident physician of New York City under four successive Mayors, Wood, Opdyke, Gunther, and Hoffman, and during his incumbency showed himself to be far ahead of his time by his advocacy of precautions for the preservations of the health of the community that are now taken for granted, such as compulsory vaccination against smallpox, intelligent disposal of sewage and sanitary inspection of tenement houses. He also demonstrated that cholera instead of being a disease caused by a mysterious miasm as was then thought, was communicated by human beings, and succeeded in anchoring it in the harbor and keeping it from spreading beyond the confines of the vessel on which it originated; at this time he urged the necessity of quarantine regulations being under Federal and not State control.

In his first paper contributed to the profession entitled "Case of abscess from pneumonia of left lung terminated fatally by form-

ing a fistulous opening between the third and fourth ribs and an abscess in the substance of the Lung," he made the following query: "In an abscess of one lung, if we could accurately diagnosticate that the other was in a perfectly healthy condition, might we not puncture the thorax and collapse the diseased lung with some prospect of success in gaining an adhesion of its walls? or in empyema of a tuberculous patient from rupture of an abscess into the pleura, would we not be justified in tapping as soon as discovered?" This was October 18, 1842. When we remember the date of this statement we see the evidence of an original mind and independent thought. In orthopedic surgery Dr. Sayre was a pioneer. He performed the first successful resection of the hip joint in this country in 1854, and in 1871 demonstrated his treatment of hip joint disease before a number of the medical societies of Europe, and received the decoration of the Order of Wasa from Charles IV, King of Norway and Sweden, in recognition of his contributions to medical science. In 1876 when he demonstrated his method of hip joint excision before the International Medical Congress in Philadelphia, Joseph Lister remarked "I feel that this demonstration would of itself have been a sufficient reward for my voyage across the Atlantic."

In the beginning he was severely criticised for opening suppurating joints, and in his book on orthopedic surgery speaking of hip joint resection, he says, "I feel that by the time this operation has been recognized as proper that the profession will have learned so well how to diagnosticate the disease in its early stages and institute proper treatment for its arrest as to render this operation almost unnecessary," and this has turned out to be the case. In the treatment of Pott's disease of the spine and of rotary lateral curvature, Dr. Sayre's originality was also shown, and the "British Medical Journal" speaking of his work says, "Time, which tries all things, has set its seal of emphatic and general approval both on the principles and methods which Dr. Sayre having eminently devised, has ably illustrated, and successfully carried into practice. He has removed a great mass of painful, tedious, and almost incurable complaints into the region of curable and easily managed affections. He has substituted a simple and practical method within the reach of every practitioner for costly, complicated, and heavy mechanical devices which were accessible only to the few, and which only imperfectly and occasionally fulfilled their objects." "Few men have in their generation accomplished so much for the relief of humanity, and his name will go down to posterity with that of Marion Sims (q. v.), as amongst the most distinguished benefactors whom the American Medical Profession has produced for the glory of medicine and the good of mankind during this century."

He was a frequent writer for the medical press, largely on orthopedic subjects. The titles may be found in the index catalogue of the Surgeon-General's office. In 1877 when he visited England he had an ovation from the profession and demonstrated his treatment of Potts' disease and lateral curvature.

As a lecturer Dr. Sayre was one of the most forceful and convincing that this country has produced, and it is interesting to note that his first public appearance was in 1824 when Lafayette revisited this country, and Master Lewis A. Sayre, aged four years and six months, recited a poem in his honor composed by Mr. John T. Durthick, principal of the Madison Academy (named after President Madison) at Bottle Hill, New Jersey, all of which is duly recorded in the "Paladium of Liberty" published in that village.

Dr. Sayre married in 1849 Eliza Ann Hall, daughter of Charles Henry Hall, of Harlem, New York, whose ancestor settled at Charlestown, Massachusetts, in 1630. They had four children, Charles Henry Hall, Lewis Hall, Mary Hall, and Reginald Hall. The boys all studied medicine. The eldest died in 1890, and the second in 1890, having married Alice Pomeroy, and leaving three children. Dr. Sayre's wife died in 1894, the daughter and the youngest son survived their father, who died September 21, 1900.

REGINALD H. SAYRE.

SCHADLE, Jacob E. (1849-1908), laryngologist of St. Paul, Minnesota, was of German ancestry and was born at Jersey Shore, Pennsylvania, June 23, 1849. He graduated from Jefferson Medical College in 1881, and practiced first in a Friends' settlement at Pennsdale, in central Pennsylvania. After two years he moved to Shenandoah, Pennsylvania, and six years later went to St. Paul. It was during his residence in Shenandoah, and while acting as lazaret physician, that he made a record by the skill and courage which he displayed in the handling of a widespread epidemic of smallpox and in stamping out the disease. In 1885 he reported the suc-

cessful treatment of three cases of mushroom poisoning by administering large doses of atropine. This was the first instance of the use of atropine as an antidote for amanitine poisoning.

Schadle had, for years, been the leader in his specialty in the Northwest. He was remarkably deft in the manipulation of instruments in the throat and nose, and as an operator he had few superiors; he invented a number of surgical instruments which are now in general use. Schadle was a frequent and highly valued contributor to the medical journals of this country. His articles include: "Empyema of the Accessory Sinuses of the Nose"; "Erosions and Ulcerations of the Triangular Cartilage of the Septum"; "Adenoid Growths in Children"; "Relationship Between Diseases of the Nose and Throat and General Diseases"; "History of Medicine"; "The Relation of Antral Sinusitis to Hay-fever and Asthma."

For several years he had been engaged in the study of the etiology and treatment of hay-fever, and had advanced an entirely new theory as to the cause of this disease, which he had hoped to elaborate at the meeting of the American Medical Association, when the grim Reaper took him. Dr. Schadle was a member of the Minnesota State Medical Association, the American Rhinological, Laryngological and Otological Association, of which he was president of the Western section in 1888, and was for many years professor of diseases of the throat and nose in the medical department of the University of Minnesota.

He married the daughter of Dr. D. H. Miller, of Mifflinburg, a physician of Central Pennsylvania. He died at St. Joseph's Hospital in St. Paul, May 29, 1908, of cerebral thrombosis followed by general paralysis, after an illness of several weeks' duration.

SCHAFFER, Charles (1838-1903), physician and botanist, was born in Philadelphia, Pennsylvania, February 4, 1838. His father, Charles Schäffer, was a wholesale druggist, in the vicinity of Sixth and Market Streets; his mother was Priscilla Morgan, daughter of Stacey K. Potts, an old Philadelphia merchant. Charles' early education was received from a private tutor, who prepared him for the University of Pennsylvania where he took his M. D. in 1859. He served in the Chester Military Hospital in 1863 and was attending physician at the Mission Hospital and Dispensary from 1874 until its close in 1880.

He became interested in the flora of Philadelphia and vicinity and later extended his collecting trips to the Selkirk Mountains of British Columbia amassing a collection of photographs and plants of that region. Dr. Schäffer married Mary Townsend Sharples, who was his companion on his explorations and was deeply interested in his scientific work. Under his guidance she reproduced the rarer plants in water-color and by photography; these were published after Schäffer's death, the illustrations being Mrs. Schäffer's and the letter-press that of the botanist, Stewardson Brown, under the title "Alpine Flora of the Canadian Mountains" (1907), published by G. P. Putnam's Sons, New York. Mrs. Schäffer spent seventeen summers in these mountains, and is the author of "Old Indian Trails of the Canadian Rockies" (1911).

Schäffer was a member of the Academy of Natural Sciences, Philadelphia; the Historical Society of Pennsylvania; the American Association for the Advancement of Science; the Pennsylvania Horticultural Society; and Fellow of the College of Physicians, Philadelphia, and of the Geological Society of America.

He died November 23, 1903.

JOHN W. HARSHBERGER.

SCHENCK, Benjamin Robinson (1872-1920), gynecologist of Detroit, Michigan, was born in Syracuse, New York, August 19, 1872, the son of Adrian A. and Harriet Robinson Schenck. His ancestry dates back to the Holland Schencks in unbroken line to 1346; his first American ancestor was Roelof Martense Schenck (1619-1704) who was born in Amsterdam, came to New Amsterdam, and settled in Flatlands, Long Island. Benjamin Baird Schenck VII (1809-1883), the grandfather of our Dr. Benjamin, was a physician, a graduate of the Geneva Medical College in 1835. Dissatisfied with the often vague and always heroic methods of "the old school" he turned to Homeopathy where he became a bright light. Also he was ordained a minister of the Gospel in 1846. Benjamin's father held sundry important political positions and built up a flourishing manufacturing business. He devoted much time to collecting genealogical data which his son assembled with characteristic care and thoroughness. The outcome of these joint labors is a volume of 160 pages, entitled, "The Descendants and Ancestors of Rulef Schenck, A Genealogy of the Onondaga County Branch of the Schenck Family. By Benjamin Robinson Schenck, M.

D., from Records and Notes Compiled by Adrian Adelbert Schenck, Detroit, Michigan, 1911."

Benjamin took his A. B. in 1894 from Williams College and was graduated in medicine from the Johns Hopkins University Medical School in 1898. In August, 1904, he married Jessie McCallum of St. Catherines, Ontario, who had been trained in the Nursing School of the Johns Hopkins Hospital; they had two children. After graduation Schenck became a resident on the gynecological staff of the Johns Hopkins Hospital under Howard A. Kelly (1898 to 1903) and also instructor in gynecology (1901 to 1903). While resident, he published "On Refractory Subcutaneous Abscesses caused by a Fungus possibly related to Sporotricha" (1898) which constituted a sort of graduation thesis and is his most original contribution, inaugurating as it did a vast amount of literature within the next 15 years. The disease consisted of a series of rebellious abscesses creeping up the arm from the right index finger and hand of a workman who had scratched his finger on a nail; when incised the abscesses discharged a gelatinous puriform material which gave pure cultures of a sporotrichum on various media but which soon died out in animal tissues. He was assisted particularly by Dr. Erwin F. Smith of the United States Department of Agriculture, who lent his valuable experience in the determination of the probable genus of the fungus to which belonged this branching mycelial, conida-forming growth, isolated from the abscesses. The classification was approximate as only a conidal form was found. He also wrote, "Four Cases of Calculi Impacted in the Ureter. Nephro-uretectomy. Abdominal Uretero-lithotomy. Vaginal Uretero-lithotomy." (1901); in conjunction with W. W. Russel, "An Ovarian Sarcoma developing from the Theca Externa of the Graafian Follicle" (1902); "A Resume of forty-eight Cases of Postoperative Crural Thrombosis" (1902); "Relaxation of the Synchondrosis of the Symphysis Pubis, following Normal Labor, treated by Suturing and Wiring" (1902); "An Eighty-eight Pound Ovarian Cyst Successfully Removed from a Patient Seventy-seven years of age" (1903); "The Newer Methods of Detecting Renal Insufficiency, Cryoscopy, and the Phloridzin Test" (1904); "Renal Hematuria of Unexplained Origin, ceasing after Nephrotomy" (1904); "Essential Hematuria and Mild Grades of Nephritis" (1911); and others. No more model clinical study can be found in our literature than his "Symptoms, Diagnosis, and Treatment of Ureteral Calculus" (1902), written at a date when the method of discovering calculi by passing a wax-tipped catheter up the ureter and recognizing the pathognomonic scratch marks was still comparatively new.

Schenck settled in Detroit, Michigan, in 1903 and remained there in active practice, becoming a leading exponent of his specialty. He was also gynecologist to the Harper Hospital, consulting obstetrician to the Woman's Hospital, and associate professor of gynecology at the Detroit College of Medicine. He was secretary of the Michigan State Medical Society and editor of the journal of the Society from 1905 to 1910. It also fell to his lot to organize the state society meetings. The Medical Library at Detroit owes its excellent status to his brooding care.

In 1916, he went to Colorado with his family in search of health. Here he died, June 30, 1920, after several years of brave fighting against the pulmonary affection which terminated his life.

HOWARD A. KELLY.

SCHMIDT, Henry D. (1823-1888), histologist, was born at Marburg, Prussia, receiving the usual education of a German boy, then was apprenticed to an instrument-maker at the age of fifteen, a training which in after-life enabled him to conceive and construct various pieces of apparatus for the benefit of his scientific investigations (his microtome and injector, employed in his researches into the histology of the liver). During his apprenticeship he visited the large cities of Europe and came to Philadelphia in 1848, where he began the study of anatomy and constructed papier maché models of such correctness and beauty that several are still preserved in the medical department of the University of Pennsylvania. Attracting the attention of Leidy (q. v.) and Jackson, he became prosector to Dr. Jackson and assisted Prof. Leidy in many of his physiological investigations. After studying five years, he was graduated in medicine in 1858 (University of Pennsylvania) and devoted himself to histology. By his own contrivance of an injecting apparatus, he was able to solve the question of the termination of the bile ducts of the liver and to demonstrate their origin in the intercellular capillaries. In 1860 Dr. Schmidt went south, first to the Medical College of Alabama, in Mobile, and thence to

New Orleans, succeeding Penniston as demonstrator of anatomy in the New Orleans School of Medicine. During the Civil War he served the South as a military surgeon. At the close of the struggle he returned to New Orleans and was installed as pathologist to the Charity Hospital, a position which he occupied for twenty years. He was known as a man of strong convictions, honest and earnest; never cynical nor prejudiced in regard to the opinions of others.

He died at his home, November 23, 1888.

A list of his many contributions to medical literature may be found in the "New Orleans Medical and Surgical Journal," December, 1888, vol. xvi, n. s., p. 757.

SCHULTZ, Sir John Christian (1840-1896), pioneer physician of Rupert's land, Canada, of Norse and Irish descent, son of William Schultz, of Bergen, Norway, and Elizabeth Riley, of Bandon, Ireland, was born at Amherstburg, Ontario, January 1, 1840, and received his education at Oberlin College, Ohio, and Kingston, Ontario, then took his medical course at Victoria College, Toronto, graduating in 1861. The life of Sir John Christian Schultz is intricately woven into the early history of the Canadian North West, formerly called Rupert's land. His first trip there was made at the age of twenty, before he graduated in medicine. He returned to his home in 1861 to take his degree, but immediately went back to the land of his adoption where he successfully practiced till public duties claimed all his time. In 1863 he assisted Gov. MacTavish and the right Rev. Bishop Anderson in forming the Institute of Rupert's land, of which he became secretary, taking an active part in the founding of its museum and contributing papers on prevailing diseases of Rupert's land and on the plants, minerals and other natural resources of the country. In this year, after reading a paper on the "Flora of the Red River Valley Country" before the Botanical Society of Kingston, he was elected a fellow of that Society.

While a member of the House of Commons, he impressed on the Government the vast resources of the new province, pointing to what he termed "Greater Canada" as having the largest extent of arable and grazing land and the greatest coal measures in the Dominion; and he also advocated a transcontinental railway to bind the Dominion together.

An incident of his early life in the Northwest illustrates alike the adventurous side of life there in the sixties, and the ready and resourceful character that ever marked Sir John Schultz. As a boy he had lived near the old dwelling places of the great Indian chief Tecumseh and the stories of the noble life of the red man had a profound influence on the lad. Throughout his life he was dauntless and forceful, yet kind and gentle. His natural sagacity stood him in good stead on many occasions. On one of his early trips from Ontario to Fort Garry, he went by way of St. Paul, Minnesota, from which place he drove all the way, a distance of four hundred and fifty miles. The Indians throughout the northern central states were all on the war path, and the young doctor was advised not to try to make the journey. He, however, secured a companion and set forth. After some day's journey they were surprised by a band of warriors and immediately piled up their kit as a barricade. A parley ensued between the two men and the forty Indians, when a shout came from behind an elm tree, demanding "by what right the white man passed through their country?" The barricade answered "I am a Segenash Mushkekewenene (English medicine man) travelling to the wigwams of the English people at the English fort." The "Elm Tree" answered "We saw you as you crossed the ford and you were dressed like the people we have just driven from our hunting grounds." The barricade answered, "Clothes do not differ among the whites and we are not 'Kitchemokomans' (Americans) but 'Segenash' (English) who have passed this trail for years in peace." Yet it became apparent that the Indians would have to be convinced of these assertions if these two travellers were to leave the spot alive, and the slight knowledge of the Indian language possessed by the doctor's companion, with a few phials of medicine and a pocket surgical case were now used in this behalf. The "barricade" engaged not to fire if the chief would send one of his braves across the ford to examine and report. The "Elm Tree" engaged on behalf of his followers to let the travelers pass if the envoy's examination was satisfactory. The young Indian brave, with full war paint and more feathers than clothes, came over, and his quick eye took note that the trappings and equipage were of St. Paul make, but the sight of the rows of bottles and curious surgical instruments seemed to satisfy the warrior, who returned to his band, and after a hurried

consultation the "Elm Tree" announced that they "will come over and shake their English brothers' hands." The hand-shaking over, the two hosts entertained their guests in such royal style that they were in danger of leaving themselves hungry for ten days. As they were about to proceed on their way the chief gave them an invitation, that sounded more like a command, to spend the night at his camp some four miles away. Of necessity the invitation was accepted and a tent was assigned to the two travellers. All night long they lay awake to hear conversations in a nearby "tepee" during which frequent references were made to "Segenash" and "Kitchemokomans." In the morning a squaw who was suffering from smoke irritated eyes, and who had received an ointment the previous evening, was considerably improved. The Indians were now thoroughly convinced, and the chief displayed the medal his grandfather had received from George the III; the squaws brought corn for their horses and pounded maize and fish for the travellers. Their journey was then continued and they reached their destination without further molestation.

In 1867 Sir John Schultz married Agnes, daughter of James Farquharson, Esq., of British Guiana. In 1894 the degree of LL. D. had been conferred upon him by Queen's University, Kingston. He died in April, 1896.

JASPER HALPENNY.

SCHUPPERT, Moritz (1817-1887), surgeon of Louisiana, the first to introduce Listerism into the South, was born in Marburg, Germany, in 1817, where he received a good education, studied medicine, married, and then came to New Orleans. Poor and unfriended but endowed with great native ability and a knowledge of the science of medicine far in advance of that possessed by most American physicians of that day, these advantages soon made themselves felt. In 1853 he distinguished himself in the yellow-fever epidemic and became visiting surgeon to the Charity Hospital, where for years he continued to serve with enthusiasm and exactness. In 1854 he was city physician; in 1859 he established, in conjunction with Dr. Choppin (q. v.), an orthopedic institute. He rapidly rose to be one of the most prominent surgeons and citizens of the city. He performed many surgical operations, was skilful in the treatment of deformities, a vigorous writer, a thinker and an inspirer of thought in his associates. His biographer compares him to the Luther of his native home, stern, simple, outspoken, rugged. A lover of candor, a hater of meanness, of rough exterior and tender heart, a loyal friend, a strong man.

He died May 2, 1887. His writings were largely contributed to the "New Orleans Medical and Surgical Journal," and are, notably: "Facial Neuralgia"; a paper on gunshot wounds dedicated to the surgeons of the Confederate States Army, 1861; "A treatise on vesico-vaginal fistula," 1866, in which he flays Marion Sims and ridicules his bombast; "Biniodide of Mercury in Syphilis"; "Resuscitation from Death by Chloroform"; "Excision of Entire Scapula with Preservation of a Useful Arm" (1870); "Pneumatometry: Results of Lister's Antiseptic Treatment of Wounds in German Hospitals and Remarks on the Theory of Septic Infection" (1875-6); "Lister's Antiseptic Treatment of Wounds" (1878-9). As the first to introduce Lister's practice into the South he is rightly regarded as the father of antiseptic surgery in Louisiana.

JANE GREY ROGERS.

SCOTT, Upton (1772-1814), of Annapolis, Maryland, a founder and first president of the Medical and Chirurgical Faculty of Maryland, was the son of Francis Scott, of Templepatrick, near Antrim, Ireland, where he was born in the year 1722. After a literary training, probably at the University of Dublin, he began to study medicine and early in 1747 purchased for £60 a surgeon-mate's position in one of the oldest of the British regiments, that of Lord George Sackville, and was stationed in Scotland. This was the regiment commanded by Wolfe. He accompanied his command in the ensuing campaign in Flanders. During the winter the regiment came down into the lowlands and Dr. Scott availed himself of the opportunity to attend lectures at Edinburgh and Glasgow, taking his M. D. from the latter, April 10, 1753. Having secured an engagement with Mr. Horatio Sharpe, the new governor of Maryland, he disposed of his commission and sailed for Annapolis the ensuing summer. Favored by the patronage of Gov. Sharpe, he became the court physician of the Maryland capital, and secured a large practice. He also held the sheriffship of Anne Arundel County in 1759 and secretaryship of the Council or Upper House of Assembly. On his return to Maryland, after the war, he seems to have recovered his property and to

have enjoyed the confidence of the community, as though no differences had ever existed. In 1760 Dr. Scott built a handsome brick house. Here, in the exercise of a generous hospitality, he passed a green old age and died on the twenty-third of February, 1814, aged ninety-one.

Various relics of him have been preserved besides his letters. Among these are his diploma, his medicine chest, a miniature painted on ivory, a pair of pistols presented to him by Col. Wolfe, a portrait of Dr. Cullen, the gift of that great physician, and a letter from him, in which he speaks of Scott as one among his first pupils, and a "List of Flowers that Grow in the Vicinity of the Cape of Good Hope," which was given in the form of an order to his nephew, Lieut. D. Murray, of the United States Navy, at Annapolis in 1807. Dr. Scott wanted to bring to Maryland for planting purposes near Annapolis all seeds and bulbs of the Cape of Good Hope plants that could possibly be obtained, and as Lieut. Murray attended to this order for him it is probably a fair assumption that many of the flowers of Colonial Maryland sprang from this origin.

Dr. Scott was a close observer, taking a deep interest in medical progress and frequently ordering new books through his agent in London.

Shortly after his arrival in Maryland he married Elizabeth Ross, an heiress with a large landed estate, but died without direct descendants.

EUGENE F. CORDELL.

SCRIBNER, Ernest Varian (1855-1918), alienist of Worcester, Mass., was born in Lewiston, Maine, February 18, 1855. His parents, Cyrus Scribner and Mary Thompson, were natives of the same state. He spent his early life in Lewiston, where he received his preliminary education in the city schools and the degree of A. B. from Bates College in 1878. He then taught in the public schools for one year during which he spent all his spare time under the apprenticeship of Dr. Wedgewood.

It was while teaching that he became acquainted with Mary E. Prince, whom he married in New Sharon, Maine, December 28, 1881. His medical studies were pursued at the Bowdoin Medical School, where he was graduated in 1881, ranking second in his class. After leaving college he was appointed assistant physician at the Worcester State Hospital. At the end of one year his health failed and he removed to Bismarck, North Dakota. With the change of climate and atmospheric conditions, he soon began to improve and for a while engaged in the practice of medicine in Bismarck. In 1884 he returned East and became assistant superintendent of the Worcester Insane Asylum (Grafton State Hospital), and in November, 1890, following the resignation of Dr. Hosea M. Quinby, he was appointed superintendent, at thirty-five years of age. This position he held for a period of twenty-two years, at the expiration of which he resigned to accept the superintendency of the Worcester State Hospital, where he died, June 14, 1918, after a comparatively short illness.

With the exception of two years his entire professional life of thirty-seven years was spent in the pursuit of that special department of medicine, psychiatry, which he chose early as his life work. During his administration at the Asylum many improvements were made. Bays were added to the administration center; the ventilating system was improved; all the plumbing on the wards was renovated; extensive changes and improvements were made in the kitchen; congregate dining-rooms were open for male and female patients and better accommodations were provided for both male and female nurses.

Dr. Scribner was always a staunch supporter of ergotherapy and an especially warm advocate of occupation out-of-doors for restless and disturbed patients of both sexes. By an act of the Legislature in 1901 money was appropriated to purchase land and a colony was established at Grafton. This unit grew rapidly and at the time of his resignation more than $743,000 had been expended in improvements and building operations. While superintendent of the Worcester State Hospital he built a three-story addition to the male side of the hospital which accommodated about one hundred patients; made many improvements and by his encouragement and support stimulated clinical and pathological work. Dr. Scribner's able business qualifications, honesty, loyalty and efficient administration won for him the respect of his officers and employees and the confidence and able support of his board of trustees. His thoroughness of examination, keenness of perception, suavity of manner, sound judgment, and clearness of expression soon led to his services being much in demand in medico-legal work as well as in the capacity of consulting alienist. He was rec

ognized by the legal profession as a fair and conscientious expert whose testimony carried much weight in the courts.

During his institutional life he contributed to the literature of his profession in communications to medical journals, to medical societies and clubs and also through the medium of his annual reports. Dr. Scribner was a fellow of the American Medical Association, Massachusetts Medical Society, American Medico-Psychological Association, New England Society of Psychiatry, Boston Society of Neurology and Psychiatry, and a member of the commission of five appointed by the Governor in the year 1910 to investigate the question of the increase of criminals, mental defectives, epileptics, degenerates and allied classes in the Commonwealth.

B. Henry Mason.

SCUDDER, John Milton (1829-1894), noted eclectic physician of Ohio, was born in Harrison, in that state, September 8, 1829. His father died when he was a boy of eight and as soon as old enough he went to work in a button factory in Reading, Ohio, receiving fifty cents a week for his labor; but he saved a little money besides helping his mother who had two other children, and at the age of twelve years he entered Miami University and when he left there learned cabinet-making, at which he worked in winter, also painting, which was his work in summer. He then started a general store in his native place. He married Jane Hannah in 1849 and of their five children, three died in infancy, Scudder thought it was through improper medical treatment. This idea so disturbed him that he determined to study medicine and chose Dr. M. L. Thomas, an eclectic, for his preceptor. In 1856 Scudder was graduated at the Eclectic Medical Institute, Cincinnati, and was valedictorian of his class. His work as teacher began the next year when appointed professor of anatomy in the Institute. He was successively professor of obstetrics and diseases of women (1858-1860); professor of pathology and practice of medicine (1860-1867). In 1867, because of failing health, his chair was divided with R. L. Thomas, son of his old preceptor; Dr. Scudder lectured on hygiene, physical diagnosis and specific diagnosis until his death. He was a thorough and interesting teacher, an able executive, coming to the rescue in what was known as the "dark days" of the Eclectic Medical Institute, giving up a large practice, becoming dean, and getting the Institute on a sound financial basis. He introduced the "doctrines and practice of specific medication," and was energetic in his efforts to secure honest medicines.

Scudder wrote a "Practical Treatise on the Diseases of Women" (1858); "Materia Medica and Therapeutics" (1860); "The Eclectic Practice of Medicine" (1864); "Specific Medication" (1871); "Specific Diagnosis" (1874). He edited the "Eclectic Medical Journal" from 1862.

Of his first marriage one daughter survived; she became the wife of John H. Twachtman, artist. Dr. Schudder's wife died, and in 1861 he married her sister, Mary Hannah; there were five boys of this marriage; of these are: Dr. John K. Scudder, Dr. Paul Scudder, Dr. H. Ford Scudder, and Dr. W. Byrd Scudder.

Dr. Scudder died of heart disease at Daytona, Florida, February 17, 1894.

Howard A. Kelly.

SCUDDER, Nathaniel (1733-1781), physician and patriot, a notable figure in the early medical and historical annals of America, was born near Huntington, Long Island, New York, May 10, 1733, the son of Colonel Jacob Scudder. He took an A. B. at Princeton University in 1751, then studied medicine and practiced at Manalapan, Monmouth County, New Jersey, and later at Freehold. He was one of the founders of the Medical Society of New Jersey (1766), the first "Provincial or State Medical Society" in America. His quiet life as a physician was broken into by the excitement of pre-Revolutionary times, as Monmouth County early resented the acts of the British. Scudder, fired with patriotism, became a leading spirit in the cause of the Colonies. He was active in the meeting at Freehold, June 6, 1774, where it was resolved that the cause of the "suffering inhabitants of Boston is the common cause of the whole continent of North America . . . and until their odious port bill and other oppressive acts be repealed, we recommend entire stoppage of trade between the Provinces and Great Britain and the West Indies"; he was one of a committee formed to co-operate with other towns for "the weal and safety of North America and her loyal sons." On July 19, 1774, the committees from the several townships met at Freehold and passed resolutions for permanent record. Scudder was one of

those who drafted the resolutions which closed with the wish that "some faithful record of their notification be handed down to the yet unborn descendants of Americans that nothing but the most fatal necessity could have wrested the present inestimable enjoyments from their ancestors. Let them universally inculcate upon their beloved offspring an investigation of those truths concerning both civil and religious liberty which have been so clearly and fully stated in this generation. May they be carefully taught in their schools, and may they never rest until, through the Divine Blessing upon their efforts, true freedom and liberty shall reign triumphantly over the whole globe" (resolutions published in full in the "Monmouth Democrat," June 12, 1873). Scudder was a member of the Committee of Observation and Inspection (1774); he was a delegate to the first Provincial Congress held in New Jersey (1774 at New Brunswick). When the War began he was made lieutenant-colonel of the First Regiment of Monmouth. He was a delegate to the Continental Congress, 1777-1779, and a signer of the Articles of Confederation, in the defence of which he wrote to John Hart, speaker of the Assembly of New Jersey, a stirring letter (a copy of which is preserved).

Towards the close of the seventeenth century the Andersons came from Scotland in the "Old Caledonia," and brought large tracts of land on Manalapan Heights. It was a member of this family, Isabella Anderson, whom Dr. Scudder married. Wickes relates the story (pages 391 and 392 of his History of Medicine in New Jersey) as told him by Scudder's granddaughter, "The beautiful heiress rode to church on horseback," the story runs, "Young Scudder had his eye out. She alighted from her horse, fastened him to a tree by a staple which had been driven there, then walked up and into the church. Then was Dr. Scudder's time to work. He approached her horse, disarranged the equipments and entangled the bridle. After the closing of the church, Isabella walked down to the place where stood her horse. Young Scudder, of fine appearance, dignified and graceful, being on the alert, sprang to her assistance, adjusted matters all well then assisted the damsel to mount, and directly ascended his own steed. As they had to travel the same road, which was nearly four miles, I think he was too gallant to let her travel alone, but rode by her side for protection home. Their houses were not far distant. Thus began the courtship which terminated in marriage."

Scudder's interests were far-reaching and his services given to many causes; he was trustee of the College of New Jersey (now Princeton University) 1778-1781 and a ruling elder in Old Tennent Church at Freehold. He met his death, at the age of forty-eight, through an accidental shot aimed at General David Forman who was with him, during a skirmish with a party of refugees, at Black Rock, Monmouth County, October 16, 1781, three days before the surrender at Yorktown. He was buried in Old Tennent Churchyard, and his gravestone records that he "fell in the defence of his country." His wife survived him little over a year, dying at the age of forty-five, December 24, 1782.

John Anderson Scudder, Nathaniel's eldest son, was born March 22, 1759. He was a graduate of Princeton (1775) and studied medicine. He served in the Revolutionary War as surgeon's mate, was a member of the State Assembly and represented New Jersey in Congress for the unexpired term of James Cox who died in 1810. He moved to Kentucky, then settled in Indiana, where he practiced.

Another son was Joseph, who married a daughter of Philip Johnson (colonel of the First New Jersey Regiment, who was killed at the Battle of Long Island), was graduated at Princeton in 1778 and became a distinguished lawyer. His son was the noted missionary and physician, John Scudder (1793-1855), born in Freehold, September 3, 1793. He was graduated at Princeton in 1811, and at the College of Physicians and Surgeons, New York, in 1813, practicing in New York. Going as a missionary to India in 1819 he became a minister of the Dutch Reformed Church, and settled at Ceylon, where he was missionary and physician. He founded a hospital, schools and churches. All of his seven sons and two daughters became missionaries. He wrote several books and tracts. He died at the Cape of Good Hope, January 13, 1855. His son, Henry Martyn, born in Ceylon, February 5, 1822, was a graduate of the University of New York in 1840, and Union Theological Seminary in 1843, and returned to India as a missionary where he practiced medicine, also. Silas Doremus (1833-1877), still another son, born in Ceylon, November 6, 1833, was graduated at Rutgers College in 1856, studied medicine and was licensed to practice in New York City. He went to India as a medical missionary and

after thirteen years returned to this country because of ill-health, dying in Brooklyn, New York, December 10, 1877.

HOWARD A. KELLY.

SEAMAN, Valentine (1770-1817), New York physician, was the fourth son of Willet Seaman, a merchant, and descendant from John Seaman who arrived from England and settled in Hempstead, Long Island, about 1660. Valentine Seaman was born in North Hempstead, April 2, 1770. The City Almshouse was the only institution where medical instruction could be had, and Valentine, after studying with Nichols Romayne (q. v.), entered there as resident physician. In 1792 he took his M. D. at the University of Pennsylvania, and was made one of the surgeons to the New York Hospital in 1796, a post he held until his death. He was very active in introducing vaccination into his city and vaccinated his own son and a number of citizens, and in 1816 published a discourse on the subject. In 1810-11 he, with several other physicians, formed a new medical institution which was associated with Queen's College, New Brunswick, but it lived only three years. The manumission of slaves and the mental improvement of midwives were two other things concerning which this active enthusiast was very keen. In the winter of 1815 he had "inflammation of the lungs" and developed consumption which ended his life July 3, 1817, in New York City. He married the second daughter of John Ferris of Westchester and had nine children.

He wrote: "An Account of the Epidemic Yellow Fever as it Appeared in New York in 1795" (New York, 1796); "The Midwife's Monitor and Mother's Mirror" (New York, 1800); "Pharmacopeia Chirurgica in usum nosocomii Novi Eboracensis" (New York, 1811), and many other articles for the "New York Medical Repository" in 1798 and 1808.

SEELY, William Wallace (1838-1913), dean of the Medical College of Ohio, son of John F. and Louisiana Seely, was born in Muskingum County, Ohio, August 17, 1838. His ancestors were French people who settled in Stamford, Connecticut. Dr. Seely was sixth in descent, on the maternal side, from John Conant (1652-1724), a member of Captain Appleton's Company in King Philip's War. He was eighth in descent from Roger Conant (1592-1679), Governor of the Colony at Cape Ann in 1625-26; and of the Colony at Salem in 1627-29. Dr. Seely's early education was obtained in the schools of his native place, and in Phillips Academy, Andover, Massachusetts. In 1862 he was graduated at Yale College among the first in his class, then he studied medicine at the Medical College of Ohio, where he took an M. D. in 1864. After graduation he went to Germany, and on his return in the same year, was demonstrator of anatomy in the Medical College of Ohio and in 1865 he was appointed professor of ophthalmology and otology. He was secretary of the faculty for many years, and dean from 1881 to 1900. He was a member of the Academy of Medicine of Cincinnati from 1865 until his death, and its president in 1883 and he was a member of the Ohio State Medical Association, of the Cincinnati Literary Club, and a member of the Society of the Colonial Wars. He was for a number of years on the staffs of the Cincinnati and Good Samaritan hospitals and was co-editor of "The Clinic" for several years. Dr. Seely was associated for several years in the practice of ophthalmology and otology with Elkanah Williams (q. v.), the most prominent man of his day in those departments of Medicine. He was ambidextrous, using either hand as necessity required.

Dr. Seely was married in 1870 to Miss Helen Simpson, of Boston, Massachusetts. Three daughters were born to them, Elizabeth, Grace and Helen.

He died November 7, 1913.

A. G. DRURY.

SEGUIN, Edward Constant (1843-1898), neurologist of New York, was born in Paris in 1843, the son of O. Edouard Seguin (q. v.), well known for his researches on idiocy and his work in training the feeble-minded. The elder Seguin came to America in 1848; the son studied at the College of Physicians, New York, where he graduated in 1864. In 1862 he was appointed a medical cadet in the regular army and served two terms, at Little Rock, Arkansas, and in 1867 as post-surgeon at Forts Craig and Selden, in New Mexico. From 1865 to 1867 he was an interne at the New York Hospital. The winter of 1869-70 was spent in Paris under the teaching of Brown-Séquard, Cornil and Charcot, which deeply interested him in diseases of the nervous system. In 1871 he was associated with Dr. W. H. Draper (q. v.) and became connected with the College of Physicians and Surgeons, New York, as professor of diseases of the nervous system, and founded a clinic for these diseases.

But while his chief work was in the direction of such healing it must not be forgotten that to him in great part was due the introduction of medical thermometry in the United States. In a footnote to the first article in Seguin's "Opera Minora," called "The Use of the Thermometer in Clinical Medicine" ("Chicago Medical Journal," May, 1886), Amidon said: "This article and the observations leading to it form the starting point of medical thermometry in the United States." The work was done by Dr. W. H. Draper and Dr. Seguin, and is interesting as presenting probably the first temperature chart on record in this country. It is called "A Record of Vital Signs" and gives a chart of the pulse, respirations and temperature. His papers on aphasia, infantile paralysis, on tetanoid paraplegia, and, above all, his lectures and admirable series of papers on localization of brain-lesions did a great deal to stimulate the study and practice of neurology. His work on spastic paraplegia, his lectures and his series of papers preceded those of Erb and Charcot. To him is due what is known as the American method of giving potassium iodide in enormous doses.

Though a specialist, he had very wide sympathies in the profession and threw himself with great enthusiasm into literary ventures. Thus, in 1873, he joined with Brown-Séquard in the editorship of the "Archives of Scientific and Practical Medicine and Surgery," a journal which did not, however, survive a year. Between 1876-8 he edited a series of American clinical lectures, but his most pretentious venture was the "Archives of Medicine" (1879), in which an attempt was made to supply the profession with a high-class journal. But it was not a financial success and lapsed after the twelfth volume. The bibliography of his writings is in his "Opera minora," 1884. According to Charles L. Dana, Seguin had precise and painstaking methods which had been acquired in the laboratory, then not common in the profession, and he was a thorough and careful clinician.

From the shock of an awful domestic tragedy in 1884, Dr. Seguin never fully recovered. After staying abroad for two years he resumed practice in New York, but did not teach again. Many years before his death he lost one of his fingers, the result of a spindle-shaped growth. In 1896 a growth appeared in the abdomen and there were, later, signs of diffuse metastases. From a long and trying illness he was released on February 19, 1898.

SEGUIN, O. Edouard (1812-1880). This Frenchman, pioneer in the scientific treatment of the feeble-minded, came to the United States when thirty-six years old, after the revolution of 1848, during which he lost his position as director of the Bicêtre idiot asylum at Paris, where for ten years he had pursued his investigations. He originated eleven similar institutions in this country and ultimately became a citizen of our largest city and took an M. D. degree in 1861 from the University of the City of New York.

The son of T. O. Seguin, he was born at Clamecy, Department of Nièvre, France, January 20, 1812. His education was at the colleges of Auxerre and St. Louis, Paris. Immediately he began studies upon the physiological education and training of idiots, taking under his care a defective boy as early as 1837 and improving his condition, with the advice of his teachers Itard and Esquirol. The standard "Dictionaire de Médecine" published in that year had this to say as to the outlook in idiocy: "It is useless to attempt to combat idiotism. In order that the intellectual exercise might be established, it would be necessary to change the conformation of organs which are beyond the reach of all modification." Dr. Seguin thought he saw the gleam beyond the hopelessness. He defined idiocy as an "infirmity of the nervous system, which has for its effect the abstraction of the whole or part of the organs and the faculties of the child from the normal action of the will." In time his school for the feeble-minded became the prototype of seventy-five similar institutions in civilized countries. He began to write papers on his specialty in 1839 and in 1846 appeared his "magnum opus," "Traitement Moral, Hygiène et Education des Idiots." This was followed by an article on the treatment of the deaf and dumb, in 1847. Seguin's work was crowned by the Academy and he received an autograph letter from Pope Pius IX. Psychologists of all nations visited his school and spread his teachings. Horace Mann brought his ideas to Massachusetts, thus leading to the founding of the state asylum and Sumner took them to New York.

When Dr. Seguin came to the United States in 1848 he settled in Cleveland, Ohio, and practiced medicine there and at Portsmouth, Ohio, for ten years, then after revisiting France he returned to settle in New York where he spent the rest of his life. A year after receiving his degree from the New York University he became a member of the

American Medical Association. In New York he practiced medicine and became interested in the study of animal heat and medical thermometry. His want of familiarity with the English language was a handicap; this and his distaste for administrative details led him to relinquish, after a short service, the superintendency of a recently established Pennsylvania training school. He helped organize the School for Defectives on Randall's Island, New York City, in 1863. In 1866 he published, with the assistance of his son, E. C. Seguin (q. v.), a book in English, on "Idiocy and Its Treatment by the Physiological Method." His publications on medical thermometry from 1871 to 1876 popularized the use of the clinical themometer. In the last decade of his life he was a frequent visitor to European medical congresses, where he figured more especially as an advocate of a uniform metric system and of "mathematical" themometry in medicine. His last writings were monographs on the training of the idiot's hand and the training of the idiot's eye, and his last enterprise was the establishment in the City of New York of a "Physiological School for Weak Minded and Weak-Bodied Children." He died October 28, 1880, at the age of sixty-eight years.

He was fond of poetry and wrote good verse; he had an urge for the fine arts; he was modest and retiring, always eager to help others. A bibliography of his writings may be found in the Annals of Medical History, N. Y. 1924. vol. vi. pages 478-479.

WALTER L. BURRAGE.

SEILER, Carl (1849-1905), of Philadelphia, laryngologist, was born in Switzerland, April 14, 1849, and died at his home in Reading, Pennsylvania, October 10, 1905, at the age of fifty-six years. He was educated at the Universities of Berlin and Pennsylvania, studied medicine in Vienna, Heidelberg and Philadelphia, and took his degree of M. D. in 1871 at the University of Pennsylvania. His mother, Mme. Emma Seiler, was a woman of strong personality, a noted authority and writer on the voice. She published two books which had a large circulation, originally written in German and later translated into English by W. H. Furness, D. D., a member of the American Philosophical Society of Philadelphia, of which she also was a member. The "Voice in Singing" appeared in Philadelphia in 1868, soon after she came to this country. The "Voice in Speaking" was published in the same place in 1875. The preface of the former book contains letters from Helmholtz, the celebrated professor of physiology in Heidelberg whom she had assisted while he was writing his essay on the formation of vowel tones and on the registration of the female voice, and from Du Bois-Raymond, professor of physiology in Berlin, who called her "a lady of rare scientific attainment and one to whom we owe a more exact knowledge of the position of the larynx and of its parts in the production of the human voice." In the volume on the "Voice in Speaking" she refers to her son's helping her in her studies of sound. Undoubtedly her influence must have inclined him to take up the medical study of the larynx and perhaps even suggested to him a subject for his graduation thesis, which was the "Physiology of the Voice."

After getting his M. D. Carl began general practice in Philadelphia, paying special attention to what was then called laryngoscopy (laryngology), at first as an office student of Dr. J. Solis-Cohen and afterwards his assistant. Later he was lecturer on laryngoscopy from 1877 to 1895 and chief of the throat dispensary at the hospital of the University of Pennsylvania for nearly twenty years. He was also laryngologist to the German Throat Infirmary and physician-in-chief to the Union Dispensary. Besides his special clinical work he was a member of the Pathological Society of Philadelphia and recorder of the Biological and Microscopical Section of the Academy of Natural Sciences. In this connection he published a "Compendium of Microscopical Technology," Philadelphia, 1881. In 1879 he was elected a member of the American Laryngological Association and was at one time its vice-president. He was also secretary of the laryngological section of the American Medical Association. The results of his large experience he recorded in what became a standard text-book, recommended as such as late as 1900 in the catalogue of the medical department of the University of Pennsylvania. It has the title "Handbook of Diagnosis and Treatment of Diseases of the Throat and Nasal Cavities," Philadelphia, 1879. This was followed by three other editions, much enlarged, the last one in 1893. In this work the chapters on the anatomy and physiology of the larynx and the use of the voice show the influence of his mother's teaching. As a surgeon he was ingenious, inventive and original. He devised several instruments for operations upon the nasal septum and turbi-

nates and was the first to suggest a tubular splint, later developed by Asch (q. v.).

What brought him his greatest notoriety perhaps was a formula for an alkaline and antiseptic wash for the nose. In the first two editions of his book he had advised the use of the so-called Dobell's solution, but in his third edition, 1889, page 168, he says that he finds many patients object to the odor of carbolic acid, one of the ingredients of Dobell's solution, and in order to obviate this he had prepared instead a similar solution with a pleasant odor. This contained ten ingredients beside water. Desiring something more easily carried about, he had the formula made into compressed tablets, with the result that the name of Seiler's Tablets is now known to every one who has occasion to use or prescribe a nasal solution.

Owing to illness in his family, he left Philadelphia in 1897 and lived in Scranton, Pennsylvania, from 1898 until 1902, going subsequently to Reading, Pennsylvania, where he died in 1905.

He married, in 1876, Carrie G. Linn, daughter of Claudius B. Linn, of Philadelphia, by whom he had two daughters and one son who survived him.

JOHN W. FARLOW.

SELDEN, William (1808-1887), physician and writer of Norfolk, Virginia, was born in Norfolk, August 15, 1808, the son of Dr. William B. Selden (q. v.), a noted physician of that city. He attended lectures and was graduated from the University of Pennsylvania in 1830, after which he spent two years in London and Paris, then, returning to this country, he settled in his native city, and soon built up a large practice. He was a member of the Medical Society of Virginia, of which he was twice elected vice-president. In May, 1863, he was commissioned surgeon in the Confederate Army, and served to the end of the war in army hospitals. The rest of his professional life was spent in his native city, where he accomplished much good through his great ability and valuable counsel. He was one of that band of heroic physicians who stood steadfast at the post of duty during the terrible epidemic of yellow fever which visited Norfolk and Portsmouth in 1855, being chairman of a committee appointed by the city counsel to investigate the cause and origin of the epidemic. This committee, which consisted of six physicians, submitted a full and valuable report, with the correct conclusion that the disease was introduced by the steamer "Ben Franklin." This report is from his pen, and few more valuable contributions to medical literature have been given the profession.

An able writer, he made some very valuable contributions to medical literature; the titles of two are: "Report on the Origin of Yellow Fever in Norfolk in 1855." ("Virginia Medical Journal," vol. iv); "Bony Union of Fracture of the Neck of the Femur, with Report of Cases and Comments Thereon" ("Transactions of the Medical Society of Virginia," 1877).

He married Lucinda Wilson, the daughter of Dr. Daniel Wilson, of Louisville, Kentucky, and died at his home in Norfolk, Virginia, November 7, 1887.

ROBERT M. SLAUGHTER.

SELDEN, William Boswell (1773-1849), prominent practitioner of Norfolk, Virginia, was born in 1773, the son of the Rev. William Selden, pastor of the Episcopal Church at Hampton, Virginia. He received a good education, afterwards studying medicine for several years under Dr. Taylor and Dr. Hansford of Norfolk, and then attended a course of lectures at the University of Pennsylvania. After two years in Edinburgh he had not received a degree for he had to return home on account of lack of funds. He settled in Norfolk and was associated with Dr. Alexander Whitehead. In 1779 he obtained some vaccine virus from Dr. Jenner and with this proceeded to vaccinate, and kept up a continuous supply for nearly fifty years. He declared that all this time he could see no variation in the appearance of the vesicle, nor any failure in its power to protect. From the beginning of his practice he used the bark in the treatment of malarial fevers without waiting for the fever to subside, and in severe cases, anticipated the paroxysms by full doses of camphor and opium. Long before Graves wrote on the subject, he treated typhoid fever by careful nursing and proper medicines, rather than with drastic remedies. He was one of the first in this country to use calomel in the treatment of the summer diarrhea of children, trying it first in 1807 in the case of his own child. He had a large obstetrical practice, and was one of the best accoucheurs of his day, and was probably the first to perform the operation of decapitation of the fetus. This he did in the case of a woman

with a shoulder presentation, who had been in labor for two days. The shoulder was forced so low in the pelvis that the neck was easily reached, and the doctor decided to sever the neck, rather than attempt to turn. This he did with a pruning knife with a curved blade which he happened to have in his pocket. The body was then easily delivered by pulling down the arm and the head was expelled by the uterine contractions. The woman recovered.

Dr. Selden was a scholarly man, an earnest student and a close observer. From the beginning of his career it was his habit to write down every morning his observations on the climate and weather, and to record briefly any noteworthy case he had seen. These records were lost during the Civil War when his son's library was plundered by the Federal troops.

He married, in 1802, Charlotte Colgate, of Kent, England, and several children were born. Three sons and a daughter survived him and two of the sons, William (q. v.) and Henry, became physicians. He died on July 18, 1849, his last illness presenting the symptoms of cancer of the stomach.

ROBERT M. SLAUGHTER.

Sellman, John (1764-1828), early physician of Cincinnati. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii. p. 355.

SEMMES, Alexander Jenkins (1828-1898), professor of physiology in the Savannah Medical College, writer, was born December 17, 1828, in the District of Columbia; graduated A. B., 1850; A. M., 1852, from Georgetown College, District of Columbia; M. D., 1851, Columbian College, District of Columbia. He was the son of Raphael Semmes, Esq., of Nanjemoy, and Matilda Neal Jenkins, of Cobneck, Charles County, Maryland; his paternal and maternal grandfathers were officers of the Maryland line of the Revolutionary Army, and came to Maryland between 1636 and 1650. He studied medicine three years with Grafton Tyler, and after graduating at the National Medical College, District of Columbia, settled in New Orleans, Louisiana, where he was a resident physician of Charity Hospital, New Orleans, in 1860. He was appointed surgeon of the Eighth Louisiana Volunteers, June 19, 1861, and July 4 was commissioned a surgeon in the Confederate Army, serving from 1861 to 1863 as surgeon and brigade surgeon in Hay's Louisiana brigade, of Stonewall Jackson's corps in the army of Northern Virginia and surgeon in charge of the third division of the Jackson Military Hospital at Richmond, Virginia. After the close of the war he returned to New Orleans, then removed to Savannah, Georgia, and from 1870 to 1876 was professor of physiology in the Savannah Medical College. Subsequently he took orders in the Roman Catholic Church and in 1886 became president of the Pio Nono College, Macon, Georgia.

He was the author of "Medical Sketches in Paris," 1852; "Poisoning by Strychnine," 1855; "Medico-Legal Duties of Coroners," 1857; "Gunshot Wounds," 1864; "Notes from a Surgical Diary," 1866; "Surgical Notes of the Late War," 1867; "Medical Reviews and Criticisms," 1860-61; "Revaccination: Its Effects and Importance," 1868; "Preparations of Manganese," 1868; "Evolution of the Origin of Life," two papers read before the Georgia Medical Society, 1873; "The influence of Yellow Fever on Pregnancy and Parturition," paper read before the Georgia State Medical Association, 1875; and other papers both numerous and important. He also wrote frequently for literary and other non-professional periodicals.

He married October 4, 1864, at Savannah, Georgia, Sarah Lowndes, daughter of John Macpherson Berrien, attorney-general of the United States in the cabinet of Pres. Jackson, and for many years United States Senator from Georgia.

He died, September, 1898, at New Orleans.

DANIEL SMITH LAMB.

Semmes, Thomas (1778-1833), a successful practitioner of Alexandria, Virginia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1033, 1034.

SENKLER, Albert Edward (1842-1899), professor of clinical medicine in the Minnesota State University, was an Englishman by birth, having been born at Docking, Norfolk, England, March 8, 1842. When he was still a boy his father, a clergyman of the Church of England, came to Brockville, Ontario. His early education was obtained under the tutelage of his father, who was a fellow of Caius College, Cambridge, and a scholar, one who gave him at home an education and an intellectual start in life, such as few boys have. Being naturally of a scientific bent, Albert decided to study medi-

cine, and at an early age entered McGill University at Montreal, where he received, when only twenty-one, his M. D., and that of Master of Surgery in 1863. Two years later he began to practice at St. Cloud, Minnesota, where he soon had a large clientèle. From 1873 to 1876 he was a member of the Minnesota State Board of Health and made the first meteorological observations in the State of Minnesota. The year 1880 saw him at St. Paul, where he lived up to the time of his death. He was president of the Minnesota Academy of Medicine, and professor of clinical medicine in the medical department of the Minnesota State University, also at the time of his death on the staff of every hospital in St. Paul. Indeed it may be said that his profession, recognizing and appreciating his character and distinguished ability, had conferred upon him every honor within its power.

He married Frances Isabella Easton, at Brockville, Canada, August 28, 1867. Two children were born; the son, George E., became a doctor.

Dr. Senkler, after a lingering illness, which for nearly a year prevented him from attending to his practice, died at his home in St. Paul, Sunday morning, December 10, 1899. A gentleman of the noblest type; a scholar in medicine, an accomplished physician who loved his profession and all that was best in it.

BURNSIDE FOSTER.

SENN, Nicholas (1844-1908), eminent surgeon of Chicago in early antiseptic days, clinical teacher, experimenter, and pioneer in intestinal surgery, was born in Buchs, Canton of St. Gall, Switzerland, October 31, 1844, and was brought by his parents to the United States in 1852, to the town of Ashford, Wisconsin. His early education was had at the Fond du Lac High School, Wisconsin, where he graduated in 1864. He taught school for two years, and at the same time read medicine with Dr. Munk, and studied the local flora; in 1866 he entered the Chicago Medical College and graduated M. D. in 1868. He was resident physician in Cook County Hospital for eighteen months, before practicing in Elmore, Wisconsin. In 1874 he moved to Milwaukee and served as attending physician to the Milwaukee Hospital, but in 1877 went to Germany to study at the University of Munich where he was graduated in 1878. He returned to the United States in 1880 and was called to be professor of surgery in the College of Physicians and Surgeons, Chicago. In 1884 he was made professor of the principles and practice of surgery in the same institution, and two days every week he travelled 88 miles to deliver his lecture and conduct clinics which became popular with practicing physicians and surgeons, as well as with the students, on account of his masterly presentation of his subject illuminated by his large knowledge of surgical history, pathology and surgical principles. In 1888 he became professor of surgery and surgical pathology in Rush Medical College, and in 1891 succeeded Charles Theodore Parkes (q. v.) in the chair of practice of surgery and clinical surgery in the same institution, the most important surgical appointment in the West. Senn was also professor of surgery in the Chicago Polyclinic. He held appointments as surgeon-in-chief to St. Joseph's and the Presbyterian Hospitals, and was surgeon to the Passavant. Later he was professor of surgery and military surgery in the University of Chicago. His early experimental work in abdominal surgery made him foremost in this field, and in his researches in intestinal perforation, particularly in gunshot wounds, he introduced the hydrogen gas test (1888). He did much to develop our modern ideas in surgical tuberculosis, and published an excellent monograph in book form on "Surgery of the Pancreas" (1885), based on extensive experimentation. He also wrote a comprehensive work on tumors (1880).

Senn was one of the first in the West to conduct elaborate systematic experiments on animals. It was said of him that "Young Senn always came to the state medical society meetings with a large manuscript, not full of words and theoretical dreams, but replete with careful experimental observations and supported by specimens from his experimental laboratory—his stable loft. He presented his subjects with such enthusiasm and force that their acceptance was irresistible and we all went home from the meeting inoculated with new material for thought and reflection." Like John Ashhurst (q. v.), of Philadelphia, he was noted for citing numerous foreign authors and their works offhand in his discourses. He was among the early experimenters in gastro-intestinal anastomosis; his investigations being carried on night after night in a laboratory constructed under the sidewalk of his home in Milwaukee. In 1896 he delivered the surgical oration, and in 1897 was president of the American Medical Association.

During the Spanish-American War he did heroic service, and while escorting Spanish wounded to Santiago as exchange prisoners he fell in with the young surgeon Rodondo, who afterwards translated his "Practice of Surgery" into Spanish. During this war he held the position of chief surgeon in the navy with the rank of lieutenant-colonel. In 1891 he founded the Association of Military Surgeons of the United States, was its president for two years, and had great interest in military surgery and pathology. His pride in his uniform and regalia greatly amused his friends, but these later war-times have put criticism to shame while demonstrating his wisdom and foresight. He knew, many years before others thought of its possibility, that the great world war was inevitable.

Of special interest are his works on first aid on the battlefield and the conservative surgery of gunshot wounds. In Illinois he was appointed brigadier-general by Governor Altgeld in 1892, and instituted the reform of a careful physical examination of recruits to the great betterment of the National Guards. His "Surgical Treatment of Cysts of the Pancreas," 58 pp., appeared in 1885; "Experimental Surgery," 522 pp., in 1889, and his "Intestinal Surgery," 269 pp. in the same year; "Surgical Bacteriology," 270 pp., 1889; "Principles of Surgery," 611 pp., 1890; "Pathology and Surgical Treatment of Tumors," 709 pp., 1895; "War Correspondence (Hispano-American War)," 278 pp., 1899; "Medico-Surgical Aspects of the Spanish-American War," 379 pp., 1900. His splendid gift of medical books, especially rich in the older writers, to the Newberry Library, Chicago, was made up largely of the collection of William Baum, professor of surgery in the University of Göttingen, who had been gathering them assiduously for fifty years; after Baum's death in 1886 it was purchased by Senn, including also the library of DuBois Raymond. He endowed the Senn room in St. Joseph's Hospital (Chicago) where he lay in his last illness. He gave a clinical building to Rush Medical College, devoted to clinical and laboratory purposes, at an approximate cost of $100,000.

Senn cultivated pathology diligently and brought it into living touch with his surgery. He was a voluminous and rapid writer; dashing off reams for publication while travelling, and without reference books, a fact which accounts for a loose style and for the short life of much of his work. His manuscripts consist of one hundred and sixty volumes. He was the intimate friend of Christian Fenger (q. v.), whose qualities were in a sense complementary to his own; while Fenger was first a pathologist and then a surgeon, Senn was preeminently a surgeon cultivating pathology as a valuable handmaid. Allowing for the great difference of personality, Senn was our latter-day S. D. Gross redivivus. In his exalted preeminence in the West zeal sometimes outran prudence, and when speaking he was not always aware of the limitations of time and the patience of his auditors as well as of the claims of others.

He was short and stocky, with a hustling, nervous step, a warm impulsive heart, and a keen temper; simple-minded, sympathetic, even child-like, religious, without being specific in his faith, clean of speech and never profane or vulgar; he was an indefatigable student and worker. He was one of the first in this country to command a vast surgical service, and could at any time muster from his wards cases to illustrate numerous phases of all the commoner surgical affections, and many that were unusual. He lacked the gift of drawing close around him a group of devoted admiring younger men under training to take his place, apparently from an instinctive objection to a successful rival. During his era he reigned supreme but his work soon merged into the common stock of surgical knowledge and he left no distinctively Senn followers to perpetuate his memory. J. B. Murphy's (q. v.) tribute in this connection is, "He did not found a personal school . . . but he created a diffuse and general scientific professional sentiment that permeated the western hemisphere." "Of the western surgeons of the present generation every one is deeply indebted to Senn for inspiration and instruction, and the appreciation of the fact that genius without ceaseless labor is imperfect." (Ochsner.) The West was extremely proud of him, admiring him as its great protagonist. Roused to antagonism, this intellectual giant became a vigorous fighter. He was the recipient of such honors and degrees from numerous foreign societies as commonly fall to the lot of men of unusual distinction. In Senn's later years he travelled much, visiting Porto Rico, Constantinople, Lisbon, Hawaii, and the Islands of the Pacific, Madrid, the hospitals of Jerusalem, St. Petersburg, London, Paris, Cairo, Gratz, Vienna, and all the important German clinics. From South America he wrote a series of letters to the "Journal of the American Medical Association." Even on these holidays, Senn's

inveterate habit of industry gripped him in its tyrannical vise and drove him relentlessly to study, to observe, and to record and send home for publication numerous letters from all parts of the world. Witness his substantial readable volume, well illustrated, entitled "Around the World via Liberia" (1902). Wherever he went hospitals and their surgeons were his first interest. His admiring comments on the splendors of Germany and the nobility of the Russian citizen and his extreme devotion to his Little Father make curious reading today. As a visitor, Senn donned the spectacles of an optimist. As he had always been a prodigy of both physical and mental endurance, he refused to recognize the plain signs of a chronic interstitial myocarditis towards the end and only relaxed temporarily in order to work as hard as before. His acute illness came on during his South American trip, where he made an ascent of 16,000 feet, followed by dilatation of the heart, which on his return home was found enormously distended, with gallop-rhythm pulse, pulmonary edema, extreme dyspnea and anasarca, followed by acute nephritis engrafted on the chronic passive congestion of the kidneys. He died January 2, 1908.

In 1869 Dr. Senn married Aurelia S. Muehlhauser of La Crosse, who survived him, together with two sons, Dr. Emanuel J. and Dr. William N. Senn.

HOWARD A. KELLY.

SERGEANT, Erastus (1742-1814), of Stockbridge, Massachusetts, was the chief surgeon for Berkshire County before the advent of Josiah Goodhue (q. v.). The son of the Rev. John Sergeant, first minister of Stockbridge, he was born in that town, August 7, 1742. He spent two years at Princeton College, studied medicine with his uncle, the famous Dr. Thomas Williams (q. v.), of Deerfield, and on the opening of the Revolution was major in the 7th Berkshire regiment, serving at Lake Champlain from December, 1776, to April 1777, and until Burgoyne's surrender. Yale gave him an A. M. in 1784 and Harvard an honorary M. D. in 1811. He joined the Massachusetts Medical Society in 1785 and was a councilor and chief representative of his country for many years.

Dr. Sergeant was reputed to be the most skilful operator of his time, and his services were in demand within a wide radius. Tall, erect and thin, his figure was a familiar sight in Stockbridge. He died in the town of his birth of pulmonary hemorrhage while sitting at table, November 14, 1814, at the age of seventy-two.

WALTER L. BURRAGE.

SEWALL, LUCY (1837-1890), pioneer woman physician of Boston, was descended from a long line of Puritan ancestors, and belonged to the Sewalls of Massachusetts. She was born in Boston, April 26, 1837, the daughter of Samuel E. Sewall, lawyer and reformer. While in her youth, coming under the influence of Dr. Marie Zackrewska (q. v.), she was drawn to study medicine. She seems to have been the first girl of fortune and family to study medicine in the United States. She entered the only college then open to women, the New England Female Medical College of Boston, graduating in March, 1862, then went to Europe where women were admitted to hospitals only by favor. Such was her ability and personality that she not only gained favors, but proved herself eminently worthy of them in her work with Dr. A. Chereau, whose lectures she attended in Paris. Upon her return in 1863 she became resident physician of the New England Hospital for Women and Children, Boston. Her romantic and enthusiastic friendship for Dr. Zackrewska, while yet her pupil, led the young Boston girl to devote her life, her fortune and the influence she could command from a wide circle of friends to the building up of the hospital. In 1869 she resigned the position of resident physician to become attending physician, serving until 1886. She was considered to be an expert obstetrician. The Maternity Building at the New England Hospital for women and children is named after her, "Sewall Maternity."

Through her influence the Massachusetts Infant Asylum was founded, the first effort made in Massachusetts to save the lives of infants who would otherwise have gone to the almshouses or the "baby-farms."

The latter years of her life were those of enforced semi-invalidism, because of organic heart disease, but she took up the study of mineralogy as a diversion. She died of valvular disease of the heart, February 13, 1890, having well achieved the purpose of her life, that of creating confidence in women as physicians and surgeons.

ALFREDA B. WITHINGTON.

SEWALL, Thomas (1787-1845), the first to demonstrate the appearance of the gastric mucosa in alcoholics, was born April 16, 1787, at Augusta, Maine, the son of Thomas and Priscilla Cony Sewall. After receiving his M. D. at Harvard, in 1812, Dr. Sewall studied under Rush and others at the University of Pennsylvania. He was given to original research and published possibly the first monograph on the postmortem appearance of the gastric mucosa in alcoholics, shortly following the work of Beaumont (q. v.) on digestion.

He practiced at Ipswich and Essex, Mass., until 1820. Dr. Sewall was the first or one of the first opponents of phrenology and wrote a monograph, "The Errors of Phrenology Exposed." He also published papers in the current medical journals. He was professor of anatomy and physiology at Columbian University, District of Columbia, from 1821 until his death, April 10, 1845.

He was the author of "Lectures Delivered at the Opening of the Medical Department of Columbia College," Washington, 1825, 1826; "Eulogy on Dr. Goodman," Washington, 1830, 1832, 1840; "Examination of Phrenology," etc., Washington, 1837, 1839; "The Enquirer; Pathology of Drunkenness," 1841; this was later translated into German and established his reputation both at home and abroad as an original investigator.

He married Mary Choate, sister of Rufus Choate, November 28, 1813. There was but one child, Thomas, born April 28, 1818.

DANIEL SMITH LAMB.

SEYBERT, Adam (1773-1825), of Philadelphia, physician, chemist, mineralogist and statesman, was born in Philadelphia, May 16, 1773. He began the study of medicine with Caspar Wistar (q. v.), then entered the Medical Department of the University of Pennsylvania in 1791, graduating M. D. in 1793; he continued his medical studies in Europe. His thesis for the medical degree was: "The Attempt to Disprove the Doctrine of the Putrefaction of the Blood of Living Animals," that was included by Caldwell in the first volume of his "Medical Theses."

Seybert's interest in public affairs led him into politics and he represented Philadelphia in the United States Congress for eight years, 1809-1815 and 1817-1819. He collected material during this time and published "Statistical Annals of the United States," which was reviewed by Sydney Smith in the "Edinburgh Review" for January, 1821. In this article occurs the oft-quoted question, "Who reads an American book?" In 1809 he was a candidate for the chair of chemistry in the University of Pennsylvania, made vacant by the death of James Woodhouse; he was strongly endorsed by his old preceptor, Caspar Wistar, but the other candidate, John Redman Coxe (q. v.), backed by Benjamin Rush, was appointed.

In 1798 he married Maria Sarah, daughter of Henry Pepper, who came from Germany in 1869 and settled in Philadelphia and was the grandfather of William Pepper (1810-1864) (q. v.). They had two children, Catherine, who died in infancy, and Henry (1801-1883), whose education he largely superintended, and who was his companion in travel in this country and abroad.

Seybert was a member of the Royal Scientific Society of Göttingen, the Chemical Society of Philadelphia, and the American Philosophical Society of which he was secretary in 1798-1809. To the transactions of the latter society in 1797, he contributed his papers on "Experiments and Observations on Land and Sea Air" and "On the Atmosphere of Marshes."

He died in Paris, France, May 2, 1825, and was buried in Pére La Chaise. In his will he left one thousand dollars for the education of the deaf and dumb and smaller sums to the Philadelphia Dispensary and to the Orphan Asylum; another bequest will be understood from an extract from his will: "Whereas it is my opinion that some of the unfortunate convicts who are discharged from the Philadelphia Penitentiary after having undergone the penalty of the law, without having the means to procure a morsel of food or a night's lodging, might be prevented from the commission of further crimes were they provided with a moderate sum of money. I do request you to subscribe in my name five hundred dollars towards a fund to be established for the purpose aforesaid, according to such rules and regulations as may be adopted by a majority of the board of Inspectors of the Penitentiary aforesaid . . . My opinion is that every convict discharged as above mentioned should receive from the fund aforesaid as much money as would enable him to purchase food for two days and lodging for two nights."

Seybert's son, Henry, who never married, at his death in 1883 left $60,000 to the University of Pennsylvania to endow a chair of intellectual and moral philosophy on condi-

tion that the University appoint a commission (the widely known Seybert Commission) to investigate modern spiritualism; a preliminary report was published in 1887.

SEYMOUR, William Pierce (1825-1893), of Troy, New York, did not leave much written work, but was one of those who, a generation ahead of the profession, seem to care little or nothing about posthumous reputation but devote themselves entirely to mastering every subject for the sake of exact knowledge and teaching. He was one of the three sons of Israel and Lucinda Pierce Seymour, who were among the early settlers of Troy, New York, where William was born October 17, 1825. He worked as a schoolboy under Professor Charles H. Anthony and, graduating from Williams College in 1845, studied medicine with Dr. Alfred Wotkyns, whose daughter he afterwards married in 1852. He was graduated from the University of Pennsylvania in 1848, receiving an A. M. from Williams the same year, and the following year began to practice in Troy. From 1857 to 1862 he was professor of materia medica and therapeutics in Castleton (Vermont) Medical College and from 1858 to 1863 held the same chair in the Berkshire (Massachusetts) Medical Institution, being professor of obstetrics in the last named institution for two years, 1863-65. The year 1870 saw him professor of obstetrics and diseases of children at the Albany Medical College, and there was added to this three years later the professorship of obstetrics and gynecology. A student of Hodge, (q. v.) he yet corrected errors of that time and recognized in the human pelvis three straits or planes having their appropriate diameters and their axes decussating at a similar angle of 130 degrees to the planes of entrance, rotation and exit, thus departing from the teaching of Levret that there are two straits and axes as in the lower animals.

His statement as to the infectiousness of pneumonia, made in 1868 before the Rensselaer County Medical Society, met with opposition, and ten years before, his strong advocacy of operation for appendicitis, then called typhlitis, was deemed heretical. Those who knew him best, however, and were educated to follow him, appreciated his ability and mental worth.

He died on April 7, 1893, passing away quietly as if falling asleep. He left two sons, Alfred W. and William Wotkyns, the latter following his father's profession.

SHAKESPEARE, Edward Oram (1846-1900), who was descended from a brother of the poet, was born May 19, 1846, in New Castle County, Delaware. He graduated at Dickinson's College in June, 1867, taking his M. D. at the University of Pennsylvania in 1869. After practicing in Dover, he removed to Philadelphia in 1874. He was made lecturer on operative surgery at the University of Pennsylvania and wrote a number of ophthalmological papers. He investigated the cause of a great epidemic of typhoid fever in Wyoming Valley near Wilkesbarre, Pennsylvania, and discovered the cause in the contamination of the mountain water, a report which was of great value. In 1885 he was sent as United States representative to Spain to investigate cholera, and made an elaborate report to Congress. During the war with Spain he was appointed brigade-surgeon.

He died June 1, 1900.

HARRY FRIEDENWALD.

SHAPLEIGH, Elisha Bacon (1823-1892), medico-legal expert of Philadelphia, was born in York County, Maine, November 6, 1823, a descendant of one Nicholas Shapleigh who emigrated from England in 1630. His A. B. was from Yale in 1846, his M. D. from the University of Pennsylvania in 1849. Immediately after graduation he settled in Lowell, Massachusetts, but in 1851 removed to Philadelphia, where he married, in June, 1864, Anna, daughter of William Lloyd. He was a frequent writer for the medical press, especially on subjects connected with toxicology and legal medicine.

Dr. Shapleigh was a man of medium size, but of heavy build. He had dark skin, hair and eyes, and wore a full beard. He was slow and deliberate in speech, but fond of telling stories; he was ever saying "that reminds me." He was conversant with the literature of law as well as of medicine.

THOMAS HALL SHASTID.

SHATTUCK, Benjamin (1742-1794), pioneer physician of Templeton, Massachusetts, was a descendant of William Shattuck, who was born in England and died in Watertown, Massachusetts, August 14, 1672, aged fifty-eight. Benjamin was born in Littleton, Massachusetts, November 11, 1742, the grandson of the Rev. Benjamin Shattuck, first minister of Littleton, and son of Stephen Shattuck, farmer, a man of great physical

and mental powers and a warm patriot. On the memorable April 19, 1775, after he was sixty-five, he shouldered his gun and marched to Concord and followed the retreating enemy to Cambridge. Benjamin's grandmother was a granddaughter of the celebrated John Sherman, clergyman and metaphysician. He was fitted for college by Jeremiah Dummer Rogers and graduated A. M. from Harvard College in 1765. After studying medicine with Dr. Oliver Prescott (q. v.), of Groton, Massachusetts, he settled in Templeton, and practiced there until his death in that town, January 14, 1794.

April 12, 1772, he married Lucy, daughter of Jonathan Barron, a brave provincial officer who was killed in "Johnson's Fight" at Lake George, September 8, 1755. They had seven children. Dr. Shattuck was settled in a region with but few inhabitants; instruments and books were scarce. By perseverance and sagacity coupled with unremitting labor he built up a large practice and was accounted the foremost physician of the county.

The quaint funeral sermon preached by the Rev. Ebenezer Sparhawk, in which each of the surviving relatives, most of them present, was apostrophized in turn and the departed eulogized without touching on the actual facts of his life, was characteristic of a custom of that time.

WALTER L. BURRAGE.

SHATTUCK, George Brune (1844-1923), long time editor of the "Boston Medical and Surgical Journal," was born in Boston, August 18, 1844, the son of George Cheyne the younger (q. v.) and Anne Henrietta Brune Shattuck. After a preparatory education at St. Paul's School, he took his A. B. in 1863, from Harvard University. An A. M. followed in 1867, and M. D. in 1869. Study in Paris and Vienna rounded out his preparation for professional life. Dr. Shattuck practiced medicine in Boston until 1911. Meanwhile, he filled the post of visiting physician to the Boston City Hospital, later becoming president of the Medical Board as well as senior physician. From 1886 to 1888, he was instructor in clinical medicine in Harvard Medical School. He was president of the Massachusetts Medical Society (1910-1912), of the Massachusetts Charitable Eye and Ear Infirmary and of the Boston Medical Library (1906-1919). Several times, he was elected to the Board of Overseers of Harvard University (1890-1901 and 1903-1912). He was a trustee of the Boston Athenaeum and a member of the Massachusetts Humane Society. He joined the staff of the "Boston Medical and Surgical Journal" when John Collins Warren was its chief. A bold editorial from his pen as assistant editor, attacking the method of appointing coroners, brought about a suit for damages which resulted in a complete victory for the "Journal" and the abolishment of the antiquated and corrupt coroner system in 1877.

Dr. Shattuck married Amalia Schutte in Paris, France, June 6, 1872; they had two daughters.

For some years, he was an invalid from paralysis agitans, finally succumbing to an intercurrent bronchitis on March 12, 1923. He lacked entirely ambitious self-seeking and was able always to see the humorous side of life as well as the other person's point of view. Dr. Shattuck was an ideal presiding officer—a rare attribute among medical men; he knew how to write; he kept true to the higher ideals in medicine; he made the "Boston Medical and Surgical Journal" exist and maintain a place in New England medicine during difficult times. He was of average height, wore a handsome long full beard, of which he was justly proud, and was ever on the lookout for situations which might appeal to his keen sense of humor. His fairness appealed to those who were brought into intimate contact with him so that they held him in high esteem.

SHATTUCK, George Cheyne (1784-1854), Boston physician, was born in Templeton, July 17, 1784, the youngest son of Dr. Benjamin (q. v.) and Lucy Barron Shattuck, and was named for George Cheyne, a London and Bath physician, who practiced between 1671 and 1743. Shattuck was educated at Dartmouth College, where he received his A. B. in 1803, M. B. in 1806, the honorary M. D. in 1812, and LL. D. in 1853, meanwhile taking the M. D. from the University of Pennsylvania in 1807, and the honorary A. M. from Harvard in the same year. He was a fellow of the American Academy of Arts and Sciences, and began to practice in Boston in 1807, and continued there until his death, March 18, 1854.

While a student at Dartmouth Shattuck formed a friendship with Nathan Smith (q. v.) that ceased only at Dr. Smith's death in 1829, and also with Lyman Spalding (q. v.), then lecturing at Dartmouth on chemistry. Dr. Spalding got his young friend to lecture

on the theory and practice of medicine at the Fairfield Medical School, in western New York State, for two winters and kept up a life-long friendship with him.

Dr. Shattuck married Eliza Cheever Davis, daughter of Caleb Davis, and lived and died in his house at the corner of Staniford and Cambridge Streets in the West End of Boston. He had a very large family practice and was noted for his benevolence. Dr. Edward Jarvis (q. v.) relates of him that upon many occasions he was called upon to treat the needy students of Andover and Cambridge. After hearing complaints and prescribing for them, he would hand the sufferer a prescription and say courteously, "Now, sir, will you be good enough to carry this prescription to the apothecary, 134 Washington Street, and while he is putting up the medicine, will you do me the favor to carry this note to Mr. K., No. 5 Congress Street?" The grateful student wishing to make some return for a free consultation and for the kindly interest in his case, gladly took the note to Mr. K., only to learn that it was an order to K., the tailor, for a suit of clothes for the bearer of the note.

Shattuck was president of the Massachusetts Medical Society from 1836 to 1840 and delivered the annual discourse in 1828. Many years before the establishment of the Board of Health he was one of the consulting physicians of the City of Boston. He avoided public office as a rule. Rev. Cyrus A. Bartol, pastor of the West Church, but a few steps from Dr. Shattuck's home, said of his last hours, "'Pray with me,' was commonly his first salutation as I entered his sick chamber. 'I want your prayers, they are a great comfort and consolation. Pray not for my recovery, I am going to God. I wish in your prayer to go as a sinner.'"

At various times he gave Harvard College over $26,000. His donation of $7,000 ensured the foundation of Dartmouth College Observatory, and he gave many books and portraits to the college library. The year before he died he established the Shattuck professorship of pathological anatomy in the Harvard Medical School by a gift of $14,000. In his will he left $10,000 to the Massachusetts Medical Society the income of which was to be used for essays on the climate and diseases of New England or for an annual lectureship, now the Shattuck Lecture. Of his six children all but the oldest son, George Cheyne, died when young. Shattuck assisted Dr. James Thacher (q. v.) with his American Medical Biography, as mentioned by Thacher in the preface and also in his Dispensatory. Shattuck had an extraordinary talent for writing medical papers and carried off the Boylston Prize several years in succession. Later in life he did much for the foundation and enlargement of the "New England Medical Journal" and the "Massachusetts Dispensatory," of which he was one of the committee of publication. A portrait in oil is in the possession of his grandson, Dr. Frederick Cheever Shattuck.

WALTER L. BURRAGE.

SHATTUCK, George Cheyne (1813-1893), differentiator of typhus and typhoid fever, was born in Boston, Massachusetts, July 22, 1813, the son of Dr. George Cheyne (q. v.) and Eliza Cheever Davis Shattuck, and grandson, on his mother's side, of the Hon. Caleb Davis, all of Boston. His early education was obtained at the Boston Latin School and at the famous "Round Hill School" at Northampton, Massachusetts. It was there, probably, that the interest in educational matters began which led him in later life to found St. Paul's School in Concord, New Hampshire. In his early life his love of study was, perhaps, overstimulated by his father, so that he was inclined to work beyond the strength of a not too rugged constitution. He received his A. B. from Harvard College in 1831, and after spending a year at the Harvard Law School entered the Harvard Medical School, took his M. D. in 1835 and then went abroad for study. In common with his friends, Bowditch, Stillé and Metcalfe, (q. v.) he was much influenced by the methods, the teaching and personality of Louis, with whom he kept up an intimacy until the latter's death forty years later. Shattuck and Stillé read papers before the Paris Society for Medical Observation, in 1838, that served to mark out the distinction between typhus and typhoid fevers.

On April 9, 1840, having settled to practice in Boston, he married Anne Henrietta Brune of Baltimore.

For nearly twenty years he was a professor in the Harvard Medical School; from 1855 to 1859 professor of clinical medicine, and from 1859 to 1873 professor of the theory and practice of medicine. In 1849 he succeeded Oliver Wendell Holmes (q. v.) as visiting physician to the Massachusetts General Hospital and served in this capacity for thirty-six years. He was president of the

Massachusetts Medical Society from 1872 to 1874, and he was a fellow of the American Academy of Arts and Sciences.

He died March 22, 1893, being survived by a daughter and two sons, one of the latter being Frederick Cheever Shattuck, who became professor of clinical medicine in the Harvard Medical School, and the other George Brune Shattuck, (q. v.) editor of the "Boston Medical and Surgical Journal" for twenty years. An oil painting of Dr. Shattuck is in the Boston Medical Library.

WALTER L. BURRAGE.

Shaw, Charles H. (1875-1910), professor of botany in the Medico-Chirurgical College, Philadelphia. See Cyclopedia of American Medical Biography, H. A. Kelly, Philadelphia, 1912, vol. ii, pp. 362-363.

SHAW, Charles Stoner (1856-1899), pediatrist of Pittsburg and editor of the "Pittsburg Medical Review" was born in that city September 13, 1856, the second son of Dr. Thomas Wilson and Catherine Stoner Shaw. His early education was obtained at the Ward School and the high school of Pittsburgh. He was graduated in medicine at the University of Pennsylvania in 1879 and returning to Pittsburgh was associated with his father and devoted himself to general practice for several years, gradually, however, restricting himself to the treatment of diseases of children. In 1894 he was elected to the chair of diseases of children in the medical department of the Western University of Pennsylvania, in Pittsburgh, a position he held until his death. His wide knowledge coupled with his scholarly attainments, exceptional for his age, at once attracted the students and made his lectures a marked feature in the college course. He was a member of the county, state and national medical societies. At the time of his death he was the unanimous choice for the presidency of the Allegheny County Medical Society.

Shaw was a man of high ideals, and stood for all that is best and highest in the medical profession. With a view to do battle in its cause and to stimulate the observance of the Code of Ethics, the more especially as to its bearings on nostrums and nostrum advertising in the medical press, he, with some half dozen others of the younger physicians of Pittsburg, organized in December, 1885, "The Pittsburg Medical Review," a monthly periodical owned and controlled entirely by the editors. Dr. Shaw was recognized as editor-in-chief of this publication and under his vigorous efforts, directed especially at the "Journal of the American Medical Association," the board of trustees of that journal gradually eliminated the more obnoxious advertisements, until its pages were practically free from all advertisements which the code of ethics forbids.

His contributions to medical literature partook largely of the nature of editorials together with papers on general medicine and pediatrics.

Dr. Shaw was not married and died in Albuquerque, New Mexico, of pulmonary tuberculosis, December 28, 1899.

His portrait is in the hall of the Assembly Room of the Pittsburg Free Dispensary.

ADOLPH KOENIG.

SHAW, John (1778-1809), a founder of the University of Maryland, was born at Annapolis, Maryland, May 4, 1778, and entered St. John's College on its opening in 1789 and took his A. B. there in 1796. He began the study of medicine under Dr. John Thomas Shaaff, of Annapolis. In 1798, while attending his first course of lectures at the University of Pennsylvania, he received an appointment as surgeon in the United States Navy, and sailed to Algiers. He spent about a year and a half in North Africa, holding a position which was partly medical and partly consular. While there he learned to speak Arabic, and became physician to the Bey of Tunis, also Secretary of Legation and Chargé d'Affaires. He returned home in the spring of 1800, but in July 1801, left America for medical studies in Edinburgh. But early in 1803, before he had obtained his medical degree there, he was induced to go to Canada by the Earl of Selkirk, who had founded a colony. He remained in the Earl's service until 1805, when he returned to Annapolis to practice.

In February, 1807, he married and removed to Baltimore, where he joined with Davidge and Cocke (q. v. to both) in founding the College of Medicine of Maryland (University of Maryland), in which he held the chair of chemistry. He was treasurer of the Medical and Chirurgical Faculty of Maryland from 1807 to his death, which occurred at sea, January 10, 1809, at the age of thirty, from consumption. Dr. Shaw published a number of poems, and left a manuscript of his travels and life in Africa. The former were collected

and republished in a volume in 1810, preceded by a biographical memoir. ("Poems by John Shaw," Philadelphia, 1810.) His prose style is sprightly and entertaining, his poetry is chiefly sentimental and patriotic and is sweet and graceful.

EUGENE F. CORDELL.

SHAW, John Cargyll (1845-1900), a New York alienist, was born September 25, 1845, at St. Ann's Bay, Jamaica, West Indies, and died in Brooklyn, New York, January 23, 1900. His parents were John and Christiana Drew Shaw. After education in the local schools he came to the United States with his mother and sister when seventeen. When he had served with a wholesale druggist in New York, and attended lectures on chemistry, he studied medicine under Dr. George K. Smith, and in 1874 took his M. D. from the College of Physicians and Surgeons, New York. He took great interest in studying the histology and pathology of the nervous system in the laboratory of Dr. Satterthwaite and Professor Seguin (q. v.), and became clinical assistant to the latter at the College of Physicians and Surgeons. He was appointed neurologist at St. Peter's Hospital, Brooklyn, New York, and filled the position of medical superintendent of the Lunatic Asylum of Kings County, where he instituted and carried out many needed and praiseworthy reforms. He was appointed lecturer on the diseases of the nervous system at the Long Island College Hospital, and advanced to the position of clinical professor of diseases of the mind and the nervous system, increasing his reputation in the field of clinical instruction. Twice president of the New York Neurological Society, he was also elected president in 1893 of the Medical Society of the County of Kings and consulting physician to the State Hospital for the Insane, Poughkeepsie, New York. He also occupied the position of neurologist in St. Peter's Hospital, the Long Island College Hospital, the Brooklyn Hospital, St. Catherine Hospital, the Long Island Throat Hospital, the Brooklyn Eye and Ear Hospital, and the Kings County Hospital. He held membership in the New York Neurological Society, the Brooklyn Pathological Society, the American Neurological Society, the Medical Society of the County of Kings, the Neurological Society of Brooklyn, the Medical Society of the State of New York and the Brooklyn Anatomical and Surgical Society.

Dr. Shaw contributed many valuable papers on subjects relating to the nervous system, reading them before medical societies and publishing them in medical journals. The following may be mentioned: "Muscular Atrophies in Locomotor Ataxia;" "Hemiplegia in Children;" "Progressive Muscular Atrophy and its Pathology;" "Anomalous Cases of Locomotor Ataxia;" "General Paralysis of the Insane;" "The Practicability and Value of Non-Restraint Treatment of the Insane;" "Raynaud's Disease." He contributed to "International Clinics" and for a time was an associate editor of the "American Medical Digest." He wrote "Essentials of Nervous Diseases and Insanity." His efforts were directed and applied to the more humane treatment of the insane. The commissioners of charity, moved by his persistent importunities, gave the good doctor all their aid to improve the condition of the poor who had become insane from want, anxiety, hard work and improper food. There was a praiseworthy effort to transform the modern "Bedlam," as it were, back into the Home of Bread, the "Bethelehem," in which the better emblem of sanity might come with hope and peace. Chains, shackles, handcuffs and strait-jackets were taken off. Occupations and amusements were provided. Cottages were built for the less violently insane, and better sanitary conditions were established.

Shaw set out on his life work with ambition, industry, perseverance and high aims and made himself master in every department of his specialty.

SHECUT, John Linnaeus Edward Whitridge (1770-1836), of Charleston, South Carolina, writer on botany, natural philosophy and other subjects, was born at Beaufort, in that state, December 4, 1770. He was descended from French Huguenots who sought refuge in Switzerland, near Geneva, whence his parents, Abraham and Marie Barbary Shecut, emigrated to South Carolina in 1768-9. He began to study medicine under Dr. David Ramsay (q. v.), and continued his studies at the University of Pennsylvania, but did not graduate. He was a member of the Literary and Philosophical Society of South Carolina, which he organized in 1813, first as the Antiquarian Society, and was the first president of the American Homespun Company, the first cotton factory in the state, which he himself founded in 1820.

Dr. Shecut began to practice at Charleston and continued in active duty until his death. He was one of the pioneers in the therapeutic application of electricity, and in 1806 ex-

hibited a machine which he had designed for its administration. Dr. Shecut's interests were not limited to medicine, as shown by his activity in scientific, literary and industrial fields. He gave popular lectures on electricity in Charleston in 1822. His work on the flora of Carolina was written for the purpose of stimulating an interest in the study of botany and to simplify the Linnaean system. In later life he became actively interested in theology and organized the body of Trinitarian Universalists. This organization seems to have been rather short-lived, for the founder became allied with the Methodists, of which denomination he was a member at the time of his death.

A voluminous writer, the following are among his chief works: "Flora Carolinensis, an Historical Medical Economical Display of the Vegetable Kingdom," Charleston, South Carolina, 1806; "A Treatise on Climatic Conditions in South Carolina (a rare book); "Medical and Philosophical Essays," Charleston, South Carolina, 1819, containing topographical, historical and other sketches of the city of Charleston; "An Essay on the Prevailing Fever of 1817;" "An Essay on Contagions and Infections;" "An Essay on the Principles and Properties of the Electric Fluid;" "The Elements of Natural Philosophy and a New Theory of the Earth;" "The Eagle of the Mohawks," a novel, New York; "The Scout, or the Fort of St. Nicholas," a novel of the seventeenth century, New York. There is also in possession of his descendants a manuscript work entitled "Trinitarian Universalists."

He married Sarah Cannon, January 26, 1792, and had four children, one of whom, William Harrel, studied medicine. He married his second wife, Susannah Ballard, on February 7, 1805, and had five children by this marriage. He died of paralysis at his home at Charleston, June 1, 1837.

ROBERT WILSON, JR.

Sheldon, Alexander (1766-1836), early speaker of the New York Assembly. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1043.

SHEPARD, Charles Upham (1804-1886), physicist, of Connecticut, was born at Little Compton, Rhode Island, June 29, 1804, graduated at Amherst College in 1824 and received a year's instruction under Thomas Nuttall at Cambridge. Then he gave private lessons in botany and mineralogy in Boston and was for two years an assistant in the laboratory of Professor Silliman (q. v), at Yale, subsequently taking charge for a year of an institution in New Haven for furnishing the citizens with proper lectures on science. In 1832-33, under a commission from the United States Government, he investigated the cultivation and manufacture of sugar in the Southern States, the results of which were embodied in Professor Silliman's report to the secretary of the Treasury in 1833. According to the Catalogue of Yale University 1701-1904, Dr. Shepard held the degrees of M. D. and LL. D. Dr. Shepard was lecturer on botany and natural history in Yale College from 1831 to 1847; in 1835 he was appointed associate of Dr. Percival in the state geological survey of Connecticut, and he was professor of chemistry and natural history in Amherst College from 1845 to 1852, also professor of chemistry in the Charleston Medical College from 1854 to 1861. In the investigation of minerals and meteorites Dr. Shepard visited Europe seven times and possessed a large collection of those articles. In 1832 he published a "Treatise on Mineralogy."

SHERMAN, Benjamin Franklin (1817-1897), a busy general practitioner of Ogdensburg, N. Y., the youngest of five brothers, all physcians, was a descendant of Henry Sherman, born in Devonshire, England, in 1516, and John Sherman, who came to Connecticut in 1634. Benjamin was born in Barre, Vermont, May 24, 1817, graduated from the Ogdensburg Academy, studied at the Berkshire Medical Institution and took his M. D. at the Albany Medical College in 1841. After practicing in Hammond and Potsdam he finally settled in Ogdensburg, where he married Charlotte C. Chipman of Waddington and had five children, two of whom became doctors. Taking long journeys by stage and sailing vessels to reach recognized teachers, he fitted himself to be one of the best men around. He eagerly kept pace with every advance, so that, in his eightieth year, younger men came to him to take advice and borrow books and instruments. Often he had to mount at sunrise, fill his saddle bags with home manufactured drugs and set out on a long tour, not knowing whether a major operation or a delicate piece of eye surgery would be required en route. As physician and chemist he was also called on for evidence in important trials and litigations. Besides being coroner for

his county he was chemist and microscopist for the public prosecutor. Among his appointments were the presidency of the New York State Medical Society, and also of the Northern New York Medical Society, and of the St. Lawrence County Medical Society.

SHEW, Abram Marvin (1841-1886), superintendent of the Connecticut Hospital for the Insane, was born September 18, 1841, at Le Roy, Jefferson County, New York, and was the youngest of a family of eleven children. When eleven years of age Abram removed with his parents to Watertown, N. Y., where he received his education at the Jefferson County Institute. Having decided upon his profession, he entered upon the study of medicine at the Jefferson Medical College in Philadelphia as one of the pupils of Professor W. H. Pancoast (q. v.). During his course of study his attention was called to the subject of insanity, and he spent some time as an assistant at the New York Asylum for Insane Criminals at Auburn. He then returned to his second course of lectures at Philadelphia and was graduated at Jefferson Medical College in 1864. He was immediately appointed assistant surgeon of United States Volunteers, and assigned to duty as post surgeon at Hilton Head, South Carolina. After six months he took charge of the post hospital at Beaufort, where he remained until the close of the war. Upon his return to Philadelphia he was appointed one of the resident physicians of Blockley Hospital, and finding his interest in the subject of insanity reawakened, he decided to make it the specialty of his professional life. Here he made the acquaintance of Miss Dix, a lady widely known for her interest in the insane, who became markedly interested in Dr. Shew, and through whom he was later prominently brought to the notice of the trustees of the Connecticut Hospital for the Insane as eminently fitted to organize and take charge of their institution, which had just been chartered. Leaving Blockley he became assistant physician at the New Jersey State Lunatic Asylum, where he remained until he received the appointment of superintendent to the Connecticut Hospital, during the summer of 1866, a position he held to the close of his life. By earnest effort he succeeded in gaining for the institution its present site, and he devoted the autumn and winter of 1866-7 to the study of hospital construction, maturing plans and formulating specifications. He had large executive ability and the institution of which he had charge gives abundant evidence of his thorough appreciation of the needs of the state in providing for the insane, as well as of his skill in carrying forward such plans as were adopted. He constantly sought to inspire his patients with the belief that he was their friend as well as their physician, and his cheerful face and hopeful words, his constant anticipation of brighter days and better things to come for them, together with the magnetism of his manner and bearing, caused them to become greatly attached to him. No one during his twenty years' residence in Middletown can be found who ever knew him to forget his dignity or give a hasty or angry answer.

Besides his annual reports to the trustees of the hospital, Dr. Shew wrote the following papers: "History of the Connecticut Hospital for Insane" (1876); "The Insane Colony at Gheel" (1879); "What Can Be Done for the Indigent Insane" (1879); "A Glance at the Past and Present Condition of the Insane" (1880). In 1878 he visited Europe and investigated the treatment of the insane at various foreign asylums and at the Insane Colony of Gheel. He visited California several times and the Sandwich Islands. He was a man of broad culture, interested in everything that constitutes good society and the better civilization.

On January 27, 1869, he married Elizabeth Collins Palmer, daughter of the Hon. Lewis Palmer of Watertown, N. Y. She died January 19, 1874, of puerperal fever, after the birth of their second child. On June 12, 1878, he married Clara Loomis Bradley, only daughter of S. L. Bradley of Auburn, N. Y. She died September 22, 1879, of diphtheria. On October 23, 1884, he married Clara Brown, daughter of Samuel Brown of Staten Island, who survived her husband, as did a son and daughter by his first wife.

Dr. Shew's death was caused through a fall, received while carrying one of the heavy case-record books down the main staircase of the hospital. It produced spinal concussion, followed by inflammation of the spinal membranes. The inflammation traveled from below upwards until it terminated his life, somewhat suddenly, by an apoplectic effusion at the base of the brain, on April 12, 1886.

Shew, Joel (1816-1855), of New York State, an early advocate of hydropathy. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 1045.

Shipman, Azariah B. (1803-1868), professor of anatomy in the University of Laporte, Indiana. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1045.

SHIPMAN, George Elias (1820-1893), of Chicago, defender of homeopathy, son of a prosperous Wall Street broker, was born in New York City, March 4, 1820; his mother was the sister of Edward Payson, noted divine of Portland, Maine. He was graduated from the University of New York, began to study medicine under Alfred C. Post (q. v.), and took his M. D. from the College of Physicians and Surgeons, New York, in 1843. A convert to homeopathy, he translated Granvogl's "Textbook of Homeopathy" and "The Law of Similarity," Panell's "Typhoid Fever," Parrott's "Urine of the Newborn," and edited the "Northwestern Journal of Homeopathy," 1848-52, the "American Journal of Materia Medica," 1860, and the "U. S. Medical and Surgical Journal," 1865-69.

When Hahnemann Medical College, Chicago, was founded in 1855, Shipman became a trustee and first professor of materia medica and therapeutics. In 1871 he founded a home for abandoned infants and homeless pregnant girls. For nearly half a century Dr. Shipman was one of "the valiant knights of homeopathy and defender of the faith when to be a follower of Hahnemann implied persecution and misrepresentation." A biographer writes, "Dr. Shipman was, without doubt, the ablest defender and scholar the cause of homeopathy ever had in the west."

In 1845 he married Fannie E. Boardman of Connecticut.

Death followed an attack of hemiplegia, January 19, 1893, he being survived by his wife and eight children.

JOSEPH L. MILLER.

SHIPPEN, William (1712-1801), the elder, was born in Philadelphia, October 1, 1712, the son of Joseph Shippen and Abigail Grosse. His grandfather, Edward Shippen, mayor of Philadelphia, emigrated to this country from Cheshire, England, in 1668, and was proverbially distinguished as having three great things: "The biggest house, the biggest person, and the biggest coach." William Shippen had a decided bent for medicine and early undertook its study. He was not long in securing a large and lucrative practice. He was remarkable for his generosity to the poor, giving them much of his time and money.

He married Susannah Harrison, of Philadelphia, in September, 1735, and had four sons. One of them, William Shippen (q. v.) he trained for the medical profession, providing him with an excellent education in Europe. On the return of the young man in 1762, the father encouraged him to give a series of lectures on anatomy, thus inaugurating the first medical school of the country. Dr. Shippen was elected to the Continental Congress in 1778 and re-elected in 1779. He was a member of Benjamin Franklin's "Junto," and was vice-president of the American Philosophical Society. He was the first physician to the Pennsylvania Hospital, 1753-1778. He was one of the twenty-four founders of the University of Pennsylvania and a trustee (1749-1779); a founder of the College of New Jersey (Princeton) and trustee (1765-1796); and one of the founders of the First Presbyterian Church (1742), of which he was a member for nearly sixty years, and in the graveyard of which he was buried.

Dr. Shippen was noted for his splendid health and physique; he rode horseback from Germantown to Philadelphia in the coldest weather without an overcoat and but a short time before his death he took a six mile walk. He never tasted wine or liquor until his last illness, which occurred when he was eighty-nine years old, the end coming at Germantown, November 4, 1801.

ROBERT M. LEWIS.

SHIPPEN, William (1736-1808), the first in America to lecture on midwifery and to establish a hospital for its teaching, was born in Philadelphia, October 21, 1736, and went as a boy to an academy kept by the Rev. Samuel Finley, Nottingham, in which John Morgan and Benjamin Rush (q. v. to both) were also pupils. He received the degree of A. B. from the College of New Jersey (Princeton) in 1754. He was the valedictorian of his class, and the great preacher Whitefield, who was present, is said to have declared that he had never heard better speaking and urged Shippen to go into the ministry. He, however, returned to Philadelphia, where he devoted himself to the study of medicine with his father, Dr. William Shippen (q. v.), until 1758, when he went abroad to finish his medical education. Watson (Annals, vol. ii, p. 378, Edition, 1844) quotes a letter written by the father to an English correspondent, in which he writes, "My son has had his education in the best college in this part of the

country, and has been studying physic with me, besides which he has had the opportunity of seeing the practice of every gentleman of note in our city. But for want of that variety of operations and those frequent dissections which are common in older countries, I must sent him to Europe. His scheme is to gain all the knowledge he can in anatomy, physic, and surgery."

In London young Shippen studied anatomy with John Hunter and midwifery with William Hunter and Dr. McKenzie. He also had an opportunity of seeing much of the work of Sir John Pringle and Dr. William Hewson. He was on friendly terms with Dr. John Fothergill, the famous Quaker physician, a friendship which was fruitful in great benefit to medical education, as Fothergill became greatly interested in the Pennsylvania Hospital, and in the medical department of the College of Philadelphia. To the hospital he sent a series of crayon pictures, illustrating the anatomy of the human body, which he had had made by Remsdyck. The pictures are still there and in a good state of preservation. Before returning to his native land Shippen obtained his M. D. from Edinburgh University, his thesis being "De Placentæ cum Utero Nexu." In Edinburgh he had sat at the feet of Munro "primus" and Cullen. Upon finishing his studies in London and Edinburgh he wanted to continue them in France, but, as England and France were then at war, he managed it only by the friendly interest of Sir John Pringle. This great authority on military surgery secured him the position of travelling physician to a tuberculous lady who having court influence, had got George the Second to procure for her a special passport through the south of France. In this capacity Shippen went over and met some of the celebrated physicians of Paris.

In 1762 he returned to Philadelphia, bringing with him the Fothergill pictures, and full of schemes to establish courses in anatomy and midwifery for the instruction of his fellow-countrymen. These plans soon took form and he announced his first course of lectures in a newspaper letter dated the eleventh of November, 1762, in which he stated "that a course of anatomical lectures will be opened this winter in Philadelphia for the advantage of the young gentlemen now engaged in the study of physic in this and the neighboring provinces, whose circumstances and connections will not permit of their going abroad for improvement to the anatomical schools in Europe; and also for the entertainment of any gentlemen who may have the curiosity to understand the anatomy of the human frame. In these lectures the situation, figure, and structure of all the parts of the human body will be demonstrated, their respective uses explained, and as far as a course of anatomy will permit, their diseases, with the indications and methods of cure briefly treated of. All the necessary operations in surgery will be performed, a course of bandages exhibited, and the whole concluded with the explanation of some of the curious phenomena that arise from an examination of the gravid uterus, and a few plain general directions in the study and practice of midwifery. The necessity and public utility of such a course in this growing country, and the method to be pursued therein, will be more particularly explained in an introductory lecture, to be delivered on the sixteenth instant, at six o'clock in the evening, at the State House, by William Shippen, Jr., M. D. The lectures will be given at his father's house in Fourth Street. Tickets for the course to be had of the doctor at five pistoles each; and any gentleman who may incline to see the subject prepared for the lectures and learn the art of dissecting, injecting, etc., is to pay five pistoles more."

His first course of lectures was attended by ten pupils, but it was not long before larger numbers came. The public was greatly opposed to dissection at that time and Shippen met with violent opposition on the part of the populace, who stoned him and smashed on several occasions the windows of the house in which the dissections were performed. To allay this prejudice he announced in letters to the newspapers that the bodies he used were those of persons who had committed suicide or been legally executed, except "now and then one from the Potter's field." In 1765 Dr. Shippen began his lectures on midwifery, the first systematic instruction given in obstetrics in this country. He himself engaged actively in the practice of that branch although it was still customary to leave the management of labor cases chiefly in the hands of female midwives. Shippen's lectures were illustrated by the "anatomical plates and casts of the gravid uterus at the hospital." In connection with his midwifery lectures he also established a small lying-in hospital "under the care of a sober, honest matron, well acquainted with lying-in women."

In May, 1765, the Board of Trustees of the

College of Philadelphia had voted to establish a medical school in connection with the College and had elected John Morgan (q. v.) professor of medicine in it. In September, 1765, Dr. Shippen was elected professor of anatomy and surgery. In the introductory lecture to his course of anatomy lectures in 1762 the latter had referred to the importance of establishing a medical college in the colonies and this statement of Shippen's is sometimes quoted to show that the credit of being the founder of the department of medicine of the College of Philadelphia should belong to him rather than to Morgan. There is no doubt, however, that this was merely an expression of opinion and should not be taken as proving the existence of any definite plan for such an institution in Shippen's mind. To John Morgan belongs the sole credit of drawing up the scheme of the first organized medical school in this country.

When in 1779 the Legislature repealed the charter of the College of Philadelphia and recreated it in the newly-created University of Pennsylvania, Shippen was the only member of the faculty who at once accepted a professorship in the new school. In 1783 the friends of the college succeeded in having its charter restored, whereupon the trustees re-elected the professors in the medical school to the chairs they had previously occupied. It is curious to note that Shippen was a professor in both the college and the university, despite the rivalry between them, but in 1791 the College of Philadelphia and the University of the State of Pennsylvania agreed to combine and form one body under the title of the University of Pennsylvania, and Dr. Shippen held the chair of anatomy, surgery, and midwifery, with Dr. Caspar Wistar as adjunct professor in the same branches.

Shippen served as physician to the Pennsylvania Hospital in 1778 and 1779. He seems to have resigned because of his necessary absence on military affairs. In 1791 he was re-elected to the staff of the hospital and served until 1802, when he resigned. He was a member of the American Philosophical Society and one of the founders of the College of Physicians of Philadelphia, being president of the latter from 1805 to 1808.

Dr. Shippen's first military position during the Revolution was that of medical director of the Flying Camp in the Jerseys, and as such he was directly subject to the authority of Dr. John Morgan. When Morgan was dismissed from the position of director-general of the military hospitals and physician-in-chief of the American Army, Shippen was appointed by order of Congress, October 9, 1776, director of the hospitals on the west side of the Hudson River. He was by this order placed on an equal footing with Morgan, whose authority was henceforth to be limited to the hospitals on the east side of the Hudson. Shippen was ordered to report directly to Congress, thus ignoring Morgan, through whom such reports had hitherto been made. Morgan, in his "Vindication" directly accuses Shippen of being the cause of his overthrow, and of aiming at securing the position of head of the department for himself. If this were so Shippen's efforts were crowned with success, for, on April 11, 1777, he was appointed to succeed Morgan as director-general of the Military Hospital and physician-in-chief of the American Army. This position he held until his resignation in January, 1781. In August, 1780, he was courtmartialed on charges affecting his financial integrity. He was acquitted and, as stated above, continued in his position.

In 1798 Shippen suffered a terrible blow in the death of his son, a young man of great promise. Dr. Caspar Wistar (q. v.), in his Eulogium of Shippen delivered before the College of Physicians shortly after his death, says that this loss seemed to destroy his interest in every remaining object. He seldom lectured and his practice declined. He died in Germantown, a suburb of Philadelphia, on July 11, 1808.

Wistar gives a delightful pen picture of Shippen: "His person was graceful, his manners polished, his conversation various, and the tones of his voice singularly sweet and conciliatory. In his intercourse with society he was gay without levity, and dignified without haughtiness or austerity. He belonged to a family which was proverbial for good temper. His father, whom he strongly resembled in this respect, during the long life of ninety years had scarcely ever been seen out of humor. He was also particularly agreeable to young people. Known as he was to almost every citizen of Philadelphia, it is probable that there was no one who did not wish him well."

FRANCIS R. PACKARD.

SHOEMAKER, John Veitch (1848-1910), prominent physician and writer of Philadelphia, was born in 1848, was graduated A. B. and A. M. from Dickinson College and M. D. from Jefferson Medical College in

1874. He was a member of the American Academy of Medicine; Association of Military Surgeons of the United States; British Medical Association and London Medical Society; president of the American Medical Editors' Association and president of the American Therapeutic Association; demonstrator and lecturer on anatomy, and lecturer on cutaneous affections in Jefferson Medical College from 1874 to 1886; professor of cutaneous diseases and materia medica and therapeutics in the Medico-Chirurgical College following the year 1886 and president of that institution after 1890. Also he was senior physician to the Medico-Chirurgical Hospital; founder of the "Medical Bulletin" in 1879, and "Medical Register" in 1887; and editor of the "Medical Times and Register."

Dr. Shoemaker was surgeon-general of the State of Pennsylvania from 1898 to 1902; and during the Spanish-American War raised the necessary funds and presented to the State of Pennsylvania a fully-equipped hospital train for the transportation of its sick soldiers from Camp Alger, Virginia. He was commissioned first lieutenant, Medical Reserve Corps, United States Army, in 1898.

Dr. Shoemaker was a prolific contributor to the literature of dermatology, materia medica and therapeutics. He wrote "Practical Treatise on Diseases of the Skin," pp. 633, 1888: "Practical Treatise on Materia Medica and Therapeutics," 2nd ed., 1046 pp., 1893. He exploited the use of oleates in skin diseases and wrote "Ointments and Oleates Especially in Diseases of the Skin," 2nd ed., 298 pp., 1890. Altogether there are twenty-seven titles of his writings in the Surgeon-General's catalogue.

In 1876 he married Jennie M. Logan, of Pittsburgh, Pennsylvania. He died at his home in Philadelphia, October 11, 1910, from acute nephritis, aged sixty-two.

SHORT, Charles Wilkins (1794-1863), Kentucky botanist, was born in Woodford County, Kentucky, on October 6, 1794. His father, Peyton Short, emigrated there from Surrey County, Virginia. His mother was Mary, daughter of John Cleves Symmes. He acquired his literary education at Transylvania University, Lexington, Kentucky, where he graduated in 1810. In 1813 he entered the University of Pennsylvania as a private pupil of Dr. Caspar Wistar (q. v.), and thence graduated in 1815, first settling in Lexington, Kentucky. He remained only a short time, moving to Hopkinsville, Kentucky, where he practiced until 1825 when he was called to the chair of materia medica and medical botany in the Transylvania University. There he served acting also as dean of the faculty, for ten years. With his colleague, Dr. John Esten Cooke (q. v.), he founded the "Transylvania Journal of Medicine and the Associate Sciences" in 1828. The University of Louisville, then an institution but one year old, called him to the chair of materia medica and medical botany in 1837. He remained in active service in this institution until 1849, when he retired from active life. Dr. Short was never a voluminous writer and confined his publications mainly to botanical subjects. Among his most prominent writings were "Notices of Western Botany and Conchology," a paper published jointly with Mr. H. Halbert Eaton (1830); "Instructions for the Gathering and Preservation of Plants in Herbaria" (1833); a "Catalogue of the Plants of Kentucky"; "The Bibliographia Botanica" (1836); "Sketch of the Progress of Botany in Western America"; "Observations on Botany in Illinois" (1845).

"An industrious botanist, and an effectual promoter of botany in this country, his great usefulness in this field was mainly owing to the extent and the particular excellence of his personal collections, and to the generous profusion with which he distributed them far and wide among his fellow-laborers in this and other lands. He and the late Mr. Oakes, the one in the West and the other in the East, but independently, were the first in this country to prepare on an ample scale dried specimens of uniform and superlative excellence and beauty, and in lavish abundance for the purpose of supplying all who could need them." The name of Short is commemorated by a number of plants: the "Genus Shortia", "Vesicaria Shortii," "Phaca Shortiana," "Aster Shortii," "Solidago Shortii," "Carex Shortiana." The little story in connection with the Shortia is that when Dr. Gray was in Paris in 1837 he saw in the herbarium of the elder Michaux a mutilated plant whose label simply stated that it came from "les hautes montagnes de Carolinie." He tried in vain on his return to find the plant, but unsuccessfully. Two years later he described the plant and dedicated it to C. W. Short, and it became the object of all botanists to visit the Carolinas to find it. In 1877 it was found accidentally by G. M. Hyams, a boy who had picked it up on the banks of the Catawba River near the town of Mar-

ion in McDowell County, North Carolina. (Letter from Asa Gray to Prof. Sargent, dated September 17, 1886.)

Dr. Short was married to Mary Henry Churchill in November, 1815, and they had one son and five daughters. He died in Louisville, Kentucky, March 7, 1863, of pneumonia.

THOMAS LINDLEY BRADFORD.

SHOTWELL John T. (1807-1850), professor of anatomy in the Medical College of Ohio, was born in Mason County, Kentucky, January 10, 1807, to which place his parents had emigrated from New Jersey at an early period in the history of the West.

The boy's early love of literature determined his father to give him a liberal education, so the family moved to Lexington, Kentucky, and the son entered Transylvania University in 1822, and was graduated in 1825, with so high a reputation that Dr. Drake (q. v.) persuaded him to take up medicine. He began to study with Dr. Drake in 1826, and became his partner in 1830. In 1832 he received his M. D. from the medical College of Ohio, and was immediately appointed adjunct professor of anatomy to his friend, Dr. Jedediah Cobb (q. v.) He was demonstrator of anatomy in the Medical College of Cincinnati, Ohio, from 1836 to 1838 and in the latter year succeeded Dr. Cobb as professor of anatomy, occupying this chair, with the exception of the session of 1849-50, until his death.

In 1842 he went to Europe, to visit the great medical centers.

In 1832 he married Mary Ward, daughter of John P. Foote of Cincinnati.

During the cholera of 1850 his strength was overtaxed, and, a victim to the importunities of his patients, and his desire to relieve the suffering, he died July 23, 1850.

A. G. DRURY.

SHRADY, George Frederick (1837-1907), of New York City, was distinguished as a surgeon of ingenuity and skill, as a medical journalist—the most prominent and successful in the country, and as a man of very unusual personal and social gifts. He was born in New York City, January 14, 1837, being one of the four children of John and Margaret Beinhauer Shrady. His paternal grandfather emigrated from Baden-Baden, Germany, to New York City in 1735. Both his grandfathers served in the Revolutionary War, and his father in the War of 1812. Dr. Shrady was educated in public and private schools, finally graduating as A. B. from the College of New York, and in medicine from the College of Physicians and Surgeons in 1858. He entered as interne in New York Hospital and graduated from its surgical division in 1859. During the Civil War he was assistant surgeon in the U. S. Army, and did work both in home and field hospitals. He early showed his manual skill, and he won in 1858 the Wood prize for anatomical dissection.

Dr. Shrady entered upon his editorial career soon after leaving the New York Hospital. He edited the "American Medical Times" from 1860 to 1864. In 1866 he founded "The Medical Record" and conducted it for thirty-nine years. During this period, as secretary of the New York Pathological Society, he did great service in promoting wider interest in that study. He kept up his surgical work and became attending surgeon to St. Francis Hospital and to the Presbyterian Hospital, at which two places he did most of his surgical work. He was a skilful, successful but very conservative operator. His most prominent contributions were in the line of plastic surgery. He was one of the founders of The Practitioners Society and gave through his journal a forum for the presentation and discussion of representative physicians, surgeons and specialists of New York City. Through the success of his journal, Dr. Shrady was the means of stimulating a wider and livelier interest in all phases of medical progress, the organization of societies, the writing of medical articles, the discussion of medical policies, the promotion of public health—in fine, to do all that would naturally fall to the part of the editor of the first well-organized and successful weekly medical journal in America.

Dr. Shrady always worked for high ideals and never advocated any but good causes and ennobling policies. He had many interests outside those of his profession. He was a clever draughtsman and would have made a successful caricaturist. He was a man of fine sense of humor, kindly to all, companionable, a good story teller, with a wonderful gift of mimicry. Sometimes his journalistic work made him enemies, but his personality won him friends. He had a taste for literature and art, and he was one of the founders of The Charaka Club, an organization devoted to the study of historical medicine. In 1869

Yale College gave him a degree of A. M. In middle and later life Dr. Shrady became associated as consultant with many institutions. He became nationally prominent in connection with the last illness of Gen. Ulysses S. Grant, to whom he was one of the attending surgeons.

He contributed many important articles on surgery and general medical subjects, of which the following is a partial list: "Ligation of the Lingual Artery near Its Origin, as a Preliminary Procedure in the Extirpation of Cancer in Diseases of the Tongue," 1878; "A New Subcutaneous Saw, Knife and Bone Rasp," 1879; "The Curved Flap in Plastic Operations on the Face," 1879; "Reproduction of the Shaft of the Humerus, after Excision for Acute Necrosis," 1880; "Intraparietal Hernia," 1881; "Surgical and Pathological Reflections on Pres. Garfield's Wound," 1881; "Removal of a Large Nasopharyngeal Tumor, with Extensive Attachments to Base of Skull; an Expected Brain Complication; Death," 1882; "Successful Tracheotomy for Diphtheritic Croup in a Child Eleven Months Old," 1882; "Case of Strangulated Hernia with Remarks on Treatment," 1884; "The Surgical and Pathological Aspects of Gen. Grant's Case," 1895; "The Curability of Cancer by Operation," 1887; "Some Observations on Cancer of the Breast," 1892; "Operative Relief for Deformity after Pott's Fracture," 1893; "A Simple Method of Closing Large Operation Wounds by Sliding Skinflaps," 1893; "Dr. J. Marion Sims, Surgeon and Philanthropist," 1894; "Shock in Modern Surgery," 1889; "Early Diagnosis of Mammary Tumors," 1901; "Hip and Thigh Amputation for Sarcoma of the Femur," 1904.

In 1860 he married Mary Lewis, of New York, who died in 1883. By her he had four children, George F., Jr., Henry Merwin, Charles Douglas, and a daughter, who became Mrs. John F. Ambrose. He was married a second time to Mrs. Hester E. Cantine, a widow with one daughter, Mrs. Edwin Gould.

He died from sepsis after a short illness on November 30, 1907, at his residence, 512 Fifth Avenue, New York.

CHARLES L. DANA.

Shuler, Lawrence S. (1790-1827), early surgeon of Indiana. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii,. p. 372.

SHUMARD, Benjamin Franklin (1820-1869), was born in 1820 and graduated in 1841, and shortly after he received his degree began practice in the country at some distance from Louisville. The frequent and prolonged excursions which this enthusiast made around Louisville and into the interior of Kentucky soon resulted in a large and interesting collection of prehistoric remains, which in due time were systematically arranged and described; and as not a few of these specimens were unknown, his fellow-naturalists, as a just tribute to his labors and researches, bestowed upon them the name of their discoverer, a practice usual with scientists. Dr. David Dale Owen (q. v.) engaged in the geological survey of the Northwestern Territories, under the direction of Congress, selected as his assistant the young scientist, whose fitness for the position had been shown by his previous labors. Conjointly with his friend, the late Prof. Lunsford P. Yandell (q. v.), he furnished, in 1847, for the "Western Journal of Medicine and Surgery," an elaborate paper entitled "Contributions to the Geology of Kentucky," in which he attempted to show the connection between certain geological formations and particular diseases. The paper attracted much attention, and was widely copied by the medical and secular press.

Other positions of trust and honor awaited Dr. Shumard. In 1850 he assisted in making a geological survey of Oregon; and soon after his return home he was employed on the palaeontology of the Red River country, in continuation of the explorations commenced by his brother, Dr. George G. Shumard. In 1853 he was appointed assistant geologist and palaeontologist in the Missouri Survey. Five years afterwards he was commissioned as geologist for Texas. But, after he had been busy at work for two years, and was almost ready to publish his report, he was suddenly, in consequence of a change in the governorship of the State, superseded, and of course obliged to retire from the field. This proved to be his last effort as a public geologist. He then began practice in St. Louis and in 1866 was elected professor of obstetrics in the University of Missouri, thus adding somewhat to his slender income. After some time, however, his health broke down, and he was obliged to abandon, not only his chair, but his practice.

On the fourteenth of April, 1867, he died of pulmonary trouble, in the forty-ninth year of his age. At the time of his decease he

was president of the St. Louis Academy of Science. All of his contributions to scientific journals, which were numerous and varied, had a bearing more or less direct upon geology and palaeontology, with the history of whose progress on this continent his name will live.

SAMUEL D. GROSS.

SHURLY, Ernest Lorenzo (1845-1913), of Detroit was an executive and organizer besides being a pioneer in the crusade against tuberculosis. He was born in Buffalo, New York, June 11, 1845, and died at his home in Detroit, Michigan, May 10, 1913. His early education was obtained at Waukesha, Wisconsin, Rochester and Buffalo, New York. He received an M. D. from the Medical Department of the University of Buffalo in 1866, was interne at the Buffalo General Hospital and entered the Medical Corps of the United States Army. After seeing service in the Indian Campaigns of the late sixties he settled in Manistee, Michigan, in 1870 and practiced medicine for two years. Moving to Detroit in 1872 he associated himself with the Detroit College of Medicine, becoming instructor in minor surgery there the following year. Later he filled the chairs of materia medica, clinical medicine and laryngology, establishing the last professorship himself. In addition to his work as a teacher, in which he had a record of clearness, directness and impressiveness, he was actively connected with the staffs of the Harper, St. Luke's, St. Mary's and the Woman's hospitals. When the Harper Hospital was modernized and enlarged Dr. Shurly undertook the task of complete reorganization in his capacity as chief of staff and was successful in raising both the administrative and the medical departments to a high state of efficiency.

As a practitioner he kept abreast with the times and in the field of thoracic surgery was something of a pioneer. He was among the first to use electricity in the treatment of diseases of the nose and pharynx and he devised a set of instruments for the application of the galvanocautery in this domain. The following is Dr. Shurly's own report of his literary work: "Small book on phthisis pulmonalis (1883); Translation, Carl Michel, On the Nasal Passages (1884); Treatise on Diseases of the Nose and Throat (1900); Address on Medicine, American Medical Association (1892), and various papers too numerous to mention, I fear." He was a careful and painstaking man and deserves credit for taking exhaustive histories of his patients, recording himself the facts in full detail; and he adhered to this custom scrupulously even at the busiest period of his career.

Through the instrumentality of Dr. Shurly the first camp in Michigan for the treatment of tuberculosis was established at Eloise, Wayne County. He maintained a laboratory for the study of this disease at Harper Hospital, and had another laboratory for animal experimentation at his residence. The day will never be forgotten when his three monkeys, each the subject of an important study in tuberculosis, escaped from confinement into the tree-tops of the city, to be captured only after a pursuit extending over forty-eight hours, throwing Detroit into an uproar of amusement and the doctor into throes of apprehension lest the results of precious experiments be lost.

Dr. Shurly was president of the American Laryngological Association in 1884, chairman of the section in laryngology and otology of the American Medical Association, a member of the American Microscopical Association and the Michigan State Medical Society. He was untiring in his support of laws to advance sanitation and to prevent adulteration of food and drugs and at the same time an enemy of charlatanism and quackery.

Although slight of stature he had great energy and strength, enabling him to be a tireless worker.

He married Elizabeth Pulty in 1868, and she survived him.

SHURTLEFF, Nathaniel Bradstreet (1810-1874) was a physician who took to antiquarian studies and to the public service, being an author noted for his accuracy, and also mayor of the City of Boston for three terms. The son of Benjamin Shurtleff, also a physician, and Sally Shaw Shurtleff, he was born in Boston, June 29, 1810, and died there, October 17, 1874. He was graduated A. B. at Harvard College in 1831 in the class with Wendell Phillips and John Lothrop Motley and from Harvard Medical School in 1834, going into practice at once in his native city. He was said to have had a good practice, and to have taken a high standing, but his mind was attuned to delving in the history of the past of his city and state, and making exact accounts of what he found rather than devoting himself to the alleviation of the sufferings of the citizens of his day. Previous to 1853 his writings evinced a considerable talent for such research, so that he was employed

in editing and supervising the publication of the records of the "Governor and Company of the Massachusetts Bay in New England" under the authority of the legislature, finishing the undertaking in 1854, and issuing five large volumes covering the period from 1628 to 1686. With David Pulsifer he edited eight volumes of "The Records of the Colony of New Plymouth in New England," 1856-57, comparing every word of the original with the printed copy, thus securing accuracy of the transcript, and at the same time, by the publication of the books, giving a great impetus to the study of local histories and genealogies. Among his published works of about this time may be mentioned: "Brief Notice of William Shurtleff of Marshfield," 1850; "Thunder and Lightning; and Deaths at Marshfield in 1658 and 1666," 1850; "A Decimal System for the Arrangement and Administration of Libraries," 1856; and "A Literal Reprint of the Bay Psalm Book," 1862.

In 1867-8-9 Dr. Shurtleff was elected mayor by increasing majorities, declining a reelection after his third term. His administration was not brilliant but he gave a conscientious attention to the business of his office and acquired such an interest in the affairs of the city that he wrote his chief work, "A Topographical and Historical Description of Boston," 1871, the third edition of which was published in 1891. It is an octavo volume of 718 pages well illustrated with maps and engravings, among the latter being a frontispiece depicting the author as a middle-aged New Englander of forceful personality.

Dr. Shurtleff was a member of many organizations, among them being the School Committees, 1854-1874; New England Historic Genealogical Society; Massachusetts Historical Society; Massachusetts Medical Society; American Academy of Arts and Sciences; the Board of Overseers of Harvard College, and its secretary, also a trustee of the Boston Public Library.

In 1836 he married Eliza, daughter of Hiram Smith of Boston, and they had one son and two daughters, the son being killed in the Civil War at the age of twenty-four.

Dr. Shurtleff, as his biographers state, was a ceaseless worker, a man whose knowledge was minute, thorough and exact, and always at the service of his fellow man. It is possible he would not have done as much for humanity had he practiced medicine.

WALTER L. BURRAGE.

SIDIS, Boris (1876-1923), psychopathologist, was born in Russia, October 12, 1876, and came to this country at the age of twenty. In 1894 he got his A. B. from Harvard; in 1895, an A. M.; in 1897, Ph. D.; and in 1908, M. D. He was the associate psychologist and psychopathologist to the New York Pathological Institute and the New York State hospitals from 1896 until 1901 when he was made director of the Psychopathologic Hospital and Psychopathologic Laboratory of the New York Infirmary for Women and Children. Later he became the proprietor and director of the Sidis Psychotherapeutic Institute, established at Portsmouth, New Hampshire. Dr. Sidis was formerly the associate editor of the Archives of Neurology and Psychopathology and the Journal of Abnormal Psychology also the author of "The Psychology of Suggestion," 1898, with an introduction by Prof. William James, (q.v.) "Psychopathological Researches," 1902; "Multiple Personality," 1905; "Experimental Study of Sleep," 1909; "The Causation and Treatment of Psychopathic Diseases," 1916; "The Source and Aim of Human Progress" (a study in social psychology and social pathology), 1919; and other works.

On October 23, 1923, at the age of fifty-five, he passed away suddenly.

SILLIMAN, Benjamin (1779-1864), who established the Yale Medical School, the youngest child of General Gold Selleck Silliman and Mary Fish Noyes Silliman, was born in North Stratford, now Trumbull, Connecticut, August 8, 1779. At his birth his father was a prisoner in the hands of the British and his mother had been obliged to leave her home and go seven miles inland. As his father died when he was eleven years old, Benjamin was given his preliminary training for college by his pastor, the Rev. Andrew Eliot, and entered Yale with his elder brother in 1792. For more than a year after his graduation, in 1796, he worked on the paternal farm and then taught a private grammar school in Wethersfield during most of the year 1798. In the fall of that year he entered the law office of Simeon Baldwin in New Haven for the study of law. This study he continued also later in the office of the Honorable Chas. Chauncey, until he was admitted to the bar in 1802. During the later period of his study of law he also occupied the position of a college tutor and continued in that position until September, 1802, when he was elected professor of chemistry and

natural history at Yale. He received this position from President Dwight, although he then had no pretensions to a knowledge of these subjects. President Dwight had told him it was impossible to find a man in this country properly qualified to discharge the duties of the office, consequently Dwight preferred a young man "born and trained among us and possessed of our habits and sympathies" who could acquire the "requisite science and skill." The next two succeeding winters were spent in study at Philadelphia where he attended the lectures of Dr. James Woodhouse (q. v.), Dr. Benjamin S. Barton (q. v.) and others. Returning to Yale he lectured for a year to the senior class and then sailed for Europe to continue his studies further and purchase books and apparatus for the college. He returned in May, 1806, and remained in active service as a professor until June, 1853; then as professor emeritus until his death, November 24, 1864. In May, 1808, he began his first course of popular lectures on chemistry and geology and continued them with great success for many years, lecturing in most of the principal cities in the United States. Upon the opening of the Yale Medical School he assumed additional duties as professor of chemistry and pharmacy, and five years later, in 1818, established the "American Journal of Science and Arts," thus securing the gratitude of the scientific men of this country.

For his work in the establishment of the Yale Medical School and for his interest in medicine he was given the honorary degree of M. D. in 1818 by Bowdoin College. He was a member of several of the principal scientific academies or societies of Europe and America. Preeminent as a teacher and almost unsurpassed as a lecturer he yielded a tremendous influence in arousing interest in scientific studies in this country. Edward Everett styled him "the Nestor of American science." In character he was a gentleman of the old school, of commanding presence and possessed with a sublime Christian faith.

He was twice married, his first wife being Harriet, second daughter of Governor Jonathan Trumbull the younger, of Lebanon, Connecticut. She died of pulmonary tuberculosis, January 18, 1850. On September 17, 1851, he was married a second time, to Sarah Isabella, third daughter of John McClellan of Woodstock, Connecticut. By his first wife he had a son, Benjamin Silliman, Jr. (q. v.), who succeeded him in teaching chemistry at Yale.

A portrait by Nathaniel Jocelyn was painted when he was in middle life and now hangs in the Yale Medical School. Another, painted in 1854, by Matthew R. Wilson, is also in the possession of the University, as well as a bust executed in 1860 by Chauncey B. Ives, and a heroic size bronze statue, modeled in 1884 by Professor John F. Weir. Among his writings we may mention accounts of two journeys to Europe and one to Quebec which went through several editions, and a two volume work on the elements of chemistry. His life in two volumes has been satisfactorily written by Professor George P. Fisher of New Haven.

WALTER R. STEINER.

SILLIMAN, Benjamin (1816-1885). This son of Benjamin (q. v.) and Harriet Trumbull Silliman, born on December 4, 1816, followed his father along the road of natural science for, after graduating from Yale in 1837, he became assistant teacher in this subject at Yale and associate editor with his father of the "American Journal of Science and Arts," until the close of the first fifty volumes in 1845, when the chief editorship devolved on him, with James D. Dana. In 1849 the University of Charleston gave him her honorary M. D. and that same year he was made professor of medical chemistry and toxicology at Louisville University, after five years resigning to take his father's chair of chemistry at Yale. Editorial duties engrossed him in 1853 when, in connection with the Crystal Palace exhibition, he worked up "The World of Science, Art and Industry," and in 1854 "The Progress of Science and Mechanism." His "First Principles of Natural Philosophy or Physics," 1858, had a second edition in 1861. Yale benefited considerably by his generosity and the results of his mineralogical researches in California. In 1868 he presented the whole of his collection to the Museum. He married, in 1840, Susan H., daughter of William J. Forbes, and had seven children.

SIMONS, Benjamin Bonneau (1776-1844), of Charleston, South Carolina, was of French extraction, being descended from the Merovingian Kings. The family was originally named Saint Simon. The first colonist, Benjamin, came to this country in 1685 and became the progenitor of the whole Simons family in the South. Benjamin Bonneau Simons was born in Charleston, December 5, 1776, graduated at Brown University, Rhode

Island, in 1796, and immediately went abroad to study medicine. He attended the schools of Edinburgh, London and Paris, and was the pupil of John and Charles Bell and did the dissections for their famous anatomical plates. So greatly were his capabilities held in estimation that he was told, did he remain in Europe he would be able to pave his street with gold. Returning to America, he began to practice in his native city in 1801, as a surgeon; he drew much of his practice from the northern states. He was considered the leading surgeon of the South, some of the medical profession even coming there to hear him lecture. He was the first man to trephine bone for abscess and did the first successful operation in South Carolina for stone in the bladder, and was said to be the only man in America who cured goiter. He treated thirteen cases of bone necrosis and first recognized the condition and treatment.

Dr. Simons was a fellow of the Royal Society of London, and one of the early presidents of the Charleston Medical Society. He was professor of chemistry and the author of a valuable treatise on the bones, as well as several other medical works.

He married Maria Vanderhorst, daughter of Gov.-Gen. Arnoldus Vanderhorst and Elizabeth Raven, and had two daughters. There is a picture of him by Bowman in the boardroom of the Roper Hospital; the same artist also painted him in another position, and so good was the likeness that it is said his old negro servant on seeing it exclaimed, "lor! massa's in dere," indicating the room in which the portrait stood. Simons was fond of drawing his friends around him and entertained lavishly at his home on East Bay Street in Charleston, where he died of apoplexy, September 27, 1844.

ROBERT WILSON, JR.

SIMPSON, William Kelly (1855-1914), laryngologist of New York City, was born in Hudson, New York, on April 10, 1855, being the youngest of the nine children of George N. and Caroline McCann Simpson. His paternal ancestors came to New York State from Virginia. His education was acquired in the school at Hudson, the Episcopal Academy of Connecticut, at Cheshire, and Cornell University, where he obtained the degree of A. B. in 1876. After a year he decided to study medicine and entered the college of Physicians and Surgeons, receiving the degree of M. D. in 1880. Upon graduation he joined the staff of the Presbyterian Hospital, where he served as interne on both the medical and surgical divisions until October, 1882. At first he undertook a general practice, but soon became interested in diseases of the nose and throat, this largely through the influence of that great specialist and teacher, Dr. Clinton Wagner (q. v.), of New York. From the first Dr. Simpson identified himself with various dispensaries and was attending surgeon to the throat department of the Northern Dispensary and the Metropolitan Throat Hospital, and assistant surgeon in the throat department of the Presbyterian Hospital Dispensary, also serving as attending physician to the out-door department of the New York Foundling Hospital. It was here that he became associated with Dr. Joseph O'Dwyer (q. v.) in his work on intubation, and he performed the first intubation in America on an adult for the treatment of laryngeal diphtheria. What is far more important, he also was the first to advocate intubation in chronic stenosis of the larynx. He was appointed instructor in laryngology in the New York Post-Graduate Medical School and Hospital and attending surgeon to the nose and throat department of the New York Eye and Ear Infirmary, and continued as such until these departments were dropped from the latter institution. In 1887 he became one of the assistant surgeons in the nose and throat department of the Vanderbilt Clinic, and in 1898 was appointed chief of the clinic and instructor in laryngology in the College of Physicians and Surgeons. On the retirement of Professor George M. Lefferts in 1904 he succeeded to the professorship of laryngology, a position he held at the time of his death. He was consulting laryngologist to the Presbyterian Hospital, the Seton Hospital, the St. John's Hospital at Yonkers and the Somerset Hospital in Somerville, New Jersey. In 1892 he became a fellow of the American Laryngological Association.

In speaking of what he accomplished in laryngology, he was perhaps best known by his work as a teacher, by what he did to develop the art of intubation in the adult, and as the inventor of the intra-nasal tampons for epistaxis, which are in general use, the invention being the application of the Bernay's sponge to the principle of intra-nasal pressure. He was the author of "The Use of Barney's Aseptic Sponge in the Nose and Naso-Pharynx with Special Reference to Its Use as a Pressure Haemostatic," and was also a contributor of the articles on stenosis

and tumors of the larynx in Keating's "Cyclopedia of the Diseases of Children," and the articles on diphtheria, intubation, etc., in Posey and Wright's "Diseases of the Eye, Ear, Nose and Throat," 1903.

Among his many attainments he was devotedly fond of music, and for a long time was a member of the Musurgia Society. His ability in this direction as well as his lovable, whole-souled personality made him much sought after on all social occasions, and numerous organizations welcomed him as a valuable addition to their list of members. He carried into his professional work the same sunny, hopeful, helpful characteristics which were so much a part of him, making him a beloved physician, an enthusiastic, effective lecturer and teacher, and a lucid and sane writer and thinker in the work of the specialty to which he devoted himself.

Dr. Simpson married, October 25, 1882, Anna Farrand, of Hudson, New York, and three children were born to them.

He died, February 6, 1914, following a cerebral hemorrhage. His wife, a daughter and a son survived him.

SIMS, James Marion (1813-1883), America's noted surgeon, was on his father's side of English, on his mother's of Scotch-Irish descent. His paternal grandfather, John Sims, was born December 27, 1790, and married Mahala Mackey in 1812. Of the father, his distinguished son left a record that "he was one of the best of men and best of husbands." He was sheriff of Lancaster County, South Carolina, from 1830-1834. His mother was the daughter of that Lydia Mackey, wife of Charles Mackey, a revolutionary soldier, who interceded successfully for the life of her husband who had been taken within the British lines, tried by court-martial and sentenced to death as a spy by Col. Tarleton.

Marion Sims was born in Lancaster District, South Carolina, January 25, 1813. He attended the common schools there, entered the Franklin Academy in 1825, and later was sent to the South Carolina College at Columbia, from which he was graduated in December, 1832. Speaking of himself at this time says: "I never was remarkable for anything while I was in college except good behavior. Nobody ever expected anything of me, and I never expected anything of myself." On the twelfth of November, 1833, he matriculated at the Charleston Medical School, where he attended lectures for one year, and in 1834 became a student at Jefferson Medical College, Philadelphia, from which he was graduated in 1835. In May of that year he settled as a practitioner in Lancaster, but after a short period of discouragement removed in the fall of 1835 to Mount Meigs, Montgomery County, Alabama, where he was soon recognized as a clever doctor. To keep Sims from joining his brother in volunteering for the Seminole War his father persuaded him that it was his duty to escort his sisters to Philadelphia and see them placed in Miss Edmund's school there where he had boarded a year before.

Ambitious for a larger field, he established himself in Montgomery, the capital of the State, in December, 1840.

The boldness and success of his operations in general surgery soon attracted a large clientèle, which encouraged him to establish a private hospital, and within a few years he startled the professional world by the announcement of the cure, by an original method, of a series of cases of vesico-vaginal fistula. Up to that time there was not an authenticated successful treatment for this important surgical lesion, and when the science of obstetrics was in its infancy there were thousands of women who, as a result of unskilful attendance in childbirth, were left in the most deplorable and loathsome condition by reason of injuries to the bladder; they were, in fact, among the most wretched and pitiable of human beings, and attracted the sympathy and attention of the enterprising young surgeon. He sought out a number of these hopeless women, gave them shelter and free treatment in his hospital, and after several years of patient, anxious and persistent effort, finally succeeded in curing them. In the evolution of this operation he invented the silver-wire suture and the duck-bill speculum, the announcement of these successful cases attracting world-wide attention, and in many quarters being received with incredulity.

The invention of the speculum came about in this way: Early one morning in 1845 a countrywoman riding on horseback into Montgomery was thrown from her horse and suffered a displacement of the uterus. Sims was called to see her, and found her in bed complaining of great pain in her back and a sense of tenesums in both bladder and rectum. A digital examination revealed a retroversion of the uterus. He placed the patient in the knee-elbow position, inserting two fingers into the vagina in the effort to

push the womb into place. To his great surprise there was an inrush of air which dilated the vagina and exercised pressure enough to carry the displaced organ into position. The ballooning of the vagina by atmospheric pressure brought all parts of this hitherto inaccessible surgical region into full view. Forgetting everything for the moment except the value of this important revelation, he jumped into his buggy, and drove hurriedly to a hardware store in Montgomery, where he bought a set of pewter spoons of different sizes. Bending the bowl and part of the handle of one of these at a right angle, he placed one of his patients suffering from vesico-vaginal fistula in the genupectoral position, inserted the improvised speculum, and atmospheric pressure accomplished the rest. The fistulous opening was clearly seen. He says: "Introducing the bent handle of the spoon, I saw everything as no man had ever seen before. The fistula was as plain as the nose on a man's face; the edges were clear and well defined, and the opening could be measured as accurately as if it had been cut out of a piece of plain paper. The speculum made it perfectly clear from the very beginning. I soon operated upon this fistula, closing it in about an hour's time, but the operation failed."

He did not then know the cause of failure, but later discovered that it was due to infection from the use of silk ligatures. Not long after this, in walking from his home to his office, he noticed upon the ground a bit of spiral wire, such as was used to give elasticity to suspenders before the days of India rubber. He picked up the wire, uncoiled it and it came over him at once that he had found a suture which, if made of a pure metal, would not only hold, but be less apt to induce infection. He carried the wire immediately to a silversmith in Montgomery, gave him a half-dollar silver piece, and asked him to beat that into a wire of the size of the brass wire he presented. This was skilfully done by the smith, and with this wire and the speculum was done the first successful operation for vesico-vaginal fistula, and Marion Sims had taken the first great step towards the immortality which awaited him. Of this instrument the illustrious Thomas Addis Emmett (q. v.) said: "From the beginning of time to the present, I believe that the human race has not been benefited to the same extent and in a like period by the introduction of any other surgical instrument. Those who did not fully appreciate the value of the speculum itself have been benefited indirectly to an extent they little realize, for the instrument in the hands of others has probably advanced the knowledge of the diseases of women to an extent which could not have been done for a hundred years or more without it."

But it was not alone in this particular line that Sims achieved distinction, but also in other departments of surgery. In 1835 he performed a successful operation for abscess of the liver; in 1837 one for removal of the lower jaw without external mutilation, the operation of excision being done entirely from within the mouth, and he did also a successful removal of the superior maxilla for tumor of the antrum. He performed originally the operation of cholecystotomy, without the knowledge of the fact that Dr. Bobbs (q. v.), of Indiana, to whom he always accorded full credit, had preceded him by a few months.

To him it may well be said that mankind is indebted for the surgical invasion of the peritoneal cavity. In his great paper entitled: "The Careful Aseptic Invasion of the Peritoneal Cavity for the Arrest of Hemorrhage, the Suture of Intestinal Wounds and the Cleansing of the Peritoneal Cavity, and for all Intraperitoneal Conditions," before the New York Academy of Medicine, on October 6, 1881, quoting from his own experience as surgeon-in-chief of the Anglo-American Ambulance Corps in the Franco-Prussian War, Dr. Sims courageously promulgated these rules: 1. The wound of entrance should be enlarged sufficiently to ascertain the whole extent of the injuries inflicted. 2. These should be remedied by suturing the wounded intestine and ligating bleeding vessels. 3. Diligent search should be made for extravasated matter, and the peritoneal cavity should be thoroughly cleansed of all foreign matter before closing the external wound. 4. The surgeon must judge whether the case requires drainage or not.

In 1853 he established himself in New York City, and in February, 1855, organized the "Woman's Hospital in the State of New York," and thus becoming the founder of the great science of gynecology. From the temporary structure at 83 Madison Avenue, the hospital was removed to the block of ground donated to it by the city on 50th Street and Lexington Avenue, whence after nearly a half century it was removed to the magnificent new building at 110th Street and Morningside Heights.

In 1861 Dr. Sims for the first time visited Europe, and on the eighteenth of October of that year, at the Hotel Voltaire, successfully demonstrated his operation for vesico-vaginal fistula. Among those who witnessed this operation were some of the greatest surgeons of that age, Nélaton, Velpeau, Civiale, Baron Larrey, Sir Joseph Olliffe, Huguier and others. By this and other cases his presence in Paris created a "furore" in medical circles. So great was the reputation achieved that he was called to all parts of Europe, not only to operate, but in consultation, and to treat various maladies in the department of gynecology; in fact, a short time saw him enjoying a most lucrative practice among the best people in European capitals. Upon one occasion, in attendance upon an important case, he became for several weeks the guest of the Emperor Napoleon at St. Cloud.

After the close of the Civil War in America Dr. Sims returned to New York, but upon the outbreak of the Franco-Prussian War in 1870, he sailed for Europe, and there organized and became surgeon-in-chief of the Anglo-American Ambulance Corps. He rendered such distinguished professional services, especially at and after the battle of Sedan, that the French Republic conferred upon him the order of Commander of the Legion of Honor. From this time until his death, November 13, 1883, he lived alternately in Europe and America, busily engaged in the practice of his profession wherever he found himself.

Dr. Sims contributed extensively to professional literature, not only as it related to obstetrics and gynecology, but to medical and surgical science in general. His most important professional work was entitled "Clinical Notes on Uterine Surgery." Among the many official positions which he occupied was that of the president of the American Medical Association, in 1876. Near the close of his long and eminent career as a practitioner and teacher of gynecology, Prof. T. Gaillard Thomas (q. v.), in an address to the graduating class of the medical department of Cornell University, delivered at Carnegie Hall, said: "If I were called upon to name the three men who in the history of all times had done most for their fellow men, I would say George Washington, William Jenner and Marion Sims."

Immediately after his death a movement for the erection of a statue in his memory was inaugurated in Europe and in his native country, and in 1894 there was unveiled in Bryant Park, New York City, a statue in bronze, a life-like image of the great teacher, the spontaneous gift from his brothers in the profession throughout the civilized world, and from many of the unfortunate beings his genius and skill had benefited. In brief yet comprehensive phraseology, the inscription tells the story of his career:

J. Marion Sims, M. D., LL. D.
Born in South Carolina, 1813. Died in New York City in 1883.
Surgeon and philanthropist.
Founder of The Woman's Hospital of the state of New York.
His brilliant achievements carried the fame of American Surgery
Throughout the civilized world.
In recognition of his services in the cause of Science and mankind
He received the highest honors in the gift of His countrymen
And decorations from the governments of France, Portugal, Spain, Belgium, and Italy.

On the reverse:

Presented
To the city of New York
By
His professional friends,
Loving patients,
And
Many admirers
Throughout the world.

Marion Sims possessed a striking personality. With all his long and bitter struggle with poverty and for professional recognition, and in his early days for health and life itself, time had dealt gently with his form and face, whereon nature had set in unmistakable lines the stamp of greatness. Although he had rounded well the years allotted by the psalmist, his step was still quick and firm, his carriage erect, dignified and graceful. The frosts of age had not tinged the rich abundance of his dark-brown hair, which fell straight back from off the massive forehead, for the ever-active brain and the deep-seated, searching eyes of brown, asked always for the light! The brows were arched and unusually heavy and prominent; the nose beautifully proportioned and of Grecian type; the mouth well shaped, lips usually compressed, which, with the prominent chin, bespoke courage and firmness of purpose. His face was oval, clean-shaven and smooth, and the usual expression was of almost womanly sweetness, yet it was quick to vary in harmony with whatever emotion was predominant. Away from excitement and in the home-life, his expression and actions were almost boyish. He never seemed to have forgotten that he was once a boy, and he would throw himself into a household frolic with all the ambition of his early days. He was courageous to a degree, and, although he rarely lost control of his temper, yet he was

at times imperious and aggressive. When occasion demanded he was a good fighter, and fought his enemies with right good will; but he was quick to forgive, and just before his death he said one day, "I have forgiven all who ever did me wrong, with one exception." As said of him by a gifted orator, he possesses qualities ideal in the make-up of a truly great surgeon, "the brain of an Apollo, the heart of a lion, the eye of an eagle, and the hand of a woman."

A full list of his writings may be seen at the end of "The Story of My Life," New York, 1884; they include: "On the Treatment of Vesico-vaginal Fistula," Philadelphia, 1853; "Silver Sutures in Surgery," New York, 1858; "Clinical Notes on Uterine Surgery," New York, 1866.

JOHN ALLAN WYETH.

SIPPY, Bertram Welton (1866-1924), Chicago gastro-enterologist, was born October 30, 1866, in Neptune, Wisconsin, the son of Thomas and Laura Welton Sippy. Eager to become a physician, he worked in odd hours at any attainable jobs to get funds for a course in the University of Wisconsin which he entered in 1885. In 1887, he matriculated in Rush Medical College, Chicago, and was graduated in 1890, winning second place on the intern staff of the Cook County Hospital where he served for two years. During the next three years, he was surgeon to the Northern Pacific Railroad, stationed at Missoula, Montana. Here he obtained equipment and made cultures of bacteria secured in his daily work; here, too, he abstracted the four volumes of Eichhorst's "Practice of Medicine." During 1895, he specialized in internal medicine and pathology in Vienna and returned to Chicago as instructor in medicine in his alma mater, later becoming assistant professor and professor. In 1902, he again went abroad to study in Berlin, and in 1912 spent six months in Halle and Berlin, studying intensively the physiology and morbid conditions of the alimentary tract.

Sippy became known especially for his system of treatment of gastric and duodenal ulcers, based on physiologic and chemical studies. He was an excellent diagnostician and delighted in solving the difficult physical and mental problems of his patients. As a general practitioner of medicine, he was at his best.

He was a successful teacher, and under the elective system, his classes were always at the maximum. When lecturing or at a clinic, he lost all thought of self and became enthusiastic, and earnest, and evidently enjoyed the work in hand. His modesty, tolerance, and sympathy won him devoted friends; he was ever surrounded by energetic students, making their way with difficulty, in whom he was particularly interested. He was an indefatigable worker and highly critical of his own efforts.

Sippy wrote on various medical subjects, but during the last fifteen years limited himself to morbid conditions of the digestive tract. His description of the symptoms, physical findings, and pathology of one of his patients, remains a classic in the history of splenic anemia. He contributed the articles on gastric and duodenal ulcers to the Oxford and Nelson System of Medicine.

He married Mabel Lamberson of Madison, Wisconsin, June 25, 1895.

A complication of heart disease and diabetes caused his death on August 15, 1924, at his summer home near Ludington, Michigan, on which he had latterly bestowed much attention and care.

FRANK BILLINGS.

SKENE, Alexander Johnson Chalmers (1837-1900). In the death of Dr. Skene, on July 4, 1900, at the age of sixty-three. American gynecology lost one of the last of its famous pioneers. He was born in Fyvie, Aberdeenshire, Scotland, June 17, 1837, of a family that had made its name known in Scotch history for nine centuries. His schooling was in Aberdeen and Kings College. He came to America at the age of nineteen, began the study of medicine three years later at Toronto, matriculated at the University of Michigan in 1861, and was graduated from the Long Island College Hospital in 1863. In that year and the following he served as acting assistant surgeon in the United States Volunteers at Port Royal, Charleston Harbor, and David's Island, prominent in plans for army ambulance work. He kept up his interest in military matters in the National Guard of the State as surgeon to the Twelfth Regiment and First Division, and as lieutenant-colonel on the staff of General Molineux (1884-1885). In 1864 Dr. Skene entered practice in Brooklyn, and within a year had begun his college and hospital work in obstetrics. Professor of both branches of gynecology at thirty-one, he gave his best strength to the Long Island College Hospital, as teacher, as operator, and as dean and president (1886-1893), until the last year of his life. It was he who was

most active in securing practical and beautiful plans giving adequate expression to the great Polhemus gift of a college and clinical building. The college owes its most famous alumnus a debt it can never repay.

Dr. Skene was professor of gynecology in the New York Post-Graduate Medical School, 1883-86, and consultant to various hospitals and dispensaries. He was one of the founders of the American Gynecological Society and its tenth president (1886), and founder and honorary president of the International Congress of Gynecology and Obstetrics. He had been president of the Medical Society of Kings County, of the New York Obstetrical and of the Brooklyn Gynecological Society, and was a corresponding or honorary member of many foreign societies, such as those of Paris, Leipzig, Brussels, Edinburgh, London, etc. Aberdeen University conferred on him the degree of LL. D. in 1897.

He was the author of "Diseases of the Bladder and Urethra in Women," 1878 and 1887; "Treatise on Diseases of Women," 1888, 1892 and 1898; "Education and Culture as related to the Health and Diseases of Women," 1889; "Medical Gynecology," 1895, and "Electro-hemostasis in Operative Surgery," 1899, and he wrote from a large experience and with great diligence. He wrote in the hours before breakfast to avoid interruption, and in writing, as in teaching, his method was clinical, detailed, practical. His huge capacity for work was due to a magnificent physique—his chest girth was forty-four inches. His eyes always twinkled with the memory of "last in class, first in field sports." Thus he was able to carry the burdens of college teaching, hospital operating, medical society duties, the large private sanitarium, and an extensive practice. Two days before he died sixty patients came to the office.

Dr. Skene married Annette Wilhelmine Lillian Van der Wegen, of Brussels, Belgium, who survived him. They had no children.

His country home was at Highmount, in the Catskills, where his love of the mountains had full scope, and where he could indulge his affections for animals. There he had more leisure for modelling. His life-size portraits in marble are indeed noteworthy, in view of the scantiness of the time he could give to sculpture.

If one were to attempt an appreciation of Dr. Skene's work one might select certain items, such as the insistence on gynecologic and surgical methods in obstetric work (1877); the well-known observations on the urethral glands, a source of intractable trouble until recognized (1880); the many new instruments devised, the systematic hemostatic treatment of blood-vessels and pedicles by heat of moderate degree that dries and does not char (1897). In him progressiveness and originality were balanced with caution and clear sense. Two instances will suffice. In the days when we planned to cure most pelvic pain by removing the ovaries, he was credited with timidity because of his careful restriction of the use of this universal remedy. Again, he was said to be behind the times during the epidemic of vaginal hysterectomy. Yet the profession has come back to the conservatism from which he would not swerve. Breadth of view was his. From the early days when he was Austin Flint's assistant he studied his patient as an individual, and overlooked nothing in the general condition nor any detail of constitutional treatment. Such detailed care prepared the patient for operation or avoided the necessity. His technic was so quiet and seemingly simple that only a brother surgeon could appreciate its speed and thoroughness. Few men concealed more generous deeds. Strong in his likes and dislikes, tenacious of purpose, keen of insight, full of apt anecdote, tactful, discreet, hopeful, inspiriting, his impress was strong on those about him. Personal magnetism eludes biographies. The impress of vigor and simplicity, the attraction of kindliness and heartiness—these things may not be written.

A full list of his most important pamphlets can be seen in the "Surgeon-general's Catalogue," Washington D. C.

ROBERT L. DICKINSON.

SKILLMAN, Henry Martyn (1824-1902), professor in Transylvania University, was the youngest child of Thomas T. and Elizabeth Farrer Skillman. His father, a native of New Jersey, came to Lexington, Kentucky, in 1809 and founded there the largest publishing house in the Mississippi Valley. Sprung as Dr. Skillman was from Puritan and Presbyterian ancestors, he inherited the stern sense of duty and principle that characterized them, and passed a long life without departing from the tradition of his forebears. He began his career by spending two or three years at Lexington as an apothecary, but determined in 1844 to study medicine and after three years' diligence graduated from Transylvania University in March, 1847. Early

appreciated, he was appointed in 1848 demonstrator of anatomy in the medical department of his alma mater, a position he filled so ably for three successive years that he was appointed to the chair of general and pathological anatomy and physiology in 1851, a position he retained until elected to the chair of physiology and institutes of medicine in 1856, lecturing before large classes, in these branches until the close of the institution in the summer of 1857.

He was distinguished for the accuracy and clearness of his teachings, was painstaking and apt in his instructions, and his knowledge of the branches which he taught was abreast of his day and generation. He was the last surviving member of the medical department of Transylvania University. Among his other appointments he was contract surgeon for the United States Government; president of the Kentucky State Medical Society, 1869. He was the first president of the Lexington and Fayette County Medical Society, in 1889, and it is claimed that he was the first physician in Lexington to administer anethesia.

He contributed many papers on topics particularly pertaining to medicine and materia medica to the "Transactions of the Kentucky State Medical Society." His knowledge of practical therapeutics was marvelous, he was an accurate clinician, and his skill in surgery was great, his office being always an attraction for medical students.

On October 30, 1851, he married Margaret, daughter of Matthew T. Scott, president of the Northern Bank of Kentucky.

Dr. Skillman was active in all public matters and greatly interested in everything pertaining to the growth and prosperity of his native city. He died at Lexington in March, 1902.

STEELE BAILEY.

SLACK, Elijah (1784-1866), of Cincinnati, was both M. D. and LL. D. and was born in Bucks County, Pennsylvania, November 6, 1784, graduating at Princeton in 1810 and soon after taking charge of an academy at Trenton, and subsequently being professor of natural sciences, and vice-president in Princeton College. In 1817 he went to Cincinnati and in 1819, when the Medical College of Ohio was organized, was appointed professor of chemistry, a position he held for fourteen years. He was also a minister of the Presbyterian Church. During the whole of his active life he was a teacher. Dr. Slack was the first president of the Cincinnati Medical Society, which was organized in 1819. He was also first president of Cincinnati College, incorporated the same year. He died May 29, 1866.

A. G. DRURY.

SLADE, Daniel Denison (1823-1896), veterinarian, zoologist, and author, was born on Beacon Hill, Boston, May 10, 1823, and died in his home at Chestnut Hill, near Boston, February 11, 1896. He was the son of J. T. Slade, a New England business man who had travelled as far as St. Petersburg, Russia, in mercantile pursuits, a tall man of captivating personal appearance and fine physique. J. T. Slade married Elizabeth Rogers, daughter of Daniel Denison Rogers, a Boston merchant, and their son inherited his father's physique and constitution. Daniel lost his mother when three years old and was brought up under the guardianship of his uncle, Henry Bromfield Rogers, living in his maternal grandfather's house on Beacon Street and attending the public schools until he was ten years old. After going to school in Jamaica Plain, Waltham and Northborough, he fitted for Harvard College at the Boston Latin School and was graduated in 1844. While in college he evinced a fondness for natural history and served successively as vice-president, treasurer, president and curator of ornithology and geology of the Harvard Natural History Society. During the summer and winter of 1844, Slade was associated with the historian, Jared Sparks, copying original documents relating to the American Revolution. Entering Harvard Medical School in 1845, he there came in contact with Oliver Wendell Holmes (q. v.), whose friendship he enjoyed throughout life. In the summer of 1846 he became a student in the office of Dr. Amos Twitchell (q. v.), of Keene, New Hampshire, and in October of that year was present at the first capital operation under ether at the Massachusetts General Hospital. When he had received his doctor's degree in 1848 he served as house surgeon at the Massachusetts General Hospital for a year and then spent three years in professional study abroad, mostly in Dublin and Paris. Besides being resident pupil at the Lying-in Hospital at Rutland Square, Dublin, he studied two months at the National Veterinary School at Alfort, France.

Settling in Boston in 1852 Slade became

an attending surgeon at the Boston Dispensary, translated Ricord's "Letters of Syphilis" with an analysis, gave twelve veterinary lectures at the State House and contributed several articles to the medical journals, most of them signed "Medicus." He was a successful competitor for four medical prize essays—the Boylston of 1857, that of the Massachusetts Medical Society in 1859, and the Fiske Fund in 1860 and 1862. The paper on diphtheria, after being published in 1861 and again in 1864, was found worthy of being republished thirty-six years later, in spite of the advances that had been made in the scientific study of this disease during the intervening years.

Dr. Slade did much to raise the standard of veterinary surgery in Boston and became the first president of the veterinary society; the lectures on this subject that he gave at the State House were given at the instance of the Massachusetts Society for the Promotion of Agriculture. He wrote papers on the importance to the farmer of a knowledge of the physiology of animals ("Massachusetts Ploughman," 1865); the horse epidemic, in the same publication, 1872; how to kill animals humanely, 1879.

He married Mina Louise Hensler, daughter of Conrad and Lisette Hensler, in 1856, and they lived most happily together for forty years, his wife bearing him four sons and seven daughters, all athletic, well set-up children, the handsome daughters being accomplished horsewomen. She, a small woman of great grace and charm of manner, was the life of the Chestnut Hill neighborhood where they lived, surrounded by his college classmates and many friends.

During the Civil War Dr. Slade was special inspector of general hospitals under the Sanitary Commission, and after the conflict retired from active practice and devoted himself to horticulture. On the establishment of the Bussey Institution at Jamaica Plain in 1871, he was appointed professor of applied zoology and held the office for eleven years. In 1885 he became lecturer on comparative osteology at the Museum of Comparative Zoology at Cambridge. There he worked and lectured on osteology to the students of Harvard College until his death. A large number of papers on osteological topics came from his pen in these years, published for the most part in "Science". He wrote too on colonial history and antiquarian topics for the magazines, and he made many addresses. Altogether the bibliography of his writings contains sixty-eight titles. As a lecturer Dr. Slade was popular, owing to his charm of speech and manner and his ability of stimulating original observation on the part of his students. He insisted always on the necessity of looking to nature for true information, and his students in osteology learned the science from the bones themselves and not from books.

WALTER L. BURRAGE.

SLAYTER, William B. (1841-1898), professor of obstetrics in Halifax Medical College, was born in Halifax, Nova Scotia in 1841, and died there in 1898.

He practiced for a few years in Chicago, and subsequently in Halifax for upwards of thirty years, then having taken his Arts' course at Trinity College, Toronto, he took his professional training there, and continued his medical and surgical studies in Chicago, London and Dublin. His degrees were: M. D., Chicago; M. R. C. S. and L. R. C. P., London; F. O. S., Dublin. He was also a member of the Medical Society of Nova Scotia, and president of that Society in 1878. For many years previous to his death he was professor of obstetrics in the Halifax Medical College, and surgeon at the Victoria General Hospital, Halifax. After completing his medical course at London, Dr. Slayter served a term as house surgeon at the Westminister Hospital and subsequently was assistant to Forbes Winslow, the eminent English alienist. He began practice in Chicago and became assistant to Dr. Brainard (q. v) on the surgical staff of Rush Medical College, and acquired a good practice. On the death of his brother, the heroic Dr. John Slayter, in 1866, he removed to Halifax, and became one of the leading practitioners. His kindly and genial manner and generous disposition gained for him a host of friends, and his musical talents, which were of a high order, won him a still larger circle of admirers.

He married a Miss Clarke, of Chicago, and had a large family. Two of his sons entered the profession—Dr. John Slayter, of the Royal Army Medical Corps, and Dr. Howard Slayter.

DONALD A. CAMPBELL.

SMALL, Horatio Nelson (1839-1886), lecturer on obstetrics at the Portland (Maine) School for Medical Instruction, was eldest of the three sons of Richard and Abigail Jose

Small, of Buxton, Maine, and was born there November 10, 1839, receiving his early education in Guildhall, Vermont, whither his parents had removed during his childhood, and ultimately graduating at the Dartmouth Medical School in 1863. He immediately joined the army as assistant surgeon of the Seventeenth Regiment New Hampshire Volunteers. In August, 1863, he was made a full surgeon of the Tenth Regiment New Hampshire Volunteers, serving as brigade-surgeon in the Ninth, Eighteenth and Twenty-Fourth Army Corps and received an honorable discharge at the end of the war.

Directly after the war Dr. Small went to Portland, associated himself with Dr. William Chaffee Robinson (q. v.), took up the latter's practice during his last illness and at his death had all that he could possibly attend to as physician and obstetrician. He was chosen visiting physician to the Maine General Hospital, lecturer on obstetrics at the Portland School for Medical Instruction, surgeon on the governor's staff in 1879. Although his contributions to medical literature were not many, he read before the Maine Medical Association one or two memorable papers, one of which was on "Nasal Catarrh," another on "Extra-uterine Pregnancy" (Maine Medical Association, 1893). He was quick in diagnosing and accurate and extraordinarily skilful and bold as an obstetrician and in the use of forceps, of which he was rather overfond. He could see no need for delicate women to wait dangerous delivery when with his skilful forceps he could rapidly terminate labor with safety to mother and the child. Ready in emergencies, in one case he was called in consulation, and upon entering the room and seeing the patient comatose, paid no attention to the consultant, but whipped out his lancet and opened a vein and when the patient was showing symptoms of rallying he began to talk about the case. To see Dr. Small riding along during a procession was to see something noble, for he was a perfect picture of human skill on horseback and he and his horse made an ideal picture.

Dr. Small was married in November, 1862, to Harriet Newell, of Burke, Vermont, who survived him several years. They had no children.

In 1884 he began to show signs of failure and was obliged to rest. On his return he seemed relieved, but although his disease was checked it was too serious to be cured, and he was compelled to abandon practice again. He died rather suddenly at the last, December 28, 1886.

JAMES A. SPALDING.

Small, William Byrant (1862-1904), practitioner, of Lewiston, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1062.

SMALLWOOD, Charles (1812-1873), Canadian meteorologist, was born in Birmingham, England, in 1812 and was educated at University College, London, where he received his medical degree. In 1853 he emigrated to Canada and settled at St. Martin's, Isle Jesus, Canada East, where he acquired a large practice. He soon established a meteorological and electrical observatory, a description of which was given in the "Smithsonian Reports." He discovered the effects of atmospheric electricity on the formation of snow crystals, and investigated the action of ozone in connection with light, and that of electricity in the germination of seeds. In 1858 Dr. Smallwood received the honorary degree of LL. D. from McGill University and was appointed professor of meteorology in that institution, the chair of astronomy being added subsequently. In 1860 the Canadian government made him a grant for the purchase of magnetic instruments, and in 1861 he began making observations. When the United States signal service system was established, Dr. Smallwood arranged for stations in connection with it in Montreal and other Canadian cities. He was one of the governors of the College of Physicians and Surgeons of Lower Canada and was a member of many scientific and literary societies in America and Europe. For more than twenty years he furnished articles to scientific periodicals, to the "Smithsonian Reports," and to various magazines.

He died at Montreal, December 22, 1873.

SMART, Charles (1841-1905), writer, surgeon in the United States Army, was graduated in medicine at the University of Aberdeen in 1862, and immediately after came to America and joined the Sixty-third New York Infantry as assistant surgeon, rendering faithful and meritorious service during the Civil War. In 1864 he was transferred to the regulars and in 1866 was promoted to the rank of captain, in 1882 to that of major. In 1897 he was made lieutenant-

colonel and deputy-surgeon-general, and in 1901 colonel and assistant surgeon-general. From 1882 to 1902 Smart was on duty in the office of the surgeon-general at Washington and was one of the co-editors of the well-known "Medical and Surgical History of the War." For several years he was a member of the faculty of the Army Medical School. During the Spanish-American War he did important work inspecting the camps of the American troops. In 1902 he was sent to the Philippines as chief surgeon, but a stroke of apoplexy compelled him to return to the United States. He died at St. Augustine, Florida, April 23, 1905.

He wrote the "Handbook for the Hospital Corps of the United States Army and State Military Forces" (1889), a most excellent book, which was in use in the army for many years. "He combined with brilliant scientific attainments a great capacity for hard work together with an unfailing loyalty to duty."

ALBERT ALLEMANN.

SMITH, Albert (1801-1878), professor of materia medica and therapeutics in Dartmouth Medical School, was born in Peterborough, New Hampshire, June 18, 1801. He fitted for college at Groton Academy, Massachusetts. His father was unable to send him to college and he went to work in his cotton mill where he remained five years, and saved enough to put him through his college course, graduating at Dartmouth College in 1825, and after working several years more he entered the medical department of Dartmouth, and took his M. D. in 1833. He began to practice at once in his native town and in 1849 was appointed lecturer on materia medica and therapeutics in the Dartmouth Medical School, in the following year becoming professor and continuing in office until 1870 when he became professor emeritus. In 1857 he delivered his course of lectures at the University of Vermont and also a course at the Bowdoin Medical School in 1859. The honorary LL. D. was conferred on him by his alma mater in 1870, and the honorary M. D. by the Rush Medical College of Chicago in 1875. He was president of the New Hampshire Medical Society in 1853.

Dr. Smith married February 26, 1828, Fidelia Stearns of Jaffrey, New Hampshire, and had three children, Fred. Augustus, Susan S., and Catherine B.

As a medical instructor he was ranked among the first in New England. He devoted the leisure in the latter years of his life to the preparation of "A History of Peterborough," a book which was published in 1876. He published a lecture on "Hippocrates" and another on "Paracelsus," besides various articles in the medical journals and in the transactions of the state society. He died in Peterborough, February 22, 1878.

IRA JOSLIN PROUTY.

SMITH, Albert Holmes (1835-1885), Philadelphia obstetrician, was descended from Quaker ancestors who had emigrated from Yorkshire, England, in 1685, men who were among the earlier settlers of Pennsylvania. Albert Holmes was the third son and seventh child of Dr. Moses B. and Rachel Coate Smith, and was born July 19, 1835, in Philadelphia. As a lad he went to the Westtown School and Gregory's Classical School, at thirteen entering the freshman class in the University of Pennsylvania. He matriculated in 1849 and took his bachelor's degree in 1853; graduating M. D. in 1856 and studying under Prof. G. B. Wood (q. v.). When he left the Pennsylvania Hospital in 1859 he soon entered on a busy practice and in 1860 married Emily, daughter of Charles Kaighn of Kaighn's Point, Camden, New Jersey, and they had seven children. As a practitioner he was extremely popular, but his highest skill lay undoubtedly in obstetric manipulations and as a teacher, being noted for the practical character of his teachings and the large amount of information he imparted.

He was the inventor of several instruments and medical appliances, notably the modification of the Hodge hard rubber vaginal pessary, familiar through the medical world as the Albert Smith pessary.

To pass over the part played by him in connection with the admission of women physicians to the County Medical Society would be to ignore an important chapter in his life. He became consulting physician to the Woman's Hospital in 1867, a time when the acceptance of such a position meant strong moral courage. A resolution was offered at a meeting of the trustees of the College to expel any doctor consulting with women—a resolution aimed at those who were on the staff of the Woman's Hospital. After a heated debate this was rejected, but many of Smith's confrères were alienated from him.

His powers of physical endurance were wonderful, but an attack of typhoid fever in 1880 formed a prelude to five years of work carried on in physical weariness. A visit to

Sir Henry Thompson, London, in 1883 benefited and encouraged him, and he returned to active practice but the following year destructive adenoma of the prostate gland from which he had suffered for some time compelled him to give up work, though his interest in the world outside continued until three days before his death which occurred on December 14, 1885.

He held many appointments and memberships, notably resident physician to the Pennsylvania Hospital; visiting obstetrician to the Philadelphia Hospital; consulting physician to the Woman's Hospital. The real founder of the Philadelphia Obstetrical Society, he was its president in 1874-76; also a founder of the American Gynecological Society and its president in 1884, fellow of the College of Physicians, Philadelphia; president of the County Medical Society, Philadelphia, and honorary member of the British Gynecological Society. He was the leading obstetrician of his time.

Among his writings are: "Retarded Dilatation of the Os Uteri in Labor," 1877; "Pendulum Leverage of the Obstetric Forceps," 1878; "An Improved Speculum," 1869; "The Present Aspect of the Puerperal Diseases," 1884, and other articles descriptive of surgical appliances of his own invention.

SMITH, Andrew Heermance (1837-1910), for more than fifty years a medical practitioner in New York City and author of many monographs on medical subjects, was born at Charlton, Saratoga County, New York, August 27, 1837. He was educated at Ballston Spa Institute, Union College and the College of Physicians and Surgeons, New York, where he took his M. D. in 1858. Union College gave him an honorary A. M. in 1889. He studied medicine also in the Universities of Göttingen and Berlin. He was the son of Archibald and Cornelia Heermance. At the close of the Civil War, in which he served with credit, Dr. Smith resumed the practice of medicine. He was physician to St. Luke's and Presbyterian hospitals and surgeon to the Manhattan Eye, Ear and Throat Hospital. At the time of his death he also was consulting physician to several other hospitals. Dr. Smith was president of the New York Academy of Medicine in 1903-04, and had affiliations with numerous other societies and clubs.

In 1884 he married Jane T. Sheldon. He died at his home in New York City on April 8, 1910, of arteriosclerosis.

Among his writings should be noted: "Oxygen Gas as a Remedy in Disease" (Prize Essay), New York City, 1870; "The Effects of High Atmospheric Pressure, Including the Caisson Disease" (Prize Essay), New York, 1873; "Supplementary Rectal Alimentation and Especially by Defibrinated Blood," 1879; "The Influence of Barometric Changes upon the Body in Health and Disease," 1881; "The Physiological, Pathological and Therapeutical effects of Compressed Air," 1886. "At Sixes and Sevens," 1905.

SMITH, Andrew Murray (1826-1896), of Williamstown, Massachusetts, was the author of "Medicine in Berkshire" (Book of Berkshire, Pittsfield, 1890), a pamphlet of seventy pages that sketched the careers of many of the noted physicians of Berkshire County from its settlement to recent times. Born in Williamstown November 7, 1826, he was the son of Dr. Samuel Smith and his wife Betsey, daughter of Dr. William Towner, all of that town, the seat of Williams College. After studying at the Lenox Academy he was graduated from Williams College in 1846 and from the Berkshire Medical Institution, formerly connected with Williams, in 1847. Dr. Smith had a large practice in his native town and in the surrounding country, keeping many horses busy and making long trips. For a year and a half during the Civil War he served as assistant surgeon and surgeon to the 40th Massachusetts Regiment. Following the war, he returned to practice in Williamstown. He was a factor in the social life of his church and his Masonic lodge, and acted for the last ten years of his life as chairman of the school committee. Rheumatism finally checked his outdoor activities and he gave more time to reading, of which he was very fond, especially the classics, and he found time to delve into the history of medicine in his vicinity. His paper, "Medicine in Berkshire," was read before the Berkshire Historical and Scientific Society of Pittsfield.

He married Laura M. Hosford of Williamstown in 1846. They had two sons.

Dr. Smith died in Williamstown, October 25, 1896.

SMITH, Ashbel (1805-1886), secretary of State in the Republic of Texas, was born in Hartford, Connecticut, August 13, 1805, the eldest child of Moses and Phoebe Adams Smith. His ancestors had lived in Hartford since 1642; both grandfathers were officers in the Revolutionary War. Ashbel after

graduating at Yale in 1824 taught a private school in North Carolina, and while there spent a year in the study of law, but on account of poor health abandoned that profession for medicine. He supplemented his studies by taking the degree of M. D. at Yale in 1828 and by a visit to the hospitals of Paris in 1831-32. Returning to North Carolina he practiced medicine there until 1836, when he went to Texas, just organized by the American settlers into a republic. He tendered his services to Gen. Houston, and received the appointment of surgeon-general of the army, though too late for operations in the field. Subsequently he practiced his profession in Galveston. Gen. Houston was reelected to the presidency of the republic in 1841, and he at once commissioned Dr. Smith as minister to the courts of England and France. He accepted, and while residing in Paris and in London performed special missions to various other continental courts. In anticipation of a change in the administration, he was recalled late in 1844, and was appointed in 1845 Secretary of State under the new President, Anson Jones. In this office he continued until annexation to the United States had become a certainty, when he returned to Europe to close the relations of the Republic with the various courts. He visited Europe a third time, as a private citizen, a few years later. Meantime he established his residence on Evergreen Plantation, in Harris County, at the head of Galveston Bay; but he relinquished very early the practice of his profession, and devoted himself to agriculture and to public interests, being many times a member of the state legislature. In 1848 Dr. Smith delivered the annual oration before the Phi Beta Kappa Society at Yale, acting as a substitute for Mr. Webster.

On the outbreak of the civil war he entered the Confederate Army, in which he attained the rank of colonel, serving with gallantry to the close of the contest. During his later years he was much engaged in the establishment of the State University and was active to the last as the president of the Board of Regents. Having been for nearly fifty years a prominent character in Texas life, and respected as a public benefactor, he died at his home in Harris County, January 21, 1886, in his eighty-first year. He was never married.

He wrote an "Account of the Yellow Fever in Galveston, in 1839"; "Account of the Geography of Texas" (1851), and "Permanent Identity of the Human Race" (1860); "Reminiscences of the Texas Republic with a preliminary notice of the Historical Society of Galveston," 82 p., 1876.

SMITH, David Paige (1830-1880), surgeon of Springfield, Massachusetts, born at Westfield, in that state, October 1, 1830, was a son of Dr. James Morven Smith, and a grandson of Dr. Nathan Smith (q. v.), pioneer surgeon and founder of Dartmouth, Bowdoin and Yale Medical Schools. David attended Williston Seminary, the Mount Pleasant Institute at Amherst, and entered Yale College at sixteen. He was graduated in 1851, and from Jefferson Medical College, Philadelphia, in 1853. He married Eunice S. Brewer, September 28, 1854, and settled in Springfield, Massachusetts, the following year. He went to Europe in 1860 for study and observation; spent six profitable months in Edinburgh, under the instruction of James Lyme and Sir James Simpson, and some time in London and Paris. He came home at the opening of the Rebellion to volunteer for medical service, served the war out and then returned to his Springfield practice.

Such is the bare outline to a life of growing power and brilliant usefulness. Back of it lay a clear purpose, an intense nature, unflagging industry, and the born knack which rose to intuition. The boy was studious, shy, purposeful; the man early gained confidence in his own powers and developed that masterful spirit which made him a leader, unsparing of himself, impatient always of stupidity, with the quickness and courage for every emergency of his profession. Dr. Smith rose rapidly in the army. He entered as surgeon of the 18th Massachusetts infantry and was speedily made medical director of Gen. George H. Thomas's column; after the Peninsular campaign he was transferred to become surgeon in charge of the Fairfax Seminary Hospital, about two miles from Alexandria, Virginia. Here the young doctor was in his element; his quick perceptions, remarkable facility in surgery, an ability for organization, made his administration a conspicuous success. Only one surgeon is said to have performed more operations during the war. Except when detached for special service, the doctor remained at this important post during the war. Many stories were told of his quick wit and valuable work. A drunken soldier levelled his loaded gun at the breast of the surgeon. "Shoulder arms!" sharply ordered the threat-

ened official: "ground arms!"—the man mechanically obeyed, and the doctor ordered him under arrest. The brevet of lieutenant-colonel was conferred for his services, and the doctor was tempted to accept a permanent position in the regular army. Though fascinated with many phases of army work, he decided to resume practice in Springfield.

The soldierly figure of Springfield's most prominent physician was familiar to everyone. Erect, slender, with a step full of force and fire: the big piercing eyes, the fine but warm and nervous face behind a warlike mustache—that impetuous, eager face, as of one ready for battle, always left a sharp impression. It took on a sadder cast with the death of the doctor's only boy in 1873, a bright lad, the passion and joy of his father's life. The intensity of that grief tinged all Dr. Smith's after years, driving him to more unremitting activities, enlarging his professional success, but contributing directly to his untimely death. Dr. Smith visited Europe with profit in 1872 and 1874; in 1873 accepted the professorship of the theory and practice of medicine in Yale, and in 1877 was transferred to the more agreeable chair of surgery, formerly filled by his grandfather; his lectures were studiously prepared, and he kept abreast of the times, zealously giving his students the latest discoveries and instruments. In 1878-1880 he was vice-president of the Massachusetts Medical Society.

Personally the doctor was sometimes misunderstood. Dead in earnest, born with a volcanic temper, impatient of dullards and vehement against wrongs, he never stopped to smooth the way with honeyed words. Yet no one had broader sympathies, few wider culture, and the sometime brusque impatience of the busy man hid a heart as reverent, loving and sensitive as ever beat. Latterly the doctor preached and practiced a bright habit of cheerfulness, and indulged happily his love of genuine people and good society. He died of pneumonia, December 27, 1880.

SMITH, Elihu Hubbard (1771-1798), of New York, a founder of the first American medical journal, was born in Litchfield, Connecticut, September 4, 1771, and died of yellow fever in New York City, September 19, 1798. He was prepared in Litchfield, Conn., and entered Yale College at eleven years of age, and graduated A. B. in the class of 1786. He studied subsequently under the personal supervision of Timothy Dwight, at that time at the head of an academy in Greenfield, Mass., and subsequently successor to Ezra Stiles as president of Yale College. Smith returned to Litchfield, and began to study medicine under his father. In 1791 he went to Philadelphia, Penn., for a medical course, and in 1792 to Wethersfield, Conn., to practice medicine. He lived in New York City from 1793 until his death in 1798. In 1796 he was appointed attending physician to the New York Hospital; in the same year, in co-operation with Samuel L. Mitchill (q. v.) and Edward Miller (q. v.), he founded the "Medical Repository" (1796), to which he contributed many articles, among them a history of the plague of Athens; a case of mania treated by mercury; observations on the origin of the pestilential fever in the Island of Grenada in 1793 and 1794; letters to Dr. William Buel, of Sheffield, Mass., on the fever which prevailed in New York in 1793, published in Noah Webster's collection of papers on the subject of bilious fevers; on the pestilential diseases in the Athenian, Carthaginian and Roman armies near Syracuse; and letters on yellow fever in New York.

Dr. Smith also contributed to general literature; "American poems selected and original"; an opera in three acts, entitled "Edwin and Angelina," or the "Banditti" (1795); an epistle to the author of the botanic garden in the year 1798; a poetic address; the history of the native American elk; a drama called "Andre," a tragedy in five acts, produced in New York in 1798 (this was written anonymously, but concensus of opinion ascribed it to Dr. Smith).

While thus busy with professional and literary occupations, when only twenty-seven years of age, he suddenly took sick with yellow fever and died. During this epidemic in New York City, Dr. Smith received into his home his friend, Dr. Scandella, who, taken ill suddenly, could find no lodging. The disease was yellow fever and he died shortly; Dr. Smith also was smitten and died in the next room without knowing of his friend's death.

FREDERIC S. DENNIS.

SMITH, Francis Gurney (1818-1878), obstetrician and physiologist, was born in Philadelphia, March 8, 1818. His father, of the same name, a prosperous Philadelphia merchant, was one of six brothers, all of whom lived to be octogenarians and celebrated their golden weddings; his mother was Eliza

Muckie; Francis was their fifth son. He was graduated in arts at the University of Pennsylvania in 1837, taking an M. D. at the same institution in 1840, with the thesis "Delirium cum Tremore"; he studied medicine with his brother, Thomas M. K. Smith, of Brandywine, Delaware. In 1841 he became resident physician in the Pennsylvania Hospital for the Insane, but resigned in nine months to practice with his brother; he returned to Philadelphia, however, in 1842, to a practice, principally in obstetrics and diseases of women. The same year he was appointed lecturer on physiology by the Philadelphia Association for Medical Instruction; his private class, with J. M. Allen, numbered over one hundred students. In 1852 he was elected to the chair of physiology in the Pennsylvania Medical College, retaining this position until 1863, when he succeeded Samuel Jackson (q. v.) as professor of the institutes of medicine at the University of Pennsylvania; failing health forced him to resign in 1877 when he was made emeritus professor.

With Francis West, John B. Biddle (q. v.) and John J. Reese, (q. v.) he was a member of the first medical staff of the Protestant Episcopal Hospital, named in the reports of 1853. From 1859 to 1864 he was on the medical staff of the Pennsylvania Hospital; from 1861 to 1863 he was medical director of the Christian Street Military Hospital, leaving this post, under orders, to attend the sick and wounded officers in the city.

Smith was the first president of the Philadelphia Obstetrical Society (1868-1872); in 1875 he founded the first physiological laboratory in the University of Pennsylvania. He translated and added to Barth and Roger's "Manual of Ausculation and Percussion" (1849); he wrote with John Neill "Handbook of Anatomy"; "Handbook of Chemistry"; edited three American editions of the fourth English edition of "Carpenter's Principles of Human Physiology," also the eighth English edition. In 1856 he had Alexis St. Martin under observation, and published the result of his experiments in the "Medical Examiner," of which he was editor, 1849-1856; this appeared also as "Experiments upon Digestion," 16 pages, Philadelphia, 1856.

In 1884 he married Catharine Madeleine, daughter of Edmund G. Dutilh, of Philadelphia; they had three sons and a daughter, the eldest son, Robert Meade, became a physician and physiologist. Francis Gurney Smith, Jr., as he was always called, took his M. D. at the University of Pennsylvania in 1840; practiced obstetrics and for nine years was an editor of the "Philadelphia medical examiner". He was a vestryman of St. James Protestant Episcopal Church.

Renal calculi produced pyelitis; nervous symptoms succeeded; he went abroad twice, consulted physicians, but was unimproved. He died April 6, 1878, at his home in Philadelphia.

SMITH, George (1804-1882), Delaware physician and local historian, was born in Haverford township, Delaware County, Pennsylvania, February 12, 1804, son of Benjamin Hayes Smith, member of the Pennsylvania Legislature 1801-1804, and Margaret Dunn. He went to school in the neighborhood, then to the academy in West Chester, Pennsylvania, under Jonathan Gause, a successful teacher of that day, and graduated in medicine at the University of Pennsylvania in 1826, offering a thesis entitled "Cynanche Trachealis." He practiced for five years in Darby and its vicinity; but coming into possession of a large estate in 1829, retired from medicine and gave his time to the management of his farms, numerous private and public trusts, and the cultivation of his literary and scientific tastes. In 1832 he was elected state senator from the district composed of Chester and Delaware counties, serving until 1836. As chairman of the senate committee on education he was largely instrumental, with the support of Thaddeus Stevens and Governor Wolfe, in establishing a permanent law for free education in the state. In 1836 Governor Ritner appointed him associate judge of the courts of Delaware county, a position he held six years and the appointment was renewed by popular vote for five succeeding years. Dr. Smith was the first superintendent of Delaware county public schools (1854) and was president of the school board of Upper Darby school district for twenty-five years. He was one of the founders of the Delaware County Institute of Science and its president from its organization until his death—a period of forty-nine years; he presented the institute with his herbarium.

In 1862 he published the "History of Delaware County," an unquestionable authority on the matters to which it relates and acknowledged to have no superior among local histories of Pennsylvania; he was a frequent contributor of scientific and historical papers to the periodicals of his neighborhood.

George Smith published an instructive sketch of the geology of Delaware County and "a copious catalogue of its plants. This list, carefully prepared, is the monument of Dr. Smith's energy and interest in botanical science" (Harshberger). He was elected member of the American Philosophical Society in January, 1863.

In 1829 he married Mary, only child of Abraham Lewis, of Delaware County; they had eight children, one of whom was Clement Lawrence Smith, tutor and professor of Latin and dean of the college faculty at Harvard from 1870 to 1902.

Dr. Smith died at Upper Darby, March 10, 1882.

EWING JORDAN.

SMITH, Henry Hollingsworth (1815-1890), was born in Philadelphia, December 10, 1815, and was educated at the University of Pennsylvania, taking an A. B. in 1834 and A. M. and M. D. in 1837. He served afterwards as resident physician in the Pennsylvania Hospital for two years, after which he studied abroad, finally settling in Philadelphia to practice in 1841. He was one of the surgeons to the St. Joseph's Hospital, Episcopal Hospital and the Philadelphia Hospital (Blockley), also professor of surgery in the University of Pennsylvania from 1855 to 1871, when he became professor emeritus, but in 1861, on the outbreak of the Civil War, was appointed to organize the hospital department of Pennsylvania with the title of surgeon-general of Pennsylvania. At the first battle of Winchester, Virginia, he originated the plan of removing the wounded from the battlefield to large hospitals in Reading, Philadelphia, Harrisburg and other large cities, and established the custom of embalming the dead on the battle ground. He organized and directed a corps of surgeons with steamers as floating hospitals at the siege of Yorktown, and served the wounded after the battles of Williamsburg, West Point, Fair Oaks, Cold Harbor and Antietam. After thoroughly organizing the department of which he was in charge, he resigned his commission in 1862. In 1883 he was elected president of the State Medical Society.

Dr. Smith was the author of many important medical publications, which include "An Anatomical Atlas," to illustrate William E. Horner's "Special Anatomy" (Philadelphia, 1843); "Minor Surgery" (1846); "System of Operative Surgery, with a Biographical Index to the Writings and Operations of American Surgeons for 234 Years" (2 vols., 1852); "The Treatment of Disunited Fractures by Means of Artifical Limbs" (1855); "Professional Visit to London and Paris" (1855); "Practice of Surgery" (2 vols., 1857-63); and numerous surgical articles in medical journals. He translated from the French "Civiale's Treatise on the Medical and Prophylactic Treatment of Stone and Gravel" (Philadelphia, 1841); and edited the "United States Dissector" (1844) and "Spencer Thompson's Domestic Medicine and Surgery" (1853).

In October, 1843, he married Mary Edmonds, eldest daughter of Prof. William E. Horner, (q. v.) who had been his preceptor in the study of medicine.

He died April 11, 1890.

FRANCIS R. PACKARD.

SMITH, James (1771-1841), early vaccinator in Maryland, was born at Elkton, Cecil County, Maryland, in 1771. He was A. B., Dickinson College, 1792, and A. M., 1795, and was a pupil of Dr. Rush. He attended medical lectures at the University of Pennsylvania. He was a founder and attending physician of the Baltimore General Dispensary, 1801-1807; on March 25, 1802, he opened a private vaccine institute in Baltimore; in 1809 became state vaccine agent, and in 1813 United States vaccine agent. He held this position until 1822, when the office was abolished. He edited "The Vaccine Inquirer," 1822, and was treasurer of the Medical and Chirurgical Faculty of Maryland from 1811 to 1817. He died at Pikesville, Baltimore County, Maryland, June 12, 1841.

Dr. Smith's reputation rests upon his connection with vaccination. Although not the first to introduce it into Maryland, his use of it began at the Almshouse with the second supply received in Baltimore, the date of his first case being May 1, 1801. The virus was put up for greater security in three different ways, on the blade of a lancet, between small plates of glass, or on a thread charged with it, but in any case confined in a vial well corked and sealed. Says Dr. Smith: "The physicians of Baltimore generally were invited to inspect these cases and offers were made to furnish them with virus, but no one could be prevailed on to make any use of it beyond the walls of the almshouse during the whole summer, notwithstanding the small-pox was then prevailing in the city."

A full account of these cases was published in the "Baltimore Telegraph". An accident cut short his activities in May, 1822. Dr. Smith received no salary for his services as United States vaccine agent, and the expenses of the institution were met by subscriptions and donations. During the time that he had charge he supported twenty special agents who were furnished with horses and they rendered 6,750 days' service vaccinating and distributing matter gratuitously for rich and poor, and securing the lives of more than 100,000 persons (Quinan Medical Annals of Baltimore, 1884.) There is preserved in the archives of the Medical and Chirurgical Faculty, at Baltimore, a patent for "an improvement in the art of vaccination," obtained by Dr. Smith from the government in 1822. The "improvement" consisted in moistening the crust and grating upon it small pieces of glass or ivory, to which it would adhere when dry and might thus be transmitted by letter to remote points. Dr. Smith speaks of the crust as "a cryptogamous plant of the order of fungi."

There is a fine oil Portrait of Dr. Smith in the family of Gen. Felix Agnus, of Baltimore, which has been reproduced in Cordell's Medical Annals of Maryland, 1907.

EUGENE F. CORDELL.

SMITH, Jerome Van Crowningshield (1800-1879). One of the picturesque and prominent figures in the local medical history of Boston in the early and middle nineteenth century, was Jerome Van Crowningshield Smith, representative of an old New England family. Born at Conway, New Hampshire, on July 20, 1800, the son of a physician, he early resolved to pursue his father's profession. After graduating from Brown University in 1818, he received a medical degree in 1825 from the Berkshire Medical Institution, whose first professor of anatomy and physiology he then became, settling at the same time as a practitioner in Boston. In 1826 he was appointed port physician of Boston and held this post until 1849. Later in life he removed to New York and became professor of anatomy and physiology at the New York Medical College.

Throughout his life Dr. Smith took an active interest in medical journalism. As early as 1823 he established the "Boston Medical Intelligencer," the first weekly journal in the United States, of which he remained the editor and publisher for several years. He also entered the field of general journalism and in 1825 and 1826 was editor of the "Boston Weekly News Letter," the oldest newspaper in America, founded in 1704. In 1828 the "Boston Medical and Surgical Journal" was formed by the union of the "Medical Intelligencer" and the "New England Journal of Medicine and Surgery," and after a few years Dr. Smith became its editor and continued in that capacity until 1855. The years of his administration were the period during which the early reputation of this journal was established, and to his efficiency much of its durable character is to be attributed.

In 1854 J. V. C. Smith was elected mayor of Boston, having previously served, in 1837 and 1848, as a member of the House of Representatives of the Massachusetts General Court. During his term of office he laid the corner-stone of the former Boston Public Library building on Boylston Street. His portrait, painted at this time, now hangs in the trustees' room of the present library. In 1855 Dartmouth gave him the degree of A. M. During the Civil War Dr. Smith went to New Orleans where he accepted the position of acting inspector-general, with the rank of colonel and was chairman of a commission appointed by General Banks to consider the sanitary condition of that city. The later years of his life were spent chiefly in New York.

Dr. Smith was a voluminous writer and editor of books and contributor to general as well as to medical periodical literature. The titles of his publications include: "A Class-book of Anatomy," 1830; "Life of Andrew Jackson," 1832; "Natural History of the Fishes of Massachusetts," 1833; "Pilgrimage to Palestine," 1851; "Pilgrimage to Egypt," 1852; "Turkey and the Turks," 1854; "The Mother's Medical Guide"; "The Physical Indications of Longevity," 1869. Besides these he published anonymously "A History of the American Indians" and "A Practical Treatise on the Honey Bee"; edited six volumes of scientific tracts and contributed materially to the American Medical Almanac. During his early professional years he resided much on a small island in Boston Harbor, where, in addition to his duties as port physician, he found time for his abundant literary activities and studies in natural history.

In Dr. Smith appeared the characteristic versatility of the New England type which he represented. In college he was champion drummer of his class. In manhood besides

his professional activities as a physician he was simultaneously historian, naturalist, politician, author, editor, and orator. He was a successful modeler in clay and produced creditable busts of several prominent Bostonians. Though his career was not one of extraordinary distinction, his life was replete with a multitude of useful and effective activities.

He died at Richmond, Mass., August 20, 1879.

ROBERT M. GREEN.

SMITH, Job Lewis (1827-1897), of New York, pioneer pediatrician and author, was born in Spafford, Onondaga County, New York, on October 15, 1827, and died at his residence, in the City of New York, on June 9, 1897. He was descended from a family distinguished in revolutionary annals, tracing his lineage back to John Smith, who was one of the founders of the New Haven Colony. His grandfather, Job Smith, was an officer in the army of the American Revolution. Dr. Smith himself was the youngest of five children, one of his brothers being the surgeon, Stephen Smith, (q. v.) of New York. His father Lewis Smith, a cavalry officer in the Revolution, was prominent in local politics in Onondaga County, having served in the Legislature in 1829. His boyhood was passed on the farm which his father had left his mother, and there he toiled, helping in her support. Even in those days the energy and earnestness of character which so strongly developed as he attained maturity were marked characteristics. His kindness of heart is still spoken of amongst the residents of the village where he passed his boyhood. His early education was such as the village school of those days offered. He was graduated in arts at Yale University in 1849, in the same class as the famous President Dwight. The study of Medicine was begun under the tutorship of Dr. Caleb Green; he attended a course of lectures at the Buffalo Medical College, and through the influence of Dr. Austin Flint, Sr., served for one year in the chief hospital of that city. In 1853 he received his medical degree from the College of Physicians and Surgeons in New York City, and at once began the practice of medicine there, a practice extending over forty-four years.

During his busy life in the City of New York he held the following official positions: physician to the New York Foundling Asylum, physician to the New York Infant Asylum, consulting physician to the City (late Charity) Hospital, to the French Hospital, to the Department for the Diseases of Children at the Bellevue Outdoor Poor Department, to the Nursery and Child's Hospital, to the Infant's Hospital on Randall's Island. On the death of Dr. George T. Elliot (q. v.), he was appointed clinical professor of the diseases of children, and he held the position up to within a year of his death. Dr Smith was a voluminous writer. A list of his chief contributions will be found in the "In Memoriam by E. H. Grandin, M. D." New York 1897. From an early stage in his career he devoted himself chiefly to the diseases of children, fitting himself for the pursuit by intelligent study, not alone at the bedside, but also in the post-mortem room. Added to this his love of children, his patience with them, his intuitive sense of their needs, and it is not surprising that we find that his classical work on the Diseases of Infancy and Childhood (1869) passed through eight very large editions during twenty-seven years, was translated into the Spanish, and in its accurate portrayal of symptom, in its deep knowledge of therapeutics, was the favorite with student and the mainstay of general practitioner. Dr. Smith was one of the founders and the second president of the American Pediatric Society, was president of the Pediatric Section of the Ninth International Congress, a fellow of the New York Academy of Medicine, of the New York Pathological Society, of the County Medical Association, and of the American Medical Association.

Dr. Smith was married in 1858, and had seven children, four of whom—daughters—survived him. In 1889 he lost a very promising son, who had but just begun the practice of medicine.

So much for the public side of Dr. Smith's distinguished career. When we pass to the private side, to the side of which the great public and his medical colleagues knew but little, it is approached with diffidence, for such was the innate modesty of the man, such was his abhorrence of self-praise, that we hesitate, even now when he has passed to his reward, to mention that which he was the first to conceal. To properly appreciate the character of this man, the present generation must remember that he began practice in the days when the poor were always with the practitioner, when hospital and dispensary did not stand with wide open door ready to minister to all in want and in sickness. Therefore, Dr. Smith began early to go

around and to do good, irrespective of monetary consideration and we have learned that one of the last acts in his professional career was to spend several hours at the bedside of a sick infant in a tenement house, giving money to the parents to assist them in their extremity while his wealthy clients were awaiting his arrival. No wonder that among the poor of New York he was looked upon as the "Good Old Doctor". Although a specialist, he was still a general practitioner, realizing that only thus could he do his best in his specialty. His clinical lectures were of the most attractive type, usually unprepared, and yet clear, concise, searching, impressing the minds of his hearers. His influence on his pupils was therefore a deep and lasting one.

EGBERT H. GRANDIN.

SMITH, John Lawrence (1818-1883), engineer, mineralogist, chemist, of the South, was born near Charleston, South Carolina, December 17, 1818, and died in Louisville, Kentucky, October 12, 1883. At an early age he manifested great taste for mathematics; when four years old he could do sums in addition and multiplication with great rapidity. This was sometime before he could read. At eight years he was doing algebra, and at thirteen was studying calculus. As a boy he went to the best private schools of Charleston; afterwards to the University of Virginia, where later he devoted himself to the higher branches of physics, mixed mathematics and chemistry, studying the latter rather as a recreation. He selected civil engineering as a profession and was employed as assistant engineer on the road projected at that time between Cincinnati and Charleston, but this not proving congenial to his scientific tastes, he determined to study medicine and after three years' work, was graduated M. D. at the Charleston Medical College. Three years in Europe followed. He studied physiology under Flourens and Longet; chemistry under Orfila, Dumas and Liebig; physics under Pouillet, Desprez, and Becquerel; mineralogy and geology under Elie de Beaumont and Dufrenoy, and prosecuted original researches on certain fatty bodies. His paper on "Spermaceti" in 1843, at once stamped him as an experimental inquirer. On his return to Charleston in 1844, he began to practice and delivered a course of lectures on toxicology before the students of the Charleston Medical College, at which time he established the "Charleston Medical and Surgical Journal," which proved a success.

But the state needing his services as assayer of bullion coming into commerce from the gold fields of Georgia, and from North and South Carolina, he relinquished his practice giving much attention to agricultural chemistry. The great beds of marl on which the city of Charleston stands early attracted his attention. He first pointed out the large amount of phosphate of lime in these marls, and was one of the first to ascertain the scientific character of their immense agricultural wealth. Dr. Smith also made a valuable and thorough investigation into the meteorological conditions, the character of soils and culture affecting the growth of cotton. His report on this subject was so valuable that in 1846 he was appointed by Secretary Buchanan, in response to a request of the Sultan of Turkey, to teach the Turkish Agriculturists the proper method of cotton culture in Asia Minor. On arriving in Turkey, Dr. Smith was chagrined to find that an associate on the commission had induced the Turkish Government to undertake the culture of cotton near Constantinople. Unwilling to associate his name with an enterprise which he felt satisfied would be a failure —the event justified his judgment— he was on the eve of returning to America when the Turkish Government tendered him an independent position as mining engineer, with most liberal provisions, so he worked in this position for four years with such signal success that the Turkish government heaped upon him decorations and costly presents. After 1846 the Turkish government continued to receive large revenues from his discoveries of emery, chrome ores, coals, etc. His papers on these subjects, read before learned societies and published in the principal journals of Europe and America, gave him a high position among scientific men. His discovery of emery in Asia Minor destroyed the rapacious monopoly of this article at Naxos, in the Grecian Archipelago, extended its use and greatly reduced its price. His studies on emery and its associate minerals led directly to its discovery in America, in Massachusetts and North Carolina. There is now a large industrial product of emery. To him justly belongs the credit of having done almost everything for these commercial enterprises by his successful researches on emery and corundum; he also investigated a great many Turkish resources, and his paper on "The Thermal waters of Asia Minor,' is of great scientific value. In 1850 he invented the inverted microscope. This instrument, with its ingenious eye-piece micrometer and

goniometer is an important improvement ("American Journal of Science and Arts," New Haven, 1852, 2 s., xiv). It has been unjustly figured and described in some works as Nachet's chemical microscope.

After Dr. Smith's return to America, his alma mater, the University of Virginia, called him to the chair of chemistry, in which, with the help of his assistant, George J. Brush, he performed the valuable work of revising the "Chemistry of American Minerals." Having married a daughter of the Hon. James Guthrie of Louisville, Kentucky, Prof. Smith resigned his chair in the University of Virginia, and adopted Louisville as his home, and in 1854 was made professor of chemistry in the medical department of the University of Louisville, but he finally resigned it to devote his time to scientific research.

In 1855 he published a valuable memoir on "Meteorites," his private collection of which was one of the largest in the world. In 1873 he issued an interesting work containing the more important of his scientific researches and he contributed a large number of valuable papers to various scientific journals. Prof. Smith was very ingenious in devising new apparatus and methods of analysis. While much of his work was of a practical kind, he yet preferred original research in the less cultivated fields. Prof. Smith was a most indefatigable worker; his more important original researches number nearly one hundred and fifty. He co-edited "The Southern Journal of Medicine and Pharmacy," Charleston, 1846.

In 1879 he was elected corresponding member of the Academy of Sciences of the Institute of France to succeed Sir Charles Lyell. Prof. Smith received honors from the principal scientific bodies of the world. He was a member of the following societies: The American National Academy of Sciences; Membre Correspondant de l'Institut de France (Académie des Sciences); the Chemical Society of Berlin; the Chemical Society of Paris; the Chemical Society of London, the Société d'Encouragement pour l'Industrie Nationale; the Imperial Mineralogical Society of St. Petersburg; American Association for the advancement of Science. He was Chevalier de la Légion d'Honneur; member of the order of Nichan Iftahar of Turkey; member of the order of Medjidiah of Turkey; chevalier of the Imperial Order of St. Stanislas, of Russia.

Prof. Smith was of imposing presence and great dignity, strong, pure-hearted, withal one of the most modest and unostentatious of men. He was most generous with his apparatus, and anyone manifesting an interest in science was sure of help and encouragement.

JOSEPH BENSON MARVIN.

SMITH, Joseph Mather (1789-1866), of New York City. "Forty years a public teacher in medicine, forty-six years constantly concerned in the active duties of public hospitals; for more than thirty years a consulting physician whose practical advice was widely sought by his confrères" is a good introduction to the child who was born to Dr. Matson Smith and his wife in New Rochelle, New York, March 14, 1789. His mother was a descendant of the Mather family of Massachusetts. Joseph was educated in the academy of his native town, served as surgeon's mate during the War of 1812 and was graduated at the New York College of Physicians and Surgeons in 1815. In 1824 he published his treatise on the "Elements of the Etiology and Philosophy of Epidemics," which Sir James Johnston, reviewing in the "Medico-Chirurgical Review," described as characterized not only by great ability and force of argument, but also by candour and talent, doing honor to American medicine. He was professor of the theory and practice of medicine, in the College of Physicians and Surgeons, N. Y. from 1826 to 1855 and professor of materia medica and clinical medicine in the same college from the last date until 1860.

Four years as visiting physician to the State Prison; fighting the typhus which broke out there and in the Bellevue Almshouse in 1825, and three outbreaks of yellow fever, gave him a good and valued experience in epidemics. When, in 1831, an outbreak of cholera was announced in Europe, Dr. Smith set to work preparing to prevent or combat it, should it reach America. He traced its progress in all parts of the world, so that, when it came in 1849 he and his confrères, Beck and Moore, were ready. Record work was done in fighting the pestilence and every day the doctor met the municipal committee to confer. The following year Dr. Smith gave the American Medical Association a lengthy and valuable report on "Hygiene and Preventive Measures in Case of Possible Epidemics," and 1860 saw his exhaustive treatise on the "Medical Topography and Epidemics of the State of New York," in which geology, geography, botany, hydrology, and meteorology were

made to throw all possible light on the subject. In 1854 he was president of the New York Academy of Medicine. Even when seventy years had passed, with faculties untouched by time, he worked away at all hygienic reforms and everyone knows what cheerful work that is and the dull-headed opposition it provokes. Specially he encouraged and honored the sanitary inspectors and never failed to be present at their meetings.

On the morning of April 22, 1866, seventy-seven years old, he completed an earthly career of useful deeds. The Bible had for many years been his daily counsellor and sanctified the fireside.

In 1831 he married Henrietta M., daughter of Henry Martin Beare of New York, and had two daughters and three sons, the eldest of whom, Gouverneur M., became a physician in New York.

His writings included: "Elements of the Etiology and Philosophy of Epidemics," 1824; "Epidemic Cholera Morbus of Europe and Asia," 1831; "Influence of Diseases on the Intellectual and Moral Powers," 1848; "Illustrations of Mental Phenomena in Military Life," 1850; "Medical Topography and Epidemics of the State of New York," 1860; "Therapeutics of Albuminuria," 1862; "On the Identity of Typhus and Typhoid," 1846; "On Yellow Fever," 1859.

He numbered among his appointments professor of the theory and practice of medicine, New York College of Physicians and Surgeons; visiting physician, New York Hospital; president New York Academy of Medicine; president of the Counsel of Hygiene.

His son, Gouverneur Mather Smith, born in New York, received an A. B. and A. M. from the New York University (1852), and graduated M. D. at the College of Physicians and Surgeons of New York in 1855. He was physician to Demilt Dispensary, 1856-66 and served as surgeon in the Civil War under the United States Sanitary Commission. In 1866 he succeeded his father as attending physician to the New York Hospital, in 1879 becoming consulting physician. He was a manager of the New York Association for Improving the Condition of the Poor, and was instrumental in establishing the People's Baths in New York. He wrote "Etiology of Bright's Disease"; "Epidemics of the Century and the Lessons Derived from Them"; "Washed Sunbeams—Unused Housetops." He wrote also verse, some of it humorous.

He died in New York, December 8, 1898.

SMITH, Mary Almira (1850-1923), pioneer woman surgeon of Boston, was born at Westfield, February 10, 1850. After attending the local schools she entered Mount Holyoke College and was graduated in the class of 1872. She served for a short time as librarian of the Westfield Athenaeum and then went to Ann Arbor, Michigan where she spent two years in the study of medicine, changing to the University of Zurich, Switzerland and working six years, taking an M. D. at that university in 1880. Upon her return to America she was appointed chief surgeon to the New England Hospital for Women and Children, managed and staffed exclusively by women, situated on Dimock Street, Roxbury, a suburb of Boston. There she did a large amount of operating, both major and minor, until she resigned in 1918. In 1912 Mount Holyoke College conferred on her its Sc. D; in 1914 she became a member of the American College of Surgeons. After 1887 Dr. Smith was a member of the Massachusetts Medical Society. She lived in Boston until her retirement, when she moved to St. Petersburg, Florida. She died at Winthrop, Massachusetts, August 10, 1823, aged seventy-three. She was a competent and cool operator and inspired and kept the confidence of the hospital authorities and of a large clientele.

SMITH, Nathan (1762-1829), was one of the great pioneers of American medicine, and during his active life was the omnipresent genius in New England medicine. He was born in Rehoboth, Massachusetts, September 30, 1762, the son of John Smith and Elizabeth, born Elizabeth Ide Hills. His father was a farmer, descended from Henry Smith of Hargham Hall, Norfolk County, England, who came over in the ship "Diligent," and arrived here in 1638. From Henry Smith was descended Henry Smith Jr., whose son John was the father of Nathan. Shortly after Nathan's birth the family removed to Chester, Vermont, where John Smith was a pioneer, and Nathan aided his father in the common duties of farm life. As a boy he was fond of fishing and hunting and other outdoor sports. This environment gave him courage and self-reliance in the midst of dangers from wild animals, and hostile Indians, at whose hands he once narrowly escaped death. He belonged to the State militia on the Canadian frontier, and distinguished for bravery, was promoted to a captaincy. From this origin there arose "one of the most interesting and

important figures in American medicine" (Welch). As a boy he was hungry for all knowledge. With but indifferent opportunities he became a teacher in the local rural school. During this period Dr. Josiah Goodhue (q. v.), of Putney, Vermont, visited the neighborhood to amputate a leg and Nathan acted as volunteer assistant. He then and there expressed a desire to study medicine, but Dr. Goodhue advised a preparation at least sufficient to enter the freshman class at Harvard College. The Rev. Whiting of Rockingham, Vermont, became his tutor in 1783, and in 1784 he presented himself to Dr. Goodhue as a private medical student; here he remained for three years, and during this time a strong and loyal friendship sprang up between teacher and pupil. Nathan Smith, now twenty-five years old, began to practice medicine in 1787 in Cornish, New Hampshire, without a medical degree, but in accord with the common custom of admitting a student after three years of private tuition with a regular physician; the diploma might come later from one of the three medical colleges then in existence. He attended several courses of lectures at the Harvard Medical School, and received his degree of Bachelor of Medicine in the class of 1790, the fifth student to graduate from the medical school in the third class of that school. The degree of M. D. was conferred on him automatically in 1811, as well as upon all who had been graduated in medicine previous to that date. On graduation he presented a thesis on fevers which was published by request of the medical faculty. He then returned to Cornish, New Hampshire to renew the practice interrupted to secure his degree in medicine.

In 1791 he married Elizabeth Chase, who died childless in 1793. In 1794 he married her half-sister, and in 1795 a son was born named David Solon Chase Hall Smith; all these names are family names except Solon taken from Ossian. The name of his second son, Nathan Ryno, (q. v.) was also inspired by Ossian.

During his practice in Cornish Nathan became impressed with the meagre facilities offered young men seeking a medical education, as well as with the scarcity of men fit for professional responsibilities. He therefore sought to fit himself to undertake the great task of reconstructing medical education in the United States and to this high aim he really devoted his whole life's best energies. The first step towards the establishment of a school for medical education was taken in 1796 in connection with Dartmouth College at Hanover, New Hampshire, not far from his Cornish home; the plan was postponed by vote for one year. At this time the three medical schools in America were the University of Pennsylvania (1765), the Medical School of Kings College (Columbia University) (1767), and Harvard Medical School (1782). Smith, undaunted by the delay of the Dartmouth faculty, continued to prepare himself by sailing on the bark "Hope" for Glasglow, where he remained a short time, and then went to Edinburgh, where he studied for three months attending lectures on anatomy and surgery by Munro and chemistry by Black. He then visited the London celebrities and returned to America in the fall of 1797. Soon after his return he received a diploma from the medical society of London, with a notice of his election as corresponding member. In the Autumn of 1797 he delivered his first course of medical lectures at Dartmouth; in August, 1798, the trustees established a medical department, with Nathan Smith as professor of anatomy, surgery, chemistry and physics. The degree of A. M. was conferred by the Faculty of Dartmouth in 1798, and in 1801 that of Hon. M. D. Thus began the fourth medical college in the United States, and Nathan Smith, as Abraham Flexner remarks, "was its entire Faculty and a very able Faculty at that." The success of the medical school at Dartmouth is shown by a statement by Dr. Hubbard who said that between the years 1798 and 1828 Harvard had graduated two hundred and thirty students, while Dartmouth had sent out three hundred and forty. In the year 1812 Yale College voted to establish a medical school and invited Nathan Smith to became professor of the theory and practice of physic, surgery, and obstetrics, but he was unable to leave Hanover to accept this new professorship until the autumn of 1813, being detained by a severe epidemic of typhus. He was now associated with the founding of the sixth medical college in the United States. On arriving in New Haven he met with a painful accident and was cared for in the family of George Woolsey, father of Ex-President Woolsey, where he remained a guest all winter. On recovering he began his duties as professor of theory and practice of physics, surgery and obstetrics. In addition to Smith the Yale medical faculty consisted of Aeneas Munson, Eli Ives, Benjamin Silliman and Jonathan Knight (q. v. to all). There were thirty students matricu-

lated October 13, 1813, a large class for the first year. Smith moved his family to New Haven in the spring of 1817, and delivered his last course of lectures at Dartmouth, declining an election as professor, and settled finally in New Haven to teach and practice medicine.

His son Solon was a graduate of the Yale Medical School and received his M. D. in the class of 1816; his second son, Nathan Ryno (q. v.), received the degree of A. B. from Yale in the class of 1817, and in 1820 his M. D. also at Yale. Solon began to practice medicine in Sutton, Massachusetts, in 1819. A third son, Dr. James Morven Smith, born September 23, 1805, died April 26, 1853. Having received his degree of M. D. from Yale in 1828, he practiced for twenty years in Westfield and Springfield, Massachusetts, and at the age of 48 was killed in a railroad accident at Norwalk, Connecticut, leaving a son David Paige Smith (q. v.), a prominent surgeon of Springfield. The fourth son, Dr. John Derby Smith, was born April 9, 1812 and died April 26, 1884. He received his A. B. at Yale in 1832. Originally ordained a minister, he preached at Charlemont, Massachusetts, for ten years, and then studied medicine with his brother, Nathan Ryno, and graduated M. D. at the University of Maryland in 1846. He was an assistant surgeon in the Civil War.

In the spring of 1821 the medical school of Maine was organized at Bowdoin, and Nathan Smith gave the first course of medical lectures in the summer to a class of twenty-one, the following year there were forty-nine members, and in 1829 nearly a hundred. He lectured at Bowdoin until 1826 when he resigned. These summer lectures at Bowdoin did not interfere with his New Haven work. In 1821 the University of Vermont at Burlington established its medical department and his son N. Ryno was elected to the chair of surgery, and anatomy, and while Nathan still lectured at Yale and Bowdoin, he also gave lectures at Burlington, and thus was largely interested in the organizing of another medical school.

In 1825 Nathan Smith helped to start the Jefferson Medical College of Philadelphia in connection with Dr. McClellan (q. v.) and Nathan Ryno Smith (q. v.). He discontinued his lectures at Bowdoin and Burlington to give his entire time to the Yale Medical School. So much for his unparalleled activities as a peripatetic organizer of medical colleges.

As a surgeon Nathan Smith ranks among the greatest America has produced. He was, befitting his era, a conservative, but when convinced that operation was necessary he then advanced without hesitation and without regard to criticism or fear of failure. In lithotomy the great operation of his day he lost but two patients in thirty-two operations; he never lost a patient by hemorrhage during an operation. In 1821 he performed ovariotomy in Connecticut without knowing that it had ever been done before; he dropped the pedicle into the abdominal cavity, an important advance in the technique, instead of suturing it into the abdominal wall. He is said to have been the first to perform staphylorrhaphy for cleft palate; he devised a new method of flaps in amputating the thigh. He was also a successful operator for cataract. He orginated the manipulation method in reducing a dislocation of the hip, inspired by an accident to a sailor who had a dislocation of the hip and was thrown from his hammock in a heavy sea, when striking on the flexed knee of the affected side his dislocation was reduced. Smith then advised flexion of the affected knee with abduction or adduction, as the case might require and then by manipulation successfully reduced the dislocation. He also reduced a dislocation of the shoulder of nine weeks standing. Anesthesia was of course then unknown. He also contributed much to our knowledge of the management of fractures of the thigh. He was among the first in the country to vaccinate which he did prior to August 25, 1800; Dr. Benjamin Waterhouse (q. v.) had preceded him on July 8, 1800.

As a writer he was not voluminous; but his contributions were always of value. His first article was his inaugural dissertation mentioned, and among his early papers was one published in the "Massachusetts Magazine," 1791, Vol. 3, pages 33-81, entitled, "Dissertation on the Causes and Effects of Spasms in Fever." Another was published in the memoirs of the Medical Society of London, 1805, Vol. 6, page 227, on "The Observations on the Position of Patients in the Operation for Lithotomy." In 1816 he "edited with copious notes and additions" a treatise on Febrile Diseases by A. P. W. Phillips in 2 vols., published in Hartford, Connecticut. He also published many papers in the "Philadelphia Monthly Journal," that were republished in the French medical journals. His most important contribution to medicine was his celebrated treatise entitled, "Practical Essay on

Typhus (Typhoid) Fever," New York, 1824, the first clear description of the disease and its pathology. He pointed out that the disease was due to a specific cause and limited in its course and discarded the customary use of the lancet, and advised cold water and milk, eliminating all powerful medicines. An introductory lecture on the "Progress of Medical Science" was delivered at the opening of the medical school at Yale in 1813. An article on "The Pathology and Treatment of Necrosis" is considered a classic. Smith first described clearly osteomyelitis.

As a teacher he was accurate, simple, and concise. He taught the principles of medicine to a large number of students, and delivered about 138 courses of lectures in the various medical schools to which he was attached. To summarize his educational activities: he was the sole founder of Dartmouth Medical School connected with the Dartmouth College, as well as of the Yale Medical School connected with the College, he participated largely in the establishment of the Bowdoin Medical School of the University of Maine, and in the Burlington Medical School of the University of Vermont. He also helped his son, Nathan Ryno to organize the Jefferson Medical College. He was a brilliant operator, a great teacher, a valuable contributor to medical literature, a successful practitioner, and a pioneer in his profession. His mind was highly retentive, he had a clear discrimination, was a man of wide observation, and of rare common sense in the adaptation of common practical expedients to the needs of his professional work. He had great moral courage, and yet withal a notable gentleness of manner, and an affectionate disposition. Resourceful, self-reliant, he was ingenious as a surgeon and skilful as a diagnostician in internal medicine, a rare combination unknown in this twentieth century. His vision of the needs of the future was clear and his judgment sound, anticipating what is now generally accepted by modern educators, namely the need of a union of medical schools with established universities, in place of the proprietary medical colleges so common up to the end of the nineteenth century. Nathan Smith also demanded a higher education in medicine, and was an opponent of the superficial knowledge of his day and later. He was in open warfare against the quack and the bone setter and did much to effect the ultimate downfall of these and other "abominations" of his age. Wiliam H. Welch in his Yale address eulogized him as "Famous in his day and generation, he is still more famous today for he was far ahead of his times, and his reputation unlike that of so many medical worthies of the past has steadily increased as the medical profession has slowly caught up with him. We now see that he did more for the general advancement of medical and surgical practice than any of his predecessors or contemporaries in this country. He was a man of high intellectual and moral qualities, of great originality and untiring energy, an accurate and keen observer unfettered by traditions and theories, fearless, and above all blessed with an uncommon fund of plain "common sense."

FREDERIC S. DENNIS.

SMITH, Nathan Ryno (1797-1877), was the second of the four sons of Dr. Nathan Smith (q. v.), the distinguished New England surgeon and founder of Dartmouth and Yale College Medical Schools. The name "Ryno" was derived from the Poems of Ossian, a favorite author of his mother. He was born on May 21, 1797, in the town of Cornish, New Hampshire, where his father had been practicing for ten years. After having received a preliminary training at Dartmouth, he entered Yale as a freshman in 1813 and was graduated A. B. in 1817, at the age of twenty and in 1823 received from Yale College the degree of M. D., in his inaugural thesis defending the view that the effects of remedies and diseases are due to absorption into the blood and that they are not due to an impression on the nervous system, as many eminent writers then maintained. He continued his experiments on this subject, and his publications in 1827 are referred to by Dr. Alfred Stillè (q. v.) in his work on "Therapeutics," vol. i, p. 51. Smith began practice at Burlington, Vermont, in 1824, and in the following year he was appointed to the professorship of surgery and anatomy in the University of Vermont. While in Philadelphia he met Dr. George McClellan (q. v.), anatomist and surgeon, who was then giving private instruction in that city to large classes. This gentleman and others were then engaged in organizing a new medical school, the Jefferson Medical College. Being impressed by the ability and acquirements of Dr. Smith, they invited him to join with them and offered him the chair of anatomy, and he accepted.

In 1827 Dr. Smith's connection with Jefferson Medical College was severed by his acceptance of the chair of surgery in the University of Maryland, made vacant by the

withdrawal of Granville Sharp Pattison (q. v.). With this event began Dr. Smith's long and eventful career of fifty years at Baltimore, terminating only with his death in 1877.

In 1825 he published at New York an "Essay on Digestion" of ninety-three pages and after his settling at Philadelphia, edited in 1825-26, with the coöperation of his father, the "American Medical Review." In June, 1827, he founded a medical periodical entitled the "Philadelphia Monthly Journal of Medicine and Surgery," which was continued into the following year and then merged into the "American Journal of the Medical Sciences." In 1829 appeared his work on "Diseases of the Internal Ear," being a translation from the French of J. A. Saissy, with a supplement of twenty pages by himself, on "Diseases of the External Ear." In 1830 he issued a journal, entitled "The Baltimore Monthly Journal," the first number of which appeared in February. It continued until the end of the year, when it ceased on account of lack of support. In the September and October numbers appeared a noteworthy article, entitled "Description of an Apparatus for the Treatment of Fractures of the Thigh and Leg, by Smith's Anterior Splint." One-half of the original matter of the volume of 510 pages consisted of contributions by Smith. The Medical and Surgical Memoirs (of Nathan Smith, his father), appeared in 1831 with a memoir by N. R. Smith. He was for many years a collaborator and frequent contributor to the "American Journal of the Medical Sciences." He also wrote many articles for a journal published at Baltimore by Prof. E. Geddings of the University of Maryland, from 1833 to 1835; for the "Maryland and Virginia Medical Journal," 1860-61, of which Dr. W. Chew Van Bibber was a co-editor, and for the "Baltimore Medical Journal," founded in 1870 by Drs. Howard and Latimer. In 1832 appeared his great work on the "Surgical Anatomy of the Arteries," quarto, of which a second edition appeared in 1835. In 1867 he published a small volume of seventy pages, giving a description of the method of using his "Anterior Suspensory Apparatus in the Treatment of Fractures of the Lower Extremity, with Cuts and Diagrams." And finally he issued a little duodecimo in 1869, which he called "Legends of the South, by Somebody Who wishes to be Considered Nobody." Early in his career at Baltimore he conceived the idea of writing a work on "Surgery" with good cuts, and did from time to time compose a large part of it, but it remained at his death among his unfinished papers.

In 1867, when seventy years old, he made his first and only visit to Europe. Although he sought in it only relaxation from his labors and amusement, he naturally visited many of the great European hospitals. His reputation had preceded him everywhere and he was received with the greatest deference, Sir James Paget in London being particularly attentive and the French surgeons giving him the title of the "Nestor of American Surgery." He continued his active work at the University for two years longer, when he resigned and was made emeritus professor and president of the Faculty. In 1870 he was elected president of the Medical and Chirurgical Faculty, and the following year was re-elected to the same office, special provision being made in his case for this unusual honor. Not long after this, painful disease and infirmities of age began to oppress him. He still attended to office consultations, wrote upon his surgery, found pleasure in reviewing the classics, especially Homer and Virgil, and, above all, found that satisfaction and peace in the Christian religion which philosophy and science had been unable to secure for him. Thus engaged, the painful disease of the bladder from which he suffered slowly advanced and finally mastered his vigorous constitution on the third of July, 1877, a few weeks after he had passed his eightieth year.

He always lectured without notes and in slow, deliberate fashion. His voice was of medium pitch and distinct, though not strong. He indulged in story and humor whenever the opportunity permitted, although he was never coarse, profane or obscene. The portrait of him at the university is an admirable likeness, and represents him in his characteristic attitude while lecturing.

He was among the first to perform subcutaneous section of the tendo Achillis for club-foot (1836); Strohmeyer introduced it in Germany in 1831. Smith's reputation must rest chiefly on his lithotome and anterior splint. The former was first made known in the "Medical and Surgical Memoirs" 1831. By 1834 he had operated with this instrument with complete success in every instance, twenty-three times. By 1860 he had operated with it over one hundred times. In all, he performed the operation about 250 times, all except the first three or four being done with it, and with a relatively small mortality. A picture of this instrument is given in the "Memoirs" and also in the "Transac-

tions of the Medical and Chirurgical Faculty," 1878. But the invention which he regarded as his chief contribution to surgery was his anterior splint. He was engaged in perfecting this instrument for over thirty years and it was not completed until 1860. In 1867 he published his work on "Treatment of Fractures of the Lower Extremity by the Use of the Anterior Suspensory Apparatus." In this he claimed that his invention was applicable to all fractures of the thigh and leg. He was a pioneer in extirpation of the thyroid gland, publishing a case in "North American Archives of Medicine and Surgery," Baltimore, 1835, vol. ii, p. 309.

Smith was the founder of the Medical Department of the University of Vermont; President of the Medical and Chirurgical Faculty of Maryland. A. B. and M. D., Yale, and LL. D., Princeton.

Alan Penniman Smith (1840-98) was the son of Nathan Ryno and the third of four consecutive generations of medical men in this family. He was connected as a teacher with several chairs of the University of Maryland, and was a trustee of Johns Hopkins Hospital and University. He had a reputation as a lithotomist, operating fifty-five times without a death and one hundred and twelve times with two deaths.

EUGENE F. CORDELL.

SMITH, Peter (1753-1816), pioneer "Indian doctor" of the South and West, who wrote a "Dispensatory," the first of its kind in the West, was a son of Dr. Hezekiah Smith, of the "Jerseys," "a home old man, or Indian doctor." Peter was born in Wales, February 6, 1753, from whence this branch of the Smith family came. He was also a relative of Hezekiah Smith, D. D., of Haverhill, Massachusetts. Educated at Princeton, he was married in New Jersey to Catherine Stout, December 23, 1776. He seems to have early given some attention to medicine under his father, and became familiar with the works of Dr. Rush, Dr. Brown, and other writers of his day on "physic," as well as with the works of Culpepper, and acquired much information from physicians whom he met in New Jersey, Pennsylvania, Virginia, North and South Carolina, Georgia, Kentucky, and Ohio. He called himself an "Indian doctor," because, as he said, he relied in his practice much on herbs, roots, and other remedies known to the Indians, though he did not confine himself to botanical remedies. He seems to have been an original investigator, availing himself of all opportunities within his reach for acquiring knowledge, especially acquainting himself with domestic and tried Indian remedies, roots, and herbs.

Starting from New Jersey about the year 1780, he began his wandering, emigrating with his wife and "some" small children. He lingered for a time in Virginia, then in the Carolinas, and "settled" in Georgia. He sought out people from whom he could gather knowledge of "the theory and practice of medicine," and preached the gospel, possibly in an itinerant way. He was a devout Baptist of the old school. A strong anti-slavery man, even in that early day, he could not be content with his Georgia home, as he put it, "with its many scorpions and slaves." Accordingly, he took his family on horseback—little children, twin babies among them, carried in baskets suitable for the purpose, hung to the horns of the saddle ridden by his wife—and thus, without roads to travel, crossed mountains, rivers, and creeks. The wilderness was not free from danger from Indians, but he traversed the woods from Georgia through Tennessee to Kentucky, intending there to abide. But, finding that Kentucky had also become a slave State, the determined old man and his family bid good-bye to Kentucky. He left that State with a parting shot to the effect that it was the home of "headticks and slavery," and emigrated to Ohio, settling on Duck Creek, near the Columbia Old Baptist Church, now adjacent to Norwood village, and near the limits of Cincinnati, reaching there about 1794. He became, with his family, a member of the Duck Creek congregation, and frequently preached there and at other frontier places, still pursuing the double occupation of farming and the practice of medicine. In 1804 he again took to the wilderness with his entire family, then numbering twelve children, born in the "Jerseys and on the line of his march through the wilderness, the States and the Territories." He finally settled on a small, poor farm on Donnel's Creek, Ohio, in the midst of rich ones, where he died December 31, 1816. It seems from his book (p. 14), published while there, that he did not personally cease his wanderings and search for medical knowledge, as he states that he was in Philadelphia, July 4, 1811, where he made observations as to the effect of hot and of cold air upon the human system.

In "The Dispensatory" it is to be regretted

that Dr. Smith neglected the use of botanical names. His plants are all employed under common names, but he describes the appearance and habitat of each specimen so carefully as to enable the experienced reader to identify most of them. C. S. Rafinesque, who speaks of Dr. Smith's work, objects to his common names, which, however, are very interesting in connection with the text. The pains Smith takes to credit authorities from whom he obtained information is very refreshing, the relationship of these names to the substances used being useful to us today in connection with many drugs.

JOHN URI LLOYD.

Smith, Philip Greth (1810-1879), practitioner of Lebanon, Pennsylvania. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912 vol. ii, p. 393.

SMITH, Samuel Mitchell (1816-1874), professor in Starling Medical College, Columbus, Ohio, was born in Greenfield, Highland County, Ohio, November 26, 1816. The boy's early education was obtained from his father, a Presbyterian minister, and in private schools. Before his majority he obtained a position as teacher in the district schools of Greenfield and vicinity, by economy accumulating sufficient funds to enter Miami University, at Oxford, Ohio, and after the usual course took his A. B. in 1836 and A. M. in 1843. He became a pupil of Dr. John Morrison and matriculated in the University of Pennsylvania, from which he received his M. D. in 1840 and soon was appointed assistant physician to the Central Ohio Hospital for the Insane in Columbus.

On August 3, 1843, he married Susan Evans Anthony, daughter of Gen. Charles Anthony, of Springfield, Ohio, and very soon afterwards resigned his position in the State Hospital and began to practice on East Rich Street, near the corner of High, in the city of Columbus.

In the autumn of 1846 he was appointed professor of materia medica and therapeutics in Willoughby Medical College, transferred in that year from Willoughby, Lake County, Ohio, to Columbus. In 1847 Starling Medical College was founded and Willoughby merged into it, most of the teachers becoming members of the faculty of the new school, Dr. Smith retaining his chair with medical jurisprudence added. There was no change in his relations to the school until 1850, when he was transferred to the chair of practical medicine, and in 1851 elected dean of the faculty. In 1860 he declined re-election to the deanship, but retained the chair of practice until 1874.

In 1859 Gov. Salmon P. Chase appointed Dr. Smith surgeon-general of the state; he held this post also under Gov. Dennison and Gov. Tod. In 1872 he sustained a slight attack of cerebral hemorrhage, which caused incomplete hemiplegia from which, though not wholly disabled, he never recovered. In January, 1874, he sustained a second attack, which completely disabled him and caused his death on November 30 of the same year. He was very familiar with the Bible, and was seldom at loss for a quotation from it. He knew Shakespeare equally well, and liked Scott and Longfellow and had great fondness for Isaak Walton. His lectures were concise and very clear. His clinical lectures were especially good, and no one was surprised at his popularity with students, who never "cut" his hour. While he allotted more time to general practice, he was an enthusiastic and very successful obstetrician, and was the first in Columbus to administer choloroform in labor.

He had four children, Elizabeth, Frances, Manette and Charles, all of whom survived their father. About ten years after his death his family had a bronze statue with a drinking fountain, designed by the artist, William Walcutt, placed at the southeast corner of High and Broad streets in the city of Columbus, where it still stands.

STARLING LOVING.

SMITH, Stephen (1823-1922), pioneer public health officer and well-known surgeon of New York City who lived to be nearly a hundred, was born on a farm at Skaneateles, Onondaga County, New York, February 19, 1923. He was the son of Lewis Smith, a cavalry officer in the Revolution and Chloe Benson Smith. Sun-up would find the boy working faithfully on the farm, and only sundown would bring rest, yet his arduous duty left him time to ground himself in Latin and Greek. He began to study medicine under Caleb Green of Homer N. Y. and attended his first course of lectures in the old Geneva Medical College in 1848. During the next two years, he was a resident student in the hospital of the Sisters of Charity at Buffalo, and in 1850 he entered the College of Physicians

and Surgeons, New York, graduating in 1851. Brown University conferred her Honorary A. M. on him in 1876, and the University of Rochester, her LL. D. in 1891. After an internship of two years at Bellevue Hospital, he taught there from 1854 to 1891 and was professor of surgery during 1861-65. He was also professor of anatomy in 1865-74 at the Bellevue Hospital Medical School, professor of clinical surgery in the Medical Department of the New York University in 1874, and consulting surgeon at Bellevue, St. Vincent's and Columbus hospitals.

In 1864, New York City was deplorably unsanitary; health inspectors or wardens were politicians of a low type. As a member of the Council of Hygiene, Dr. Smith undertook a sanitary survey of the city, and, influenced by the reports of his inspectors, prepared the Metropolitan Health Bill, embodying all the best features of English and French health laws, a bill which became a law in 1866 and was gradually adopted by other large cities. While commissioner of health (1868-75), he drafted the bill creating the Bureau of Vaccination, and in 1870, called a conference of health officers of large cities for the purpose of organizing for the improvement of public health. Thus was created the American Public Health Association of which he was first president. The same year also gave birth to the agitation for a national public health service under the Federal Government, but the popular State Rights Doctrine was a stumbling block until 1878 when, during an epidemic of yellow fever in the South, he prepared the bill that established the National Board of Health—called the Marine Hospital Service, in 1881. During his term as New York State Commissioner of Lunacy (1882-1888), his new and more humane methods for caring for the insane led to "The State Care Act", made a law in 1890. The State Board of Charities attracted his active interest from 1893 until his resignation at the age of ninety five. As United States Commissioner to the Ninth International Sanitary Conference at Paris in 1894, he assisted in drafting a sanitary code to avert the dangers of epidemics attendant on the annual pilgrimage to Mecca.

To Stephen Smith we owe the initiation of sundry reforms in hospital service in New York. He founded and organized Bellevue Hospital Medical College; prepared plans for Roosevelt Hospital, and was one of six to plan the Johns Hopkins Hospital. In advance of his contemporaries, he early advocated the system of the training of nurses as established in England.

He was joint editor of the "New York Journal of Medicine" from 1853 to 1857 and editor from 1857 to 1860; he was also editor of the "American Medical Times" from 1860 to 1863. He wrote the "Handbook of Surgical Operations," publishing during the Civil War and widely distributed to surgeons of the Federal army; "Principles and Practice of Operative Surgery," 1887, a standard textbook; "Civil Obligations of the Surgeon," 1908; "The City that was," 1911; and "Who is Insane?" 1916.

On June 1, 1858 Dr. Smith married Lucy, daughter of Judge E. D. Culver, of Brooklyn, New York.

Age exacted no toll from Dr. Smith: though slight of figure, he was broad shouldered and erect; his keen, bright eyes were unaccustomed to glasses; and few lines and wrinkles furrowed his skin. During the last twenty years of his life, he was the Nestor of the profession, first of New York and then of the entire country, and as such, he was often in demand as presiding officer at public and professional gatherings. The inquiry of the curious, "What is the secret of your long life," inspired him at ninety seven in a poem to crown Hygeia his "Sweet Goddess of Longevity," whose every precept he obeyed. The second stanza scores Osler's theory of the incapacity of man past the three score milestone, for he held that man's allotted years should be five times the length of the development of the bony skeleton (twenty years). At the home of his daughter at Montour Falls, New York, he died, August 26, 1922, just six months short of realizing his conviction that he would round out the century span.

SMITH, Thomas Croggon (1842-1913), secretary of the Medical Society of the District of Columbia for thirty-three years and contributor to the literature of obstetrics, did much to elevate the standard of the profession of his native city. He was born at Washington, August 16, 1842, and died there July 23, 1913, at the age of seventy. Educated in the public schools and at Gonzaga College, he was graduated at Georgetown University School of Medicine in 1864, and practiced in Washington from the time he joined the Medical Society, July 4, 1864, until his death, a period of forty-nine years. As a practitioner he accomplished his chief work as an obstetrician, though he did general prac-

tice. His writings were of a practical character, the most notable one being an essay on "Antepartum Hour-glass Contraction of the Uterus," which appeared in the "American Journal of Obstetrics" in 1882, at that time one of the best presentations of the subject. Others of his papers were "Intrauterine Amputation of the Forearm"; "Pregnancy with Pinhole Hymen"; "Complete Inversion of the Uterus"; "Hydrorrhoea"; "Hypertrophic Elongation of the Cervix Obstructing Labor"; "Tetanus Following Abortion." In the discussions of papers before medical societies Dr. Smith, while a ready debater, always showed the kindest feeling and goodwill. In 1878 he became secretary of the Medical Society of the District of Columbia, president ten years later and then corresponding secretary until his death. Being chairman of the committee on essays for a long series of years he was instrumental in procuring papers from eminent members of the profession who lived outside of the District of Columbia. In 1894, at the 75th anniversary of the founding of the society, he read a paper entitled "History of the Medical Colleges of the District of Columbia." When it is understood that this medical society held weekly meetings for eight months in the year and that Dr. Smith was seldom absent, the measure of his devotion may be estimated.

Dr. Smith was a good citizen and a good Christian, being connected with the Methodist Episcopal Church, and he had pronounced views as to total abstinence from alcoholic stimulants. Upon one occasion, at a meeting of the Fortnightly Club, of which he was a member, he espied a glass bowl filled with brandied cherries, a beautiful color effect. Several members of the club walked up to the table and taking cherries from the bowl ate them. Dr. Smith in turn picked up a cherry but as soon as he tasted the brandy tossed it into the cuspidor with a wry face. Ever after the club knew brandied cherries as the "Thomas Smith Cocktail."

He was president of the Obstetrical and Gynecological Society of the District of Columbia and a member of the American Medical Association. For some years he was consulting physician to the Emergency Hospital and consulting physician to the Freedmen's Hospital, and president of the board of trustees of the Methodist Home for the Aged, to which he devoted much time and money.

He was married and had a son and a daughter.

SMYTH, Andrew Woods (1833-1916), surgeon of New Orleans, was born near Londonderry, Ireland, February 15, 1833. His father was John Smyth; his mother, Ann Woods, both of Scotch descent. He came to New Orleans in 1849 and there was graduated in 1858 from the Medical Department of the University of Louisiana. That same year he received the appointment of house surgeon to the Charity Hospital, a post which he retained with distinction under twelve successive governors of the state, covering a term of twenty years which included perhaps the most turbulent period in the history of Louisiana. A Presbyterian in religious conviction and a Republican in politics, Dr. Smyth's broadminded sincerity won for him the confidence of all parties and creeds and gave him an unquestioned place of honor in the community.

On May 15, 1864, the first successful operation of ligating the arteria innominata in a case of subclavian aneurysm was performed by Dr. Smyth. This had been attempted first by Dr. Valentine Mott (q. v.) in 1818, who, with unshaken faith in its ultimate success, expressed great satisfaction in Dr. Smyth's achievement. In 1866 the first successful reduction of a dislocation of the femur of over nine months' duration was made by Dr. Smyth, and in 1879 he performed the then unusual operation of extirpating a kidney; in 1885 he attracted attention by a nephrorrhaphy—attaching a floating kidney to the wound to retain the organ in place. Four of his eight published papers are to be found in the files of the "New Orleans Medical and Surgical Journal," 1869-1879. From 1862 to 1877 he acted as a member of the Louisiana Board of Health, and from 1881-85 was superintendent of the New Orleans mint.

On May 21, 1881, Dr. Smyth wedded Miss Nathalie Bouligny, a young woman of exceptional beauty and talent and a member of a distinguished Creole family. The union was blessed with one daughter, Arthemise, now the wife of the Reverend David Hays whose manse adjoins the old Smyth homestead at Ardcame, Ireland. As "Babette," the heroine of the child novel by Mrs. Ruth McEnery Stuart, Arthemise took her place early in life in the literature of her native land.

Of extreme modesty, Dr. Smyth was ever reticent upon the subject of his accomplishments and was prone to underestimate his achievements. On one occasion when called to the witness stand to give testimony in a case of serious injury which under his suc-

cessful surgical intervention recovered, he stated in answer to the question "Your operation saved the patient's life?" "While I was attending the patient, he recovered." He was a man of few words, but of "infinite jest"-and to his familiars a delightful raconteur. Possessing neither "the pen of a ready writer" nor the fluent speech of the rostrum, he rarely employed such media to demonstrate his ability and attainments, but his worth as a citizen, his integrity as a man, his sympathy as a physician and his skill as a surgeon, have made the medical profession of New Orleans proud to number him among its ranks. When in 1894 he determined to give up active service and retired with his family to Ardcame the "Times Democrat" of September 19 expressed the regret of the community in a most eulogistic valediction.

On September 4, 1916, Dr. Smyth fell a victim to the grippe and was laid to rest in the family burying ground near his place of birth.

JANE GREY ROGERS.

SNOW, Albion Parris (1826-1898), who advocated a state board of health for Maine, was born in Brunswick, in that state, March 14, 1826, and one of triplets, the son of poor parents, and like the children of many other such was all the more eager for knowledge and improvement. It is said of the Snow family that the wife brought into the world four male children inside of one year, one being born on the twenty-fifth of December, 1833, and triplets, December 2, 1834. By his perseverance and determination, young Albion studied medicine with Dr. Edmund Randolph Peaslee (q. v.), then at the Medical School of Maine, and at the Dartmouth Medical College, finally graduating from the Medical School of Maine in 1854. During this time he was well thought of as an anatomist, and was made demonstrator in both of his schools in succession. He married Matilda Sewall, of Winthrop, and settled in that town, directly after graduating. After six busy years' practicing in Winthrop he went abroad, and upon his return offered his services to the State, but did not go to the War. He joined the Maine Medical Association in 1865, and soon became an active member, was elected president at one time, and in his inaugural address strongly advocated a State Board of Health. The association, following his advice, saw it ultimately established. He also formed the Kennebec County Medical Society, and joined the American Medical Association. He collected statistics of prevalent diseases during many years in Kennebec county.

He was tall, dignified, had a polite yet firm voice, and was listened to with pleasure, both at home and at the discussions at the State Association. He was in favor of a medical Registration Law, worked zealously for it before the Legislature, but failed to bring about its establishment, which later on came to pass by other hands. He died October 25, 1898, failing gradually at the last.

JAMES A. SPALDING.

SNOW, Edward Sparrow (1820-1892), founder of the Wayne County (Michigan) Medical Society, was born in Austinburg, Ashtabula County, Ohio, July 5, 1820. His parents, Sparrow and Clara Kneeland Snow, were natives of Massachusetts, of English descent, living on a farm near Austinburg, Ohio, in 1817. Edward S. Snow was a graduate of Grand River Institute, Ohio, in 1842. During his student days he served two years as adjutant of the First Rifle Regiment, Second Brigade and Twenty-first Division under Col. Tracy and Gen. Stearns of Ohio. He studied medicine with Dr. O. K. Hawley, of Austinburg, Ohio, and in 1847 took his M. D. from the medical department of Western Reserve College, Cleveland, Ohio. After practicing a brief period at Plymouth and Dearborn, Michigan, he was appointed acting assistant-surgeon of Detroit Arsenal. After a year he was displaced, but in 1852 reinstated by Jeff Davis, and continued to serve till the Arsenal was abandoned by the United States Ordnance Department. Dr. Snow was a founder of the Wayne County (Michigan) Medical Society, both in its first and second epochs; founder of the first Detroit Medical Society; founder of the Michigan Medical Society.

Dr. Snow was a large man, fully six feet tall and weighing over two hundred pounds. His face was smooth, ruddy, rather full; he had a gracious expression, a thoughtful manner, and was deliberate in speech. He died in Dearborn, Michigan, July 18, 1892, from apoplexy.

LEARTUS CONNOR.

SOLLY, Samuel Edwin (1845-1906), an Englishman, who spent his active life in Colorado, was a general practitioner, devoting himself to diseases of all kinds, especially to those

of the chest seeking an arrest in that climate, and a restless pioneer in the now prevalent climatic treatment of tuberculosis. Such in brief was Dr. Solly. Born in London, May 5, 1845, he was educated at Rugby and later at St. Thomas' Hospital, graduating from the College of Surgeons in 1867. His father, Samuel Solly, was a distinguished London surgeon. His grandfather, a financier, joined with others in building the "Sirius," one of the first steamships to ply between England and America. In 1874 Solly cast his lot with the infant Colorado (being driven to it by disease) and with others was so insistent on its climatic virtues as to compel the world to hear. His principal writing was the "Handbook of Medical Climatology," though he published a large number of monographs on various diseases as they were affected by climate, and principally that of Colorado. His last important work was to build, with funds provided by the late Gen. Palmer, Cragmor Sanitorium overlooking Colorado Springs. He lived to conduct this institution through the first year of its existence. He was a fellow of the Royal Medico-Chirurgical Society of London; ex-president of the American Climatological Association, of the American Laryngological, Rhinological, and Otological Society; Colorado State Medical Society, and the El Paso County Medical Society. He received the honorary M. D. from the University of Denver. He was a director of the National Society for the Study and Prevention of Tuberculosis.

He married, in 1872, in London, England, Alma Helena Sandwell, who died in 1875, leaving two daughters, Lillian and Alma, and in 1877 (?) in Philadelphia, Pennsylvania, Mrs. Elizabeth Meller Evans, of Philadelphia, a widow with two children, Helen and William. Dr. Solly died in Asheville, North Carolina, of heart disease, complicated with Bright's disease, November 19, 1906.

SAMUEL A. FISK.

SOMERS, John (1840-1898), professor of physiology in Halifax Medical College, botanist, was born in St. Johns, Newfoundland, in 1840, and died in Halifax, Nova Scotia, in 1898, after practicing in Halifax most of his professional life. His general education was obtained at St. Mary's College, Halifax, his professional training at Bellevue Hospital Medical College, New York, from which he was graduated M. D. in 1866. Dr. Somers was a member of the Medical Society of Nova Scotia, of which he was president in 1883. He was for a time assistant-surgeon in the United States Army, and, for years, a visiting physician of the Victoria General Hospital, Halifax, and professor of physiology in the Halifax Medical College. He led a life of great activity, was engaged in many matters of social and public interest, and was a warm supporter of the Halifax Medical College. He was an ardent student of botanical science, did much to extend the knowledge of the flora of Eastern North America, and presented a large number of papers on this subject to the Nova Scotia Institute of Natural Science, that may be found in the Institute's printed Transactions.

Dr. Somers married a Miss Brown, of Halifax, and left several sons and daughters.

DONALD A. CAMPBELL.

SOMERVAIL, Alexander (1758-1833), of Virginia, one of the first to recognize typhoid fever as a distinct disease, was born in Scotland and probably educated at the University of Edinburgh. He emigrated to America in the early years of the nineteenth century and settled in Essex County, Virginia, and practiced there until his death. He was a very skilful and observant physician, and evidently a student of diseases and a contributor to medical literature. In a paper on "The Medical Topography and Diseases of a Section of Virginia" he shows that he recognized, as a distinct variety of continued fever, the disease we now term Typhoid Fever, which in that day was confounded with continued Malarial Fever. He was one of the first to recognize Typhoid Fever as a distinct disease. In his early life, though brought up in the Scottish Kirk, he was an avowed infidel, but later became an earnest Christian and was noted for his high moral character and charitable works, being a physician to the poor as well as to the rich.

He married the daughter of the Rev. John Mathews, of St. Anne's Parish, Essex, and was the brother-in-law, of John Baynham, surgeon of Caroline County.

The following articles are known to have been published by Somervail: "The Medical Topography and Diseases of a Section of Virginia," and "Cases Illustrative of the Use of Muriate of Lime in Palsy from Diseased Vertebræ" ("Philadelphia Journal of Medical and Physical Sciences," 1823, vol. vi).

He died at his home in the seventy-sixth year of his age.

ROBERT M. SLAUGHTER.

SOUCHON, Edmond (1841-1924), professor of anatomy at Tulane University, was born at Opelousas, Louisiana, December 1, 1841, the son of Dr. Eugene Souchon, for many years a dentist in New Orleans, and Caroline Petit Souchon. Dr. Eugene was the grandson of Charles Souchon, one of the two grenadiers to save the life of Bonaparte at the siege of St. Jean d'Acre in Egypt. After a collegiate education in Paris, Edmond began to study medicine. Upon the outbreak of the Civil War his allowance suddenly ceased and he had to make his own way during the rest of his student days abroad. When Marion Sims (q. v.) arrived in Paris to demonstrate his operation for vesico-vaginal fistula, Souchon acted as his interpreter and assistant. The death of his father called him back to America, and he was graduated from the medical department of the University of Louisiana in 1867. For some years to follow, Dr. Souchon was the prosector and later the chief of clinic at the Charity Hospital to T. G. Richardson (q. v.) who extended to him many privileges. In 1872, he was elected demonstrator of anatomy in the medical department of Tulane University and then was professor of anatomy and clinical surgery from 1885 until 1907, when he was retired on a Carnegie pension as professor emeritus. He designed and superintended the erection of the buildings of the Tulane University School of Medicine and founded the Souchon Museum of Anatomy. Souchon was president of the New Orleans Medical and Surgical Association in 1886 and of the Louisiana State Board of Health during 1898-1906. He wrote on surgery and devised the Souchon anesthetizer used in face and mouth operations. He also worked out a process for making large anatomical and surgical drawings for class demonstrations.

On December 6, 1869, he married Corinne Lavie of New Orleans. He died at his home, August 5, 1924. Of his three children, a son and two daughters, the son, Marion Sims, followed his father's profession.

SOUTHARD, Elmer Ernest (1876-1920), pioneer psychiatrist and neuro-pathologist, of Boston, was born July 28, 1876 in that city, the son of Martin and Olive Wentworth Knowles Southard. In 1879 he was graduated "magna cum laude" from Harvard and took his M. D. there in 1901 and his A. M. in 1902. Then he went abroad and studied at the Senkenberger Institute under Carl Weigert and at the University of Heidelberg under Kraepelin and Nissl. In 1917, the George Washington University gave him his Sc. D. After preliminary work in the Boston City Hospital, he became instructor in neuro-pathology in his alma mater in 1904-05, assistant professor in 1906-09, and Bullard professor from 1909 on. He was also pathologist to the Danvers State Hospital during 1906-09; pathologist to the Massachusetts State Board of Insanity (later, the Commission on Mental Diseases), 1909-19; and director of the Bedford Hills Laboratory, Bureau of Social Hygiene, the National Committee of Mental Hygiene, the Massachusetts State Psychiatric Institute, and the Eugenics Record Office. A fruitful appointment was that of director of the Boston Psychopathic Hospital in 1912, a new state institution near the Harvard Medical School intended for the temporary care of patients who might or might not turn out to be insane,—a diagnosis station for the study of mental defects with an out-patient department. Assisted by Dr. Myrtelle M. Canavan, he made countless autopsies on insane patients. He held the "brain spot" theory as opposed to the "mental twist" as explanatory of certain cases of mental derangement ("Psycholog. Bul.," 1914); he was opposed to the materialistic Freudian domination of his specialty. He stuck to one tough job for nineteen years, all the working years of his life. The study and post-mortem examination of diseased or defective brain tissues, and sixty-two papers record his results in this line alone. The central passion of his life was research; "Jubilation at the birth of a new truth seems more characteristic of him than any single trait." (R. C. Cabot). Out of his work at the Psychopathic Hospital grew four great ideas: that of the neuropsychiatrist, the psychiatric social worker, the diagnostic scheme of the Kingdom of Evil, and orderly exclusion in diagnosis. In the psychiatric social work he was associated with Miss Mary Jarrett. He was interested in his latter years, under a grant from the Engineering Foundation, in the psychiatric aspects of industry, and this opened up the mental hygiene movement. Smith College gave him the opportunity of establishing (1918) the first school for psychiatric social workers, intended primarily for shell-shocked soldiers. Through his efforts, the different state hospitals for the insane were linked for cooperative research on psychiatric problems. During the World War, he served as major in the chemical warfare

division and was director of the U. S. Neuro-Psychiatric Training School in Boston.

Southard was the author of "Outlines of Neuropathology," 1906; "Serum Anaphylaxis in Guinea Pigs," with Dr. Gay, 1907-08, followed by further studies; "Neurosyphilis," with H. C. Solomon, a masterly work, 1917; "The Brains of the Feeble Minded," with Walter E. Fernald, (q. v.) 1918; and "Shell Shock and Neuropsychiatry," 1919. He was associate editor of the "Journal of Nervous and Mental Diseases," of the "Psychiatric Bulletin," and of the "Journal of Clinical and Laboratory Medicine." He maintained an active membership in many societies and was president, 1919, of the American Medico-Psychological Association.

From his college days, he played chess expertly. He had a strong distaste for organized Christianity and worked solidly through his Sundays, shunning any sustained talk on religion but speaking out his belief in God and a life after death and then quickly changing the subject. A mild phobia of becoming popular did not cause him to achieve unpopularity; in fact he was beloved even by his enemies.

In 1906, he married Dr. Mabel Fletcher Austin of Boston; three children were born, Austin, Ordway, and Anne.

Dr. Southard died of pneumonia in New York City after a two days' illness, February 8, 1920.

SPALDING, Lyman (1775-1821), originator of the United States Pharmacopoeia, was born in Cornish, New Hampshire, June 5, 1775, son of Colonel Dyer and Elizabeth Parkhurst Spalding, of Plainfield, Connecticut. His father served in the Colonial and Revolutionary wars and was eminent in the militia. When Lyman was eleven years of age, Dr. Nathan Smith (q. v.) who was settled in Cornish, was attracted by the studiousness of the boy, caused him to be educated at the Charleston Academy nearby and afterwards at the Harvard Medical School, where he obtained his degree in 1797. He was at once enlisted by Dr. Smith in the founding of the Dartmouth Medical School being given the chair of chemical lecturer and demonstrator, in 1797. Finding, at the beginning of 1799, that he could not earn a living by lecturing, Dr. Spalding settled in Walpole, and six months later in Portsmouth, New Hampshire. Although Portsmouth boasted of several excellent physicians, among them Dr. Ammi Ruhamah Cutter (q. v.), Dr. Spalding began an active campaign in vaccination, and tested the value of the new inoculation against the virulence of smallpox, in July, 1801. He also printed yearly bills of mortality of Portsmouth, sent them to leaders in medicine in America and Europe, and in this way he became well known in American medicine. He studied anatomy in the cooler weather and built an anatomical museum. He cultivated medicinal plants and exhibited to the medical society his own specially prepared opium. He was also very active in the New Hampshire Medical Society, served eight years as secretary and librarian and he obtained also an appointment as contract surgeon for the United States troops in Portsmouth. He corresponded vivaciously, for life, with Dr. Nathan Smith, lectured once more at Dartmouth in the autumn of 1779 and then resigned his chemical lectureship. He became well known as a surgeon, did all the operations of that day, was appointed a member of the board of health of Portsmouth and did excellent service in suppressing an epidemic of yellow fever. He also constructed an excellent galvanic battery and used it largely in his practice in nervous diseases.

In 1802 Dr. Spalding married Elizabeth Coues, daughter of Capt. Peter Coues, ship master out of the Harbor of Portsmouth.

Hearing in 1808 that the famous Alexander Ramsay (q. v.) was to lecture on anatomy at Dartmouth, Dr. Spalding went there, with two pupils, and some material for dissection, and acted as demonstrator, for the odd old Scotchman. He next tried to get money for a voyage to Europe, but money was scarce and he was obliged to satisfy himself with spending the winter of 1809-10 in Philadelphia, where he devoted most of his time to anatomy with Caspar Wistar (q. v.), and was, at the time, the first American physician to succeed in injecting the lymphatics. The fame arising from these injections brought to him in 1810 an unlooked-for invitation to lecture at the Fairfield (Herkimer County, New York) Medical School. Here, for seven years, he worked hard as a pioneer lecturer, in Western New York, obtained license to give degrees, and for four winter semesters did all of the work, covering anatomy, surgery, materia medica, obstetrics and chemistry. If his prognostications concerning the success of the school failed to come true, it was simply because he could not foresee that politicians would divert needed and promised funds to other colleges. Immediately after

obtaining the presidency of Fairfield in 1813 he established himself and his family in New York City, and practiced there the rest of his life, going back and forth to Fairfield until 1817. During his nine years in the metropolis he exhibited that same medical energy which had always distinguished his career. He obtained a good practice, made wide acquaintance with leaders in medicine and literature, wrote papers on fever, vaccination, printed a paper on scull cap in hydrophobia which made much stir and laid the foundation for the United States Pharmacopoeia.

As early as 1815 he had urged the establishment of a national pharmacopœia and in 1817 he read his first paper concerning it before the New York County Medical Society. It was received in silence and referred to a committee, which finally reported concerning the plan, but buried it in much verbosity, hard now to comprehend. Three years of steady letter writing followed, to physicians from Eastport, Maine, to New Orleans, the work being all done with his own hands, and at last, in June, 1819, he was profoundly gratified by a meeting of one section on the pharmacopœia at Boston and another at Philadelphia. Finally, in 1820, the national convention met at Washington, he was put at the head of the Publication Committee and in the winter the book was published, in Latin, and English, on alternate pages.

While this great work was going on, Caspar Wistar died and Dr. Spalding made a serious effort to obtain the vacant chair of anatomy in the Pennsylvania Hospital Medical School, but local interests obtained the appointment for a local surgeon. While the printing of the pharmacopœia was proceeding, Dr. Spalding met with a blow on his head, fell ill and despite the best of skill and advice, grew steadily worse. Finding death drawing near, he asked to be taken back to Portsmouth, where he died, October 21, 1821, a few days after his arrival, at the age of forty-six.

Although Dr. Spalding was a versatile man and wrote papers on many topics in medicine, surgery, materia medica and natural history, he always had in view the advance of medicine. His papers were clean cut but rather laconic and he loved anatomy. He also took an active part in the public schools of Portsmouth and of New York, translated a number of pamphlets and a medical work from the French and corresponded with a very large number of medical personages throughout the civilized world. He likewise had a great gift for friendship and was much beloved by all who knew him. He was, we must understand, a shining light in medicine, and accomplished a great deal of scientific work in his relatively short, active, professional life.

JAMES A. SPALDING.

SPENCE, John (1766-1829), of Virginia, who believed in the efficacy of digitalis, was born in 1766 in Scotland, receiving his education at Edinburgh University, where he spent five years. Fully qualified to graduate in medicine, he was prevented from doing so by reason of the development of pulmonary tuberculosis, and having been advised by his preceptors to take a long sea voyage, he came to Virginia. Being in straitened circumstances, he accepted a position as tutor in a family living in Dumfries, then a thriving town with an extensive trade with Scotland. In 1828, in consideration of his well-merited distinction, the honorary M. D. was conferred upon him by the University of Pennsylvania. The voyage to and sojourn in Virginia so restored his health that at the expiration of his engagement in 1791 he began to practice medicine, for which he was well prepared and soon attained, in the region in which he lived for nearly forty years, a high reputation as a judicious and successful practitioner. When vaccination was introduced into the United States he gave his attention to the subject, and satisfying himself of its great prophylactic power, did much to inspire the public both in Virginia and the adjoining states, with confidence in it. Having imbibed his first principles under the immediate instruction of Cullen, they were never obliterated from his mind and were ever to him infallible evidences and tests of medical truths.

He made numerous contributions to medical literature, one of which was a valuable one on the efficacy of digitalis in pulmonary hemorrhage. He was an earnest advocate of the use of digitalis in pulmonary affections and dropsies. In 1806 he carried on an interesting correspondence with Dr. Benjamin Rush (q. v.) on the successful treatment of puerperal mania, which was published in the "Medical Museum" of Philadelphia. He was one of the collaborators of the "American Journal of the Medical Sciences," and contributed to it a good paper on the efficacy of a sea voyage in arresting pulmonary consumption as in his own case. He left many manu-

scripts in which the results of his professional experience were recorded.

The last two or three years of his life were spent in combating a disease the exact nature of which is not known. Its chief symptoms were ascites and anasarca which followed a violent attack of fever succeeded by attacks of gout. He kept himself alive long beyond the time at which his disease threatened to end his existence by the use of his favorite remedy, digitalis, and by trips in summer to watering places. His last days were saddened by the death of a favorite son. He died at his home on May 18, 1829, aged sixty-three years, leaving a widow and several small children.

ROBERT M. SLAUGHTER.

SPENCER, Pitman Clemens (1793-1860), Virginia surgeon and lithotomist, was born in Charlotte County, in that state, in 1793, the son of Gideon and Catherine Spencer, his father, a lieutenant in the state service in the Revolution. Pitman Spencer had few early advantages and began to study medicine with his brother, Dr. Mace C. Spencer, in 1810, remaining with him until 1812, when he volunteered and acted as surgeon's mate to a detachment of troops at Norfolk. He attended lectures at the University of Pennsylvania, graduating in 1818, and settled in Nottoway Court House, being associated with Dr. Archibald Campbell. He practiced until 1827, when he went abroad, passed some time in London and Paris, and made a tour of Switzerland and Italy. While in Paris he studied under Dupuytren and afterwards always used the latter's doubled, concealed lithotome. Dr. Spencer was a member of the (old) Medical Society of Virginia. A contemporary said of him that he was a born surgeon, but cared more for the art than the science. He was bold to recklessness in operating, but had marvellous success. This was attributable to the great care with which he prepared his patient; to the free use of soap and water, rendering both himself and the patient as nearly aseptic as possible, and to the care of his patients after operation. He used in his operations a solution of creosote in alcohol, an excellent antiseptic. His operations of all kinds were well done, and generally successful, and his prognoses of traumatisms seldom erred. He paid special attention to lithotomy, discarding lithotrity as not comparable in results, a conclusion arrived at only after a thorough trial of both operations. While in Paris, he spent much time practicing the crushing operation upon the cadaver and possessed a fine set of instruments. He did the operation of lateral lithotomy twenty-nine times, losing only his first two patients. Less than a year before his death he operated successfully upon an eight-year-old boy, removing a calculus weighing 580 grains. He protested against the use of the catheter after operation, and tying the legs together, awaited the passage of urine by the natural channel. His reputation as a lithotomist was very extended, indeed, almost worldwide,as in the similar case of his greater surgical co-temporary, Dr. J. P. Mettauer (q. v.), one sees what a position may be obtained in a provincial town, or even in a small village, when unaided by metropolitan or academic advantages. Spencer was far ahead of his time in the use of both asepsis and antisepsis without knowing it. His practice extended over southside Virginia and far into North Carolina, and his name was a household word, and his word the law in things surgical.

So far as I have been able to discover the following articles are all that he contributed to medical literature: "A Case of Calculus successfully treated by Lithotrity" ("American Journal of the Medical Sciences," 1832); "Report of the Successful Removal of an Enormous Tumor of the Neck" ("American Journal of the Medical Sciences," 1844); "Case of Irritable Uterus" ("The Stethoscope," vol. i, April, 1851); "Report of Fifteen Cases of Lithotomy" ("The Stethoscope," vol. i); "Empyema Successfully Treated by Paracentesis Thoracis" ("Virginia Medical and Surgical Journal," vol. iv); "Results of Twenty-four Operations for Lithotomy" ("Virginia Medical and Surgical Journal," vol. iv); "Report of Twelve Cases of Lithotomy."

He never married, although a great beau, and assiduous in his attentions to ladies, especially young ladies.

He died in Petersburg on the fifteenth of January, 1860, in the sixty-seventh year of his age.

ROBERT M. SLAUGHTER.

SPENCER, Thomas (1793-1851), founder of Geneva (New York) Medical College, was born in Great Barrington, Massachusetts, October 22, 1793. His father, Eliphalet Spencer, wheelwright, was a man of more than ordinary intellectual strength and physi-

cal energy who served during the Revolutionary War in the Connecticut regiment, fought at the battle of Saratoga, and witnessed the surrender of Burgoyne. An elder brother taught Thomas arithmetic and in 1806 he had three months' schooling for the purpose of studying English grammar, and never forgot the mortification of being outstripped by one of the school girls somewhat older than himself. When nineteen he was taught surveying by his brother, Gen. Ichabod Spencer, and about the same time began to study medicine with Dr. Dix, of Delphi, New York. By his surveying and school teaching he was enabled to earn the fees for his medical course, and in 1816 received a license to practice from the Medical Society of the County of Herkimer, New York. At once he began to practice in the town of Lenox, was elected to the several offices of the Medical Society of the County of Madison in 1820, and attended a second course of lectures at the Medical College at Fairfield, there receiving his M. D.

In 1824 Spencer was elected to the Assembly of the Legislature of New York State. In 1832 he attended a course of lectures at the University of Pennsylvania, going occasionally to the lectures at the Jefferson Medical College. His article on "Cholera" was written in Philadelphia in ten days, just preparatory to its delivery in that city. It was well received and noticed in the medical journals of Cincinnati and Philadelphia. At the suggestion of the Hon. John C. Spencer, late Secretary of War (not a relative), to Dr. Spencer and Dr. Morgan, a medical college under the powers of the Geneva College was founded. The first course of lectures was delivered in 1835, Dr. Spencer filling the chair of theory and practice of medicine for fifteen years. Through his energy large endowments were obtained for the academic and also for the medical department. He removed to Geneva in order that he might be more convenient to the college. In 1847, when the Mexican War broke out, Dr. Spencer was appointed surgeon of the Tenth Regiment of New York and New Jersey Volunteers. He served for nearly one year and a half on the northern line of the Army; at Matamoras he organized a field hospital and brought everything in connection with it, its appliances and appurtenances, to a great degree of perfection.

Soon after his return Dr. Spencer removed to Milwaukee, in order to be near the Rush Medical College, Chicago, where he became professor of theory and practice of medicine. Owing to ill health he was obliged to resign and return to Syracuse. The Board of Trustees, however, elected him emeritus professor. Dr. Spencer relinquished his practice in Syracuse to accept a professorship in the Philadelphia College of Medicine about 1852, and accordingly removed to that city, where he continued to reside until the period of his death, which took place on May 30, 1857.

MARGARET K. KELLY.

SPITZKA, Edward Anthony (1876-1922). To Edward Charles Spitzka (q. v.) and Catharine Watzek was born June 17, 1876, in New York, a son, Edward Anthony, the subsequent noted anatomist and criminologist. The boy was educated at the College of the City of New York and took his medical degree in 1902 from the College of Physicians and Surgeons of that city. From demonstrator of anatomy in 1904-06, he rose to be professor of general anatomy in Jefferson Medical College and from 1911 to 1914 he was the director and professor of anatomy of the Daniel Baugh Institute of Anatomy of that college. He was engaged in the private practice of nervous and mental diseases in New York after 1914.

The important contribution of Spitzka's life was his study of the human brain. Many of his articles on this subject are recorded in the second series of the Index Catalogue of the Surgeon General's Library. The autopsy and examination of the brain of Czolgosz, the assassin of President McKinley, fell to his lot. He witnessed many electrocutions, recording detailed observations on deaths from electricity and anatomic variations in the brains of criminals. The editorship of the eighteenth American edition of Gray's Anatomy was also his work. During the World War, he saw service in France in the Medical Corps, attaining the rank of lieutenant-colonel. At the time of his death, he was chief medical referee of the rating section of the U. S. Veterans' Bureau.

He married Alice Eberspacher of New York, June 20, 1906, who survived him. Cerebral hemorrhage caused his death on September 5, 1922.

SPITZKA, Edward Charles (1852-1914), one of America's most versatile men, will be remembered best as a pioneer neurologist and psychiatrist, and as a notable contributor to the comparative and human anatomy of the nerve system. He was born in the City of

New York on November 10, 1852, the son of Charles A. Spitzka and Johanna Tag of Germano-Slavonic origin. He attended Public School No. 35, made famous under the principalship of Thomas Hunter, and after a collegiate education at the College of the City of New York, he began the study of medicine at the Medical Department of the University of the City of New York, from which he was graduated in the year 1873. The ensuing three years were spent in Europe for the purpose of further study; first at Leipsic, as a pupil of Wagner, von Coccius, His, Wunderlich, Hagen, and Thiersch; then at Vienna, under the tutelage of Meynert, Politzer, Billroth, Bamberger, Brücke, Arlt and Schenk. It was during his sojourn in Vienna that Dr. Spitzka was most strongly influenced to pursue his career in the manner which he did. Under Meynert, renowned anatomist and psychiatrist, and under Schenk, equally distinguished in the field of human and comparative embryology, Dr. Spitzka accumulated a wealth of knowledge which formed the foundation of most of his subsequent claims to fame. He then entered into general practice in his native city in 1876, occupying among other positions that of surgeon to the outdoor department of Mt. Sinai Hospital and consulting neurologist to the North-Eastern Dispensary and St. Mark's Hospital. He obtained a considerable amount of pathological material from the private and public asylums in and near New York City. The results of the analysis of this material were embodied in an essay on the "Somatic Etiology of Insanity" which gained the prize offered by the British Medico-Psychological Association from the fund presented by W. and S. Tuke in international competition. During the same year (1876) he obtained the prize of the American Neurological Association offered by Dr. Wm. A. Hammond (q. v.) for an essay on Physiological Effects of Strychnia. He occupied the positions of professor of comparative anatomy in the Columbia Veterinary College; professor of nervous and mental diseases and of medical jurisprudence in the New York Post-Graduate Medical College (1882-87); consulting neurologist in Sydenham Hospital; president of the American Neurological Association (1890); president of the New York Neurological Society (1883-84); editor of the "American Journal of Neurology and Psychiatry" (1881-84); vice-president section of neurology of the 9th International Medical Congress, Washington, 1887; chairman, section of somatology, Congress of Arts and Sciences, St. Louis, 1904. He was a member of the Society of Medical Jurisprudence, New York Academy of Medicine, New York Neurological Association, American Neurological Association, Association of American Anatomists, New York Pathological Society, New York County Medical Society, and honorary fellow of the Chicago Academy of Medicine.

Dr. Spitzka's labors were chiefly in the direction of the deep anatomy of the brain, the morbid anatomy of organic diseases of the central nerve system and the classification of mental disorders by clinical methods. He published a textbook on "Insanity" in 1883 which has been succeeded by two editions; and he was the author of the articles on "Chronic Spinal Diseases" and "Cerebral Abscess" in Pepper's "System of Medicine by American Authors," also of "Brain Histology" in Wood's "Reference Handbook." The "Journal of Nervous and Mental Disease," vol. xli. No. 4, April, 1914 (contains a complete list of Dr. Spitzka's published articles, arranged by Dr. E. A. Spitzka). Among his original discoveries may be mentioned the inter-optic lobes of the Iguana, the identification of the hitherto unrecognized post-optic lobes in birds and reptiles, of the spinal course of the cortex-lemniscus in man, the marginal tract (discovered a year later by Lissauer) variously referred to as the Lissauer or the Spitzka-Lissauer tract, of the auditory tract in Cetacea, and of the superficial decussation of the pyramids in Pteropus. Among his voluminous writings are articles on the clinical features of grave delirium, on race and heredity as related to insanity, the historical role of mental disorders, errors regarding the alleged abnormality of criminals, and the legal and biological disabilities of natural children.

In the last thirty-five years of his life Dr. Spitzka limited his professional work to the specialty of nervous and mental diseases. He had been frequently called as a medical witness in cases where the mental state of a prisoner in a criminal proceeding or of a testator in civil proceedings was questionable, also in several well-known cases of alleged spinal injury. Notable among the criminal cases was that of Charles J. Guiteau, the assassin of President Garfield, in which Dr. Spitzka's attitude became conspicuous, as both prosecution and defence endeavored to retain his services, but failing, secured his attendance through an attachment. He then

testified to the prisoner's insanity, and was the only expert that did so.

Dr. Spitzka was a brilliant conversationalist, rapid in thought and speech, of flashing wit and ready repartee, a prodigious reader, and endowed with a remarkable memory. His naturalistic bent was apparent early in life, and much of his youth was spent in geological, floral and faunal studies in foot-excursions into the surrounding country. As an undergraduate in the City College he was summoned by the President to decide and demonstrate whether the Ichthyosaurus then purchased was a genuine fossil or a facsimile. In his latter years his principal diversion was to search for and study all forms of animal life abounding in and about Shinnecock Bay.

Dr. Spitzka was married in 1875 to Catharine Watzek, in the city of Vienna. He died at his home, January 13, 1914, of cerebral hemorrhage, after seven hours' illness.

EDWARD ANTHONY SPITZKA.

SPOFFORD, Jeremiah (1787-1880), medical biographer, was born in Rowley, Massachusetts, December 8, 1787, and died at his home in Groveland, Massachusetts, where he had practiced for forty-seven years, September 16, 1880, at the ripe age of ninety-two years. His ancestors were of puritan stock and Jeremiah was sent to the district school, having besides, private instruction in Latin before he apprenticed himself in the offices of Dr. Israel Whiton and Dr. William Pankhurst, of Winchendon. A scanty income was eked out by teaching school in his native town and he attended medical lectures at Dartmouth, finally receiving a license to practice from the Censors of the Worcester District Medical Society in 1813. After a sojourn of four years in Hampstead, New Hampshire, he moved to Groveland, then known as East Bradford, and remained for the rest of his life. In 1813 he married Mary Ayer Spofford, of Jaffrey, New Hampshire, and they had a happy married life of sixty years and reared a family of nine children.

Dr. Spofford became a fellow of the Massachusetts Medical Society in 1817 and began to write for the "Gazetter of Massachusetts," of which he brought out an edition in 1828 and another in 1860. He published two editions of the "Genealogy of the Spofford Family," 1850 and 1870; as associate editor of the "Haverhill Gazette" for thirty years he wrote many biographical sketches of the members of the medical fraternity and articles on the historical incidents connected with the Essex North District Medical Society, of which he was an active member. Among the positions he held were: trial justice, state senator, surgeon of the Essex county militia, member of the New York Historic and Genealogical Society.

SPOONER, William (1760-1836), of Boston, was born in that town March 24, 1760, the son of John Spooner, Jr. and Susan Elizabeth Spooner and a grandson of John Spooner who came to this country from England in 1719. He entered Harvard College in July 1774 and was graduated in 1778. On leaving college he began the study of medicine under Dr. Samuel Danforth, (q. v.) whose skilful teaching he followed for three years. In 1781 he entered a man of war as surgeon and continued in that capacity until peace with Great Britian was concluded. During that time he made three cruises in different ships, in one of which he was captured and carried into Barbados. In the fall of the same year he entered the medical school at Edinburgh, at that time the foremost school of the world, and was graduated with the degree of Doctor of Medicine in 1785. In 1786 Dr. Spooner returned to Boston where he settled as a practitioner of medicine. He was not content with the limited scope of private practice, but soon became identified with local and state politics and with other public interests which give expression to his desire of service to the community. In 1804 he was elected a member of the State legislature and continued to be reelected for seven successive years, the last five of which were to the senate. He was a decided federalist, although by no means as bigoted as many of the members of that party.

Dr. Spooner was an efficient member of the Massachusetts Medical Society, serving for many years as censor and councillor. He was a member of the American Academy of Arts and Sciences and of the Massachusetts Historical Society and also was president and an active member of the Massachusetts Humane Society. His interest in education lead to his choice as a member of the School Committee of the City of Boston and as an Overseer of Harvard College.

An obituary notice in the Boston Medical and Surgical Journal Vol. 14, concludes as follows:

"In his manner he was affable, respectful, and even courteous; he was a remnant of that old school, which with him seems almost en-

tirely to have passed away. In his feelings he was benevolent and truly public spirited; he was always willing to give his time and to contribute from his means, to all objects intended to promote the public good. There are few institutions of public utility established during the active and prosperous periods of his life, which will not find his name in the lists of its benefactors. He died in 1836 at the age of 76 years."

His grandson, John Winthrop Spooner (1845-1910) of Hingham, Massachusetts, was a prominent physician of that town, a medical examiner for the Southern Norfolk district, president of the Massachusetts Medico-Legal Society, president of the Norfolk South District Medical Society, a district of the state medical society, and also chairman of both the board of health and of the Hingham school committee, and a trustee of Derby Academy.

LESLEY H. SPOONER.

SQUIRE, Truman Hoffman (1823-1889), a general practitioner of Elmira, New York who invented a ball-and-socket metallic catheter, was born to John Graham and Rhoda Smith Squire in Russia, New York State, March 31, 1823. He went as a boy to the Fairfield Academy and was graduated from the College of Physicians and Surgeons, New York, in 1848, settling eventually in Elmira and practicing there all his life with the exception of a term of service during the War.

Dr. Squire possessed a reputation in skilful surgery appreciated by his colleagues and, added to this he had a fine talent of invention, one result of which was a catheter, an invention which culminated in the soft rubber catheter of Nélaton. Squire's was designed for cases of enlarged prostate and consisted of the employment at the distal extremity of a metallic catheter of a number of ball-and-socket joints in the form of a continuous tube which admitted of much mobility and readily found entrance through a sinuous canal to the cavity of the bladder. In 1876 the Argueintieul Prize from the Academy of Medicine of Paris of 1,500 francs was awarded him for his contribution to surgical appliances for use in genito-urinary disease.

He married Grace, daughter of Dr. Nathaniel Smith, of Bradford County, Pennsylvania, and had two daughters and a son, the latter, Charles L., practicing with his father, who died on November 27, 1889, at his home in Elmira.

STABB, Henry Hunt (1812-1892), Newfoundland alienist, was born in 1812 at Torquay, Devonshire, England. Educated in Torquay, he began the study of medicine at the age of fifteen in Edinburgh, where he was graduated in medicine. He joined Dr. Carson of St. Johns, Newfoundland, as assistant and was associated with him for two years. His interest in the insane in the colony dates from this period. He found six male maniacs occupying basement cells of the old Fever Hospital, since destroyed, where they were chained to benches and walls with a bedding of straw and with their food passed to them in tins tied to the ends of long poles. Seeing them in this wretched condition, he began an agitation in favor of better housing and treatment. After repeated efforts he induced the government to lease a small cottage called "Palks" on the Waterford Bridge Road, and became attending physician with ten patients. During this time he kept up his general practice and labored as secretary of the Board of Health in an epidemic of cholera and also of smallpox. In 1848 he received promises of large donations from several friends, residents in St. Johns, if the government would build a proper asylum. Miss Dix, who visited St. Johns during this year, offered a donation of 100 pounds, took great interest in the work, and collected other subscriptions from abroad. The Governor, Sir G. DeMarchand, also used great influence with the government, which finally consented and appointed Dr. Stabb to visit continental and English institutions for the purpose of studying their methods of management. He spent one year in Paris schools and in visiting Germany, England and Scotland, before his return in 1852. Upon his plans and suggestions the present asylum was begun in 1853. The building consisted of a central block for physician's residence, kitchen, engine-room, etc., and a wing attached to it, consisting of a lower ward for males and upper ward for females and an attic for extra males, with a total accommodation of forty-five male and thirty female patients. It was finished in 1855. In the year 1860 the Prince of Wales visited the island, and his attendant physician, Dr. Ackland, was surprised and pleased with the institution and encouraged Dr. Stabb to leave St. Johns to seek a position in England. In 1863 it was found necessary to build a wing, corresponding to the first, capable of containing sixty beds to be occupied by female patients. In 1873-76 two addi-

tional wings were erected to separate noisy and violent cases from convalescents.

In his declining years, Dr. Stabb enjoyed robust health up to the last; always abstemious, a non-smoker, a good pedestrian, he remained in possession of his faculties up to seventy-three years of age, when his memory slowly began to fail. Retiring from his work in 1889, his physical health remained good for two years, when he had a series of cerebral hemorrhages, and slowly passed away without suffering on May 17, 1892.

STAMM, Martin (1847-1918), pioneer surgeon of Fremont, Ohio, was born November 14, 1847, in Thoygan, Canton Schaffhausen, Switzerland. He graduated from the University of Berne, Switzerland, March 12, 1872. In the same year he began the practice of medicine in Fremont, Ohio; in this locality he practiced until his death. In the history of American surgery we have many examples of brilliant physicians who have risen to national fame in spite of the handicap of living in a small community away from the large medical centers. Dr. Stamm was an example of this type of pioneer surgeon, who by sheer pluck, ability, and hard work attained a fame which would have been a credit to one surrounded by the facilities and conveniences of a large city. An ardent student by nature, thoroughly acquainted with German and French medical literature, he was able always to keep abreast of the times and to quickly put into practice any important advancements made in his chosen profession. For this reason to Dr. Stamm belongs the credit of having first performed many of the major abdominal operations in northwestern Ohio. Dr. Stamm contributed frequently to surgical literature; a partial list of his publications, thirty titles, may be found in volume xxxi of the Transactions of the American Association of Obstetricians and Gynecologists. In 1894 he published his well-known method of gastrostomy. The operation consists of a series of purse-string sutures superimposed in the anterior wall of the stomach, by which a fistulous tract into the stomach is formed and through which a catheter can be introduced. By the use of the Stamm method regurgitation of food following gastrostomy is prevented. This operation has stood the test of time, and although to Dr. Stamm belongs the credit of priority in its publication, it is known in the surgical textbooks as the Stamm-Kader gastrostomy. It was Dr. Stamm who first suggested to the writer the idea of ligation of the upper pole of the thyroid gland as a substitute for the operation of arterial ligation in severe cases of Basedow's disease. This idea was later elaborated and published, and is now known as the Stamm-Jacobson operation, a method which has entirely supplanted the older methods of ligation of the thyroid vessels. It was Dr. Stamm who introduced Kocher's herniotomy into this country, and who did much to popularize Dührrsen's vaginal Cesarean section for eclampsia; he was one of the first to do thyroidectomy.

As a surgeon Dr. Stamm was well trained, his foundation work was thorough; he possessed an accurate knowledge of embryology, anatomy, physiology, and pathology. For this reason he was quick to recognize new methods and equally quick to reject those which were not based on accurate scientific principles. As a diagnostician, he possessed remarkable ability, the result of long years of study, close clinical observation, and experience. There was scarcely an operation in the whole range of surgery which he had not performed many times. Dr. Stamm made frequent visits abroad, and was well known in many of the large clinics, especially in those of his native country. In one of his last visits in 1914, he was made temporary chief of the surgical division of the Inselspital Clinic in Switzerland. He was for many years a professor of operative and clinical surgery in the College of Physicians and Surgeons in Cleveland; he organized, and for many years was president of the Sandusky County Medical Society; he was a member of the local, state and national medical associations, as well as a fellow of the American College of Surgeons. He was for seventeen years a fellow of the American Association of Obstetricians and Gynecologists. Throughout his career he lacked the advantage of doing his surgical work in a modernly equipped hospital. He established his own hospital, but discontinued it on account of ill health. It is to be regretted that he did not live to see finished the present new Fremont Hospital, which was nearing completion in 1918.

It was not only in the field of medicine and surgery that he was well known. He was actively engaged in all public matters pertaining to the welfare of his community, possessing advanced ideas regarding educational and municipal affairs. "Dr. Stamm worthily filled some important public positions. He was elected to the Fremont Board of Edu-

cation three terms; to the office of the Board of Public Service where his influence was great, especially on the larger matters affecting the public safety, health and general welfare. At the urgent solicitation of leading citizens of all political parties, he became a candidate for, and was elected to, the office of delegate to the Ohio Constitutional Convention in 1912."

Dr. Stamm died May 22, 1918, in Fremont, Ohio, and was survived by one daughter, Mrs. George W. Hayes of Fremont, and one son, J. Hans Stamm of Detroit, Michigan, his wife having died several years before.

J. H. JACOBSON.

STAPLES, Franklin (1833-1904), was one of the best known and most generally respected physicians in Minnesota, and through his writings, especially upon subjects relating to the history of medicine, his name was known throughout the country. Born in Raymond (now Casco), Cumberland County, Maine, November 9, 1833, he began to study medicine under Dr. C. S. D. Fessenden, of Portland, Maine, in 1855, and attended lectures at Bowdoin College in 1856. He was head instructor of the old Center Grammar School, Portland, Maine, for some four years, but upon his retirement entered the College of Physicians and Surgeons, New York, and graduated in March, 1862, subsequently being appointed demonstrator of anatomy in the medical department of Bowdoin College. In the summer of 1862 he established himself as a general practitioner in Winona and married, June 4, 1863, Helen H. Harford, of Portland.

Dr. Staples was one of the founders of the Winona Preparatory Medical School. In 1871 he was elected president of the Minnesota State Medical Society. From 1883 to 1887 he held the chair of the practice of medicine in the medical department of the University of Minnesota. His writings on medical and surgical subjects have from time to time been published in scientific and professional journals, and from their marked ability, attracted the attention of the medical profession. Among the first of his writings in this line was his report on "The Influence of Climate on Pulmonary Diseases in Minnesota"; "A Report on "Diptheria," "The Treatment of Fracture of the Femur," besides many other articles pertaining to medicine and surgery, and particularly to the history of medicine.

BURNSIDE FOSTER.

Staughton, James Martin (1800-1833), professor of chemistry in Columbian College, Washington D. C. See American Medical Biographies, H. A. Kelly & W. L. Burrage, Balto. 1920, page 1090:

STEARNS, Henry Putman (1828-1905), superintendent of the Hartford (Conn.) Retreat, writer, was born in Sutton, Massachusetts, April 18, 1828, of a family prominent in the history of Massachusetts since 1630. His preparatory studies were at Yale College which he entered in 1849, and from which he received the degree of A. B. in 1853. He received his medical education at Yale and Harvard and was made an M. D. at the former in 1855. He went for post-graduate study in the same year to Edinburgh and became an interne in the Royal Infirmary, later studying in Paris and returning to America in 1857. He settled at Marlboro, Massachusetts and practiced until 1859, when he removed to Hartford, Connecticut. In 1861, upon the outbreak of the Civil War, he was commissioned a surgeon in the First Connecticut Volunteers, and as such participated in the first battle of Bull Run. He was later made a surgeon of the United States Medical Corps and was detailed as brigade surgeon to the army of Gen. Fremont at St. Louis. Later he was assigned to the staff of General Grant and was with him throughout his service in the Southwest except for a short period when he served as medical director of the right wing of the army of Gen. McClellan. He subsequently was appointed medical inspector of hospitals on the staff of Col. R. C. Wood, assistant surgeon general and later superintended the building of the Joseph Holt Hospital at Jeffersonville, Ind. Afterward he became medical director of the United States general hospital at Nashville, Tennesee, where he had continuously under his charge at least 10,000 patients. In September, 1865, he was mustered out of the service at his own request with the rank of brevet lieutenant-colonel, and returned to Hartford, Connecticut to resume practice.

In 1873, at much pecuniary sacrifice, he accepted the superintendency of the Hartford Retreat because the demands of his large practice had proven too great for his health and strength. He began service the following year. The remainder of his professional life consequently was devoted to the care of the insane, in which branch of medicine he proved himself a diligent student, a skilful physician and a sagacious, con-

scientious and able administrator. He practically rebuilt the Retreat and added cottages and other subsidiary buildings. He also made marked improvements in the medical care and treatment of the patients under his charge. He acted frequently as a medico-legal expert in court, and his services as a consultant were highly prized by his brother physicians.

A prolific writer, he wrote many books and papers. The following is a partial list: Parts 1 and 2 medical volumes and parts 1, 2 and 3 surgical volumes of the "Medical and Surgical History of the War of the Rebellion"; "Classification of the Insane"; "The Relations of Insanity to Modern Civilization"; "The Insane Diathesis"; "Phases of Insanity"; "The Care of Some Classes of the Insane"; "Expert Evidence in the Case of the U. S. vs. Guiteau"; "Insanity, Its Causes and Prevention"; "Progress in the Treatment of the Insane"; "General Paresis and Senile Insanity"; "The Classification of Mental Diseases"; "The Importance of Cottages for the Insane"; "Some notes on the Present State of Psychiatry"; "Lectures on Mental Diseases" and "Commissions in Lunacy."

He was lecturer in psychiatry at Yale University from 1875 to 1897, and resigned because of ill health. His membership included: the American Medico-Psychological Association (President in 1891); the New England Psychological Association; Connecticut Medical Society; City Medical Society, serving each society as both vice-president and president.

He married at Dumfries, Scotland, in 1857, Annie Elizabeth Storrier, who died in 1903, after nearly forty-six years of ideal married life.

He remained in active charge of the Hartford Retreat until failing health compelled him to resign March 31, 1905, after a service of thirty-one years.

After a brief and painless illness he died May 27, 1905.

HENRY M. HURD.

STEARNS, John (1770-1848), who first called attention to the medical properties of ergot, organizer and president of the New York State Medical Society, was born in Wilbraham, Massachusetts, May 16, 1770. He was early fitted for college, and graduated at Yale with distinguished honor in 1789. He studied with Dr. Erastus Sergeant (q. v.) of Stockbridge until 1792, when he went to Philadelphia and attended the lectures of Shippen, Wistar, Rush, and others at the University. The year following, in 1793, he entered upon practice, near Waterford, in the county of Saratoga, New York, where in 1797 he married a daughter of Col. Hezekiah Ketchum. The inception of the Medical Society of the State of New York was received from John Stearns, and he was elected its secretary at the first meeting in 1807, and continued to fill the office for several years. In 1807, Dr. Stearns communicated to the profession through Dr. Ackerly, in an article published in the eleventh volume of the "New York Medical Repository," his observations on the medical properties of ergot in facilitating parturition. Whatever may have been known of this substance before, Dr. Stearns was the first to attract attention to it in the United States, and his observations were doubtless original. In 1809 he was elected to the Senate of the State of New York, and served as senator for four years until 1813. He removed to Albany in 1810, and for nine years was actively engaged in practice, enjoying largely the public confidence. The Regents of the University conferred upon him the honorary degree of doctor of medicine in 1812. In 1817 he was elected president of the Medical Society of the State of New York, and was deservedly re-elected in 1818, 1819 and 1820. In 1819 Dr. Stearns removed to New York City, where he practiced for many years, and contributed largely to the medical periodicals of the day. Upon the organization of the New York Academy of Medicine in 1847, its first president was John Stearns, then venerable in professional life. A little more than one year later, on the eighteenth of March, 1848, he died a martyr to the profession in which he had so long lived, his death occurring as the result of a poisoned wound, at the age of 77.

SYLVESTER DAVID WILLARD.

STEBBINS, Nehemiah Delavan (1802-1888), founder of the Wayne County and Michigan State Medical societies was born in Beekman Township, Dutchess County, New York, February 27, 1802, the eldest son of Lewis and Sarah Delavan Stebbins, a lineal descendant of Rowland Stebbins who emigrated from Yorkshire, England, on the ship "Francis" and settled at Northampton, Massachusetts, in 1634. The boy had a common school education and in 1820-21 worked as a civil engineer in the construction of the Erie Canal, between Rochester and Lockport. After this he studied medicine with Dr. A. F.

Oliver, in Penn Yan, Yates County, New York. Later he attended the College of Physicians and Surgeons of New York City, and was licensed to practice by the New York State Medical Society. He first settled at Hammondsport, Steuben County, New York, and eventually in Detroit until 1868, when he settled in Southern California. He was a member of the Wayne County Medical Society, in its first and second epochs and a founder of each; also a founder of the first and second epochs of the Michigan State Medical Society, and president in 1857-58.

He was six feet tall, of spare build, long legs, short body. Pleasant, penetrating blue eyes showed from deep sockets and overhanging dense brows; he was quick in movement, gracious in manner, firm in his convictions. He was a lover of all kinds of knowledge for its own sake, as well as for what practical good it accomplished. In his frequent visits to the writer, while staying in Detroit, his first question after being seated was, "What is new within your field of observation?" If anything could be given, he was as delighted as a boy with his first trousers. Dr. Stebbins' sanguine, cheery disposition, indefatigable industry, devotion to friends and profound faith in God, Bible and church, were important factors in his success.

On June 28, 1832, he married Emily White at Rochester, New York. She died in 1859. Of their three children, one, Dwight Delavan Stebbins, became a physician, but died young from typhoid infection while serving the soldiers of the Civil War. The father died at his brother's home in Dowagiac, Michigan, May 31, 1888. He went to bed well, but never woke to his earthly friends.

LEARTUS CONNOR.

STEELE, Aaron John (1835-1917), pioneer orthopedist of the west, was born November 20, 1835, in Rochester, New York. After graduating from Jefferson Medical College in 1859, he was demonstrator of anatomy in the Buffalo Medical College, served as surgeon in the Union Army during the Civil War, and then settled in St. Louis and was one of the first physicians west of the Alleghenies to limit his practice to orthopedic surgery for which his experience in the army and his mechanical skill especially fitted him. He contrived and made all his apparatus with his own hands. For many years he was professor of orthopedic surgery, first in the Beaumont and later in the Missouri Medical College. In 1899, when the Missouri Medical College merged with the St. Louis Medical College to form the medical department of Washington University, he took the chair of orthopedics and held it until 1910.

Among his writings are "Theory and Practice of Electrotherapy, or Electrotherapy as a Curative Agent," 1871, "Intra-Capsular Fracture of the Neck of the Thighbone," "Brain Matter and Mind Action," "Torticollis," "Plaster of Paris in Orthopedics," 1891. He was a charter member of the American Orthopedic Association and its president in 1893.

Dr. Steele was a connoisseur of old prints and engravings and accumulated one of the large and rare private collections in this country.

In October, 1870, he married Cassie L., the daughter of the Honorable M. G. Leonard of New York. Infirmities of age confined him to bed for over a year before his death on January 7, 1917.

STEEVES, James Thomas (1828-1897), New Brunswick physician, was of German descent and was born at Hillsboro, N. B., January 25, 1828. Educated at the local school there, at Sackville Academy, and at the Baptist Seminary, Fredericton, N. B., he entered on the study of medicine at the University of Pennsylvania Medical School, and was graduated from the University of the City of New York in the class of 1853. He began the practice of his profession in the parish of Portland, now a part of the city of St. John, in June, 1854, but removed to the city in 1864 and erected a block of buildings, where he resided and practiced until 1875, when he was called to the charge of the asylum. He ranked high as a surgeon and obstetrician, and when the general public hospital was opened at St. John, in 1864, was appointed one of the staff of visiting physicians. He was a member of the first medical council of New Brunswick (1860) under the English Medical Registration Act, the first president of the New Brunswick Medical Council under the New Brunswick Medical Act of 1880; also vice-president of the Canada Medical Association. In 1892 he visited Great Britain, Ireland and the Continent to see the asylums there, and at other times visited many of the institutions in Canada and the United States. In 1889 he was called upon to give expert testimony in a case at San Diego, California. Throughout his asylum career, Dr. Steeves proved himself a worthy successor of Dr. Waddell (q. v.), and during his 20-years ser-

vice did much toward bringing the New Brunswick institution to its present excellent condition. His death took place at Lancaster on March 3, 1897.

STEIN, Alexander W. (1841-1897), early genito-urinary surgeon of New York, born in Buda, Hungary, March 3, 1841, son of the chief surgeon of the Hungarian Army in the Revolution of 1843-1849, came to the United States with his father in 1845. He received an M. D. at the University of the City of New York in 1867 and began practice in New York City, specializing in genito-urinary and venereal diseases. In 1863 he had been acting assistant surgeon in the United States Army, being retired because of illness. He was professor of visceral anatomy and physiology in the New York College of Dentistry 1868-1875, and was appointed professor of comparative histology and physiology in the New York College of Veterinary Surgery, in 1868. He was visiting surgeon to the City Hospital. Among his writings are: "Exfoliation of the Mucus and Submucus Coat of the Bladder Preceded by Renal and Vesical Calculus"; "Lecture on Agnosticism Based on Physical Science"; "Retention of Urine Depending on Stricture." There are eight titles in the Surgeon-General's Catalogue.

He was married and had four children.

An infection received during an operation caused his death, in New York City, December 6, 1897.

STEINER, Lewis Henry (1827-1892), librarian of the Enoch Pratt Free Library, Baltimore, was born in Frederick City, Maryland, May 4, 1827. He was descended from German ancestors who settled in western Maryland early in the eighteenth century. He attended Marshall College, at Mercersburg, Pennsylvania, and took his A. B. there in 1846. The degree of A. M. was conferred upon him three times; by his alma mater in 1849, by St. James College in 1854, and by Yale in 1869. His M. D. he had from the University of Pennsylvania in 1849. In 1852 he removed to Baltimore, where he held the chairs of chemistry in the Maryland Medical Institute (a preparatory school) and in the Maryland College of Pharmacy. He also held the same chair later in Columbia College and the National Medical College, at Washington, District of Columbia, and lectured at times on natural history, physics and pharmacy. In 1861 he returned to Frederick City. During the Civil War he was chief inspector of the United States Sanitary Commission in the Army of the Potomac. After 1868 his time was given up mostly to literary and scientific pursuits.

He was a close student, an eloquent speaker, and a ready writer. At the age of twenty-four he published his first work, entitled "Physical Science." He later translated "Will's Chemical Analysis." He was assistant editor of the "American Medical Monthly." During his later years he was librarian of the Enoch Pratt Free Library in Baltimore. He was a member of the Medical and Chirurgical Faculty of Maryland, and he was also a member of the American Academy of Medicine and its president in 1879. "No brighter example," says Prof. Raddatz, his biographer, "of high and earnest ardor in his country's cause, of manhood, integrity and energy, shines in the galaxy of sterling citizens which the sturdy race from which he sprang has given to our state." The Surgeon-General's catalogue has twenty-seven titles of Steiner's writings.

Dr. Steiner's death took place suddenly in his library, from a stroke of apoplexy, February 18, 1892. He was a member of the Reformed Church, and always took an active interest in its affairs. He left a widow, three daughters and two sons, one of them the medical biographer, Walter Ralph Steiner, M. D. of Hartford, Connecticut.

EUGENE F. CORDELL.

STELWAGON, Henry Weightman (1853-1919), dermatologist of Philadelphia, was born in that city December 3, 1853, the son of Joseph and Margaretta Duckett Stelwagon. After obtaining his B. S. from Andalusia College, Pennsylvania, in 1871, he immediately began the study of medicine; both the M. D. and Ph. D. degrees were conferred upon him in 1875 by the University of Pennsylvania. When his year of internship in the Philadelphia General Hospital ended, he spent two years, 1876-78, studying skin diseases in Berlin and in Vienna where he was a pupil of Hebra and Kaposi.

From 1880 until 1890, he was physician in charge of the service for skin diseases in the Northern Dispensary of Philadelphia, with which institution he maintained a life long connection. As instructor in dermatology in his alma mater, 1885-1890, and at the same time chief of dispensary for skin diseases of the hospital of the University, most of the

teaching in his department devolved upon him because of the absence of Professor Duhring (q. v.) who suffered from protracted ill health. Stelwagon was appointed clinical professor of dermatology in the Woman's Medical College of Pennsylvania in 1888, resigning in 1907. He was dermatologist to the Philadelphia General Hospital, 1888-1915, and, after his resignation, consulting dermatologist to that hospital, also to the Northern Dispensary, 1882-1900; and to the Howard Hospital to which he was dermatologist from 1885 to 1912, and then consulting dermatologist. He was professor of dermatology in Jefferson Medical College from 1890 until June, 1918, when failing health incapacitated him for teaching. A number of foreign dermatological societies conferred honorary membership upon him.

In 1890, Dr. Stelwagon published his "Essentials of Diseases of the Skin," a small book intended especially for the use of students, that went through several editions. His magnum opus is his treatise on "Diseases of the Skin," 1901—eight editions. He wrote the chapter on skin diseases for Pepper's "System of Medicine," 1885, with Professor Duhring, and for Wilson's "Applied Therapeutics," 1896; he contributed on dermatological subjects to Keating's "Cyclopedia of Diseases of Children," 1889, Morrow's "System of Dermatology," 1896, Hare's "System of Therapeutics," 1900, and Buck's "Reference Handbook of the Medical Sciences"; and he translated Mracek's "Atlas of Skin Diseases," with additions, 1898.

On October 9, 1884, he married Elizabeth Bender of Easton, Pennsylvania.

For several years, Dr. Stelwagon had repeated attacks of angina pectoris, "the doctors' disease," which eventually caused his death. In the late afternoon of October 18, 1919, after the close of office hours, he took the long journey.

HOWARD A. KELLY.

STEPHEN, Adam (———1791), pioneer physician, army officer, and founder of Martinsburg, West Virginia.

A native of Scotland, Stephen was educated at Edinburgh University where it is said he studied six years, the last two "in different physical classes," and that Donald Monroe, Gregory and Stephen took away the palm in all classes of philosophy, mathematics and physic." Leaving college he passed the examination of the position of naval surgeon, "but discovering that officers and men were a parcel of bears," he went as hospital-ship surgeon for the army in the expedition against Port L'Oriente. After various adventures he finally settled in Virginia. He took part in the French and Indian War, and with another physician of Scottish birth, Dr. James Craik (q. v.), accompanied Washington on that perilous journey which terminated at Fort Necessity. The Revolution found him on the side of his adopted country. In her preparation for the struggle with the mother-country, Virginia raised nine regiments of infantry, the first six of which were placed on the continental establishment and their officers commissioned by Congress. The third and fourth of these were commanded respectively by Hugh Mercer (q. v.), also a physician and a native of Scotland, and Adam Stephen. Stephen took an active part in the war, and became a general in the Continental Army, also filling the position of peace commissioner to the Indians. The town of Martinsburg in Berkeley County (now West Virginia) was founded and laid out by Stephen.

The following quaint mention of two operations done by him are from a curious old manuscript endorsed in the handwriting of Dr. Rush in 1775, and read: "Stephen made himself known by making an incision into the liver of Mrs. Mercer of Stafford County, cleansing and healing the ulcers there, contrary to the opinion of all the faculty employed to cure the lady." It would seem probable that this was a case of abscess of the liver which was cured by operation. He also did an operation on one Abraham Hill for aneurysm, "restoring him the use of his arm and hand."

Dr. Stephen was noted for his talents, energy, learning, and skill in his professional work. He died at an advanced age, at his home in Martinsburg in November, 1791.

ROBERT M. SLAUGHTER.

STEPHENSON, Benjamin Franklin (1823-1871), organizer of the Grand Army of the Republic, was the son of James and Margaret Clinton Stephenson. The father was a native of South Carolina who emigrated to Kentucky, there met Margaret Clinton, whom he married and they then moved to Wayne County, Illinois. There Dr. Stephenson was born October 3, 1823, being one of a large family. When three years of age he was taken by his parents to Sangamon County, where he grew to manhood. He had few opportunities for obtaining an education, and was unable to

study medicine until he had attained his majority. He began this study with his brother, Dr. Wm. Stephenson at Mount Pleasant, Iowa. Afterwards he attended lectures at Columbus, Ohio, and was graduated from Rush Medical College, Chicago, in 1850. He began practice at Petersburg, Illinois, and in 1855 was married to Miss Barbara B. Moore. From 1855 to 1857 he lectured on general, special and surgical anatomy in the Iowa Medical College, at Keokuk, Iowa. He was surgeon of the 14th Illinois Infantry in the Civil War, serving three years, when he was mustered out. For meritorious services in the battle of Shiloh Dr. Stephenson had been given the rank of major. He then returned to Springfield, Illinois, and resumed private practice and was a popular and successful practitioner.

In 1866 he was the organizer of the Grand Army of the Republic. His plans not having met with much favor in Springfield, he went to Decatur, Illinois, to bring the matter before some of the war veterans in that city with the result that the first post was established, the ritual determined on, the name selected and the charter secured. After the organization of the Grand Army Dr. Stephenson devoted time and energy in its interest, to his personal detriment. The organization in its early years grew slowly and he saw meagre returns from his efforts. After years of toil, disabled and discouraged, he removed his family to the old home at Petersburg, Illinois. He died August 30, 1871, at Rock Creek, Menard County, Illnois, and was buried in the cemetery at that place, and on August 29, 1882, his remains were removed to Petersburg, Illinois, and interned in the soldiers' flat of Rose Hill Cemetery on the bank of the Sangamon River. On October 2, 1894, a beautiful granite monument was dedicated to his memory by his comrades of the Grand Army. Dr. Stephenson was a surgeon of ability, beloved by the men of whom he had charge, and a loyal patriot. On April 6, 1915, a tablet was unveiled at 253 South Park Street, Decatur, Illinois, marking the birthplace of the Grand Army of the Republic. The inscription on the tablet reads:

"Birthplace of the Grand Army of the Republic. In a second floor room on this spot the Grand Army of the Republic was organized April 6, 1866, by Dr. Benjamin F. Stephenson. This Tablet is placed by the Department of Illinois Woman's Relief Corps, Auxiliary to the Grand Army of the Republic, April 6, 1915."

GEORGE H. WEAVER.

STEPHENSON, John (1797-1842), the first registrar of the McGill Faculty of Medicine, was born in Montreal, in 1797, and received his early education from the Sulpicians, although he was not a Catholic. He was apprenticed to William Robertson as a medical pupil in 1815, for which privilege he paid fifty pounds and in 1817 went to Edinburgh and took his medical degree in 1820. He also became a member of the Royal College of Surgeons of England and studied under Roux in Paris. He returned to Montreal in 1821, where he obtained the distinction of being the first to organize medical education in Canada. He married Isabella Torrance in 1826 and died in 1842, and was survived by a son who was at one time professor of astronomy in Calcutta, and a member of the English bar. The first official announcement of medical education in Canada is contained in the minutes of the Montreal General Hospital under date August 6, 1822. The entry reads: "That Dr. Stephenson be allowed to put in advertisements for lectures next winter that they will be given at this hospital." Out of these lectures arose McGill Medical Faculty, and Stephenson was the first registrar. He was first occupant of the chairs of surgery, anatomy, and physiology, and he occupied all three at the same time.

ANDREW MACPHAIL.

STERN, Heinrich (1868-1918), was born in Frankfort, Germany, in 1868. Early in life he came to New York City and received his academic education in the local institutions of learning, from which he was graduated with the degree of Bachelor of Science. Medicine as a science attracted him and he was graduated from the St. Louis College of Physicians and Surgeons in 1899. After a few years of general practice he began to devote himself to studies of diseases of metabolism and soon became a well-known internist.

As an organizer Dr. Stern showed great ability and in 1905 he planned an institution on the lines of the present Rockefeller Institute. It was called "An Institution for Medical Diagnosis and Research," and was situated in the City of New York. This was thoroughly organized and a hospital founded, but through lack of funds and other circumstances it was necessary to abandon most of the project. About this time Dr. Stern became the permanent secretary and guiding spirit in the Manhattan Clinical Society. Two years later he founded successively the North

Side Medical Society and the Manhattan Medical Society of which the latter under his direction and guidance, has been able to exert a pronounced influence on medical education. The next year he was made chairman of the section on pharmacology and therapeutics of the American Medical Association, a position which brought him much honor and prestige. Early in his career Dr. Stern won the prize offered by the New York County Medical Society for the study of diabetes. In 1908, recognizing that there was not a single American journal devoted to internal medicine, Dr. Stern founded the "Archives of Diagnosis," a publication which he edited up to his death. This most altruistic journal never carried any advertisements, and was consequently always run at a financial loss to its editor. Its articles, however, were by the masters of medicine, and it has been one of the best and most ably conducted journals in this country.

From the beginning of his professional life, he was a prolific contributor of articles of medical interest to the medical press in America and Europe, such contributions reaching the number of nearly 300 articles. During this period he published at least half a dozen books on medicine including: "A Case of Crossed Hemiplegia," 1897; "Urinalysis, a guide for the busy practitioner," 1897; "Diabetes mellitus; its detection and successful treatment," 1900.

Dr. Stern was connected with many charitable institutions in New York City, including Metropolitan Hospital and Dispensary, Red Cross, the Philanthropin (which he founded), St. Marks, and the German West Side Hospital and Dispensary. He was professor of medicine in the German West Side School of Medicine. In 1915 he received the honorary degree of LL. D. and at the time of his death was a member of the Medical Reserve Corps of the U. S. Army. He was a man of strong likes and dislikes, but ever an admirer of ability and conscientious achievement. He was an indefatigable worker, an earnest student, a diagnostician of note, and a skilful practitioner of medicine.

His death took place at his home in New York City, January 30, 1918, of cirrhosis of the liver.

STERNBERG, George Miller (1838-1915), hygienist, epidemiologist, and surgeon-general of the United States, was the son of a Lutheran clergyman, Rev. Levi Sternberg, who was principal of Hartwick Seminary, New York State, he tracing descent from German settlers from the Palatinate in 1703. His mother was Margaret Levering Miller, daughter of Rev. George B. Miller, professor of theology in the seminary. George, the oldest of a family of ten, was born in Hartwick June 8, 1838, was educated at the seminary and began teaching school at New Germantown, New Jersey, at the age of sixteen, for he was to be responsible for his own education from this time. At nineteen he began the study of medicine with Dr. Horace Lathrop at Cooperstown, N. Y., and subsequently, with borrowed money, attended the College of Physicians and Surgeons, New York City, graduating with the class of 1860 and practicing in Elizabeth City, N. J., until the outbreak of the Civil War. Being appointed assistant surgeon in the United States Army and assigned to duty with the Third Infantry he received a baptism of fire at the first battle of Bull Run and was taken prisoner, making his escape, however, and reporting for duty. He went through the battles of Gaines Hill and Malvern Hill and in 1862 fell ill with typhoid fever while at Harrison's Landing and nearly lost his life. On recovery he was assigned to duty at Portsmouth Grove, Rhode Island, and at the close of the war had the rank of medical director and was in charge of the government hospital at Cleveland, Ohio. Dr. Sternberg continued in the medical service of the government and was stationed in many parts of the country, having seen an unusual amount of active service on the battlefield and in Indian campaigns. He was at Fort Harker, Kansas, in 1867, during the cholera epidemic, losing his dearly loved wife from this disease. Later he was post surgeon at Fort Columbus, New York (1871), when yellow fever gained a foothold among the troops. He was post surgeon at Barrancas, Florida, when there were epidemics of yellow fever in 1873 and 1875, losing his health and being invalided home after the latter epidemic. In 1879 he was a member of the Havana yellow fever commission. In May, 1893, he was acting as attending surgeon and consulting bacteriologist to New York City when he was appointed surgeon-general of the U. S. Army, a position he held until retired at the age limit, June 8, 1902.

Special duties were assigned to Sternberg from time to time as his services became valuable to the government because of his training and experience in epidemiology. He was a delegate from the United States to the International Sanitary Conference at Rome,

1885, and detailed by act of Congress in 1887 to make investigations in Brazil, Mexico and Cuba relating to the etiology and prevention of yellow fever. His first publication of scientific value was "An Inquiry into the Modus Operandi of the Yellow Fever Poison," published in the "New Orleans Medical and Surgical Journal" in 1875, following his observations of the Barrancas epidemics. Four years later he was secretary of the Havana yellow fever commission of the National Board of Health, in the meantime having published a paper on the study of the natural history of yellow fever in the same journal, 1876-77. Soon he issued a paper on the diagnosis of that disease and then followed a long series of articles in the medical press of the country and in the publications of the government on bacteriology, disinfection, infectious diseases, a total bibliography of 143 titles, the last being an article on yellow fever for the "Twentieth Century Practice of Medicine," 1903. The etiology of yellow fever engaged the attention of Sternberg for some ten years after 1879. His investigations disproved the causative relation of "Cryptococcus Xanthogenicus" of Domingos Freire, of Brazil, and likewise Sanarelli's "Bacillus Icteroides." Major Walter Reed (q. v.), having confirmed the finding, Dr. Sternberg organized the Yellow Fever Commission in 1900, with Major Reed Chairman and Dr. Carroll (q. v.), Dr. Lazear (q. v.), and Dr. Agramonte as members, and then followed the demonstration that mosquitoes of the genus Stegomyia carry the specific infectious agent of this dread disease. Dr. Sternberg should have the credit of making possible this great discovery by his preliminary work in eliminating errors of technique and in overthrowing the claims of other bacteriologists to the discovery of the specific organism, and further, in organizing and in making effective the commission that made the discovery.

In 1878, while stationed at Walla Walla, Washington, he began his experiments to determine the practical value of disinfectants, using putrefactive bacteria as the test of germicidal activity. These experiments were continued in Washington, D. C., and in the laboratories of the Johns Hopkins University, under the auspices of the American Public Health Association. For these Sternberg received the "Lomb prize" in 1886, the essay being revised in 1899 and translated into several foreign languages. Scientific disinfection may be said to have begun with the labors of Koch and Sternberg.

As a pioneer in America, not only in bacteriological investigations, but in the publication of text-books on bacteriology, Dr. Sternberg deserves appreciation. In 1880 he translated from the French the work of Dr. Antoine Magnin, and enlarged it and brought it up to date in 1884. In 1892 he published his "Manual of Bacteriology," it being revised and reissued under the title of a "Text-Book of Bacteriology," four years later. He was skilful at making photomicrographs and often illustrated his publications with his own work, thus showing to the American medical profession in 1881 one of the earliest photographs of the tubercle bacillus, in 1885 Laveran's plasmodium, and in 1886 the typhoid bacillus. He printed a book on the art of making photomicrographs in 1884. Other books from his pen are "Malaria and Malarial Diseases," "Immunity, Protective Inoculations in Infectious Diseases and Serum Therapy," published in New York in 1895, and "Infection and Immunity, with Special Reference to the Prevention of Infectious Diseases," 1903.

The Army Medical School which he established while surgeon-general is the best monument to Dr. Sternberg. As characteristic of the industry and perseverance of this self-made man it is to be noted that he learned the French language when forty years old and the German language in two years at the age of fifty-five, that he might be conversant with the latest scientific discoveries then being published in that tongue.

Naturally he belonged to many societies. He had been president of the American Public Health Association; the American Medical Association; the Association of Military Surgeons of the United States; the Philological Society of Washington; and the Cosmos Club of Washington. After 1893 he made his home in Washington. The LL. D. degree was conferred on him in 1894 by the University of Michigan, and in 1897 by Brown University. On his seventieth birthday, June 8, 1908, he was honored by a complimentary banquet in Washington attended by one hundred and eight guests, including prominent members of the profession of law and medicine of the capital.

Dr. Sternberg was twice married, his first wife who died of cholera in 1867, after a year of married life, being Maria Louisa Russell, of Cooperstown. His second wife, married in 1869, was Martha L. Pattison of Indianapolis. They had no children.

He died at his residence in Washington, November 3, 1915, at the age of seventy-seven.

STEUART, Richard Sprigg (1797-1876), "organizer of the Maryland institution for the insane, was of Scotch descent, and both his father and grandfather were physicians. He was born in Baltimore November 1, 1797, and was educated at St. Mary's College. He served as aide-de-camp in the battle of North Point in 1814; commenced the study of medicine with Dr. William Donaldson, and was graduated from the University of Maryland Medical School in 1822. He was professor of the practice of medicine in the University, 1843; president of the Medical and Chirurgical Faculty of Maryland, 1848-1851; vice-president of the American Medical Association, 1849; superintendant of the Maryland Hospital for the Insane, 1828-1862 and 1869-1876, and founder of Spring Grove Hospital. He died July 13, 1876, aged 78. He was an enlightened physician, a public-spirited citizen and a courteous gentleman. He early adopted advanced views in regard to the insane, to whose relief he devoted his life and means.*

It is not known what led him to become interested in the better care of the insane in Maryland, but it is a matter of history that through his insistence in 1828 the state was prevailed upon to enforce its claim for the possession of the old City Hospital which had been erected on ground purchased by the state and later leased by the city to two physicians, who conducted it as a combined city hospital, seaman's hospital and institution for the insane. Although the state was unable to regain its rights in the property until 1834 by reason of the lease, Dr. Steuart had organized a board of visitors from the state at large six years before, and as president of this board he made regular visitations to the institution. He found much neglect and many abuses in its management. He remained thereafter the responsible chief executive officer of the hospital, and for a period of more than forty years guided its work, although not a resident officer until late in his career. He obtained money from the Legislature to enlarge and rebuild the hospital and often became personally responsible for its expenses. He arranged for the removal of the institution from Baltimore to Catonsville, and solicited the sum of $20,000, which was required, in addition to the state appropriation, to purchase the site. There the hospital was known as the Spring Grove State Hospital. Dr. Steuart was president of the board of managers. Originally a man of wealth, he gave largely of his means to the hospital, and it was not until he became impoverished by the Civil War that he consented to receive any compensation for his services.

The material for a sketch of Dr. Steuart's life is very meagre, as he wrote little. He was a man of vigor of character and intellect and possessed an easy dignity which attracted rather than repelled approaches. His remarkable suavity and tactful personality were shown in the success he attained in securing contributions to benevolent objects. No one had the power to refuse him; his gentleness, his enthusiasm, his eloquent speech, were irresistible. He was instrumental in bringing Miss Dorothea L. Dix to Maryland in 1852, and introduced her to the members of the Legislature at Annapolis, where she spent the whole winter in urging upon them the better care of the dependent insane. Before the war he possessed a large productive estate on West River, Anne Arundel County and many servants (slaves), but he never gave up his life work as a physician. His mind, his heart and his purse were ever at the call of the unfortunate.

Dr. James A. Steuart, his son, bears personal testimony to the influence exerted by his father over the mind of the late Johns Hopkins in choosing the site of the Johns Hopkins Hospital.† He says: "After the building of the new hospital at Catonsville, which had been interrupted by the war, had been resumed, it was decreed by the Legislature that the grounds and buildings of the old hospital in Baltimore should be sold to pay for the new. At the annual meeting of the Board of Visitors a discussion arose as to how the property should be sold and at what price. Several propositions had been presented by property agents and others, but nothing had been decided. As Dr. Steuart and Johns Hopkins were standing together after dinner on the front steps of the hospital, the former, who had held many conversations with Mr. Hopkins in regard to his declared intention of leaving the greater part of his fortune to found a university and hospital, said: 'Hop-

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*Medical Annals of Baltimore, Past and Present, Quinan, Baltimore, 1885.

†Private letter, quoted by Dr. John Morris in The Johns Hopkins Hospital Bulletin, vol. vii, p. 40.

kins, why will you not buy this property and hold it as a part of your estate which you intend to bequeath for such noble purposes, and found your great hospital here upon this historic ground? The space is ample, the situation all that could be desired, and I will use my influence with the Board to sell it to you—in view of the great purpose you have in mind—for $150,000, which is far below its market value. If you postpone action in the matter the Board will be obliged to sell and your opportunity will be lost, unless,' he added, 'you care to pay more to others at a later period to recover the property for the site of your hospital.' Mr. Hopkins, as was his habit, deliberated for some minutes, and then said: 'Doctor, what you have said has great weight in my mind, and I will give you an early answer.' Not many days after this conversation Mr. Hopkins purchased the property which is now the site of the Johns Hopkins Hospital."

HENRY M. HURD.

STEVENS, Alexander Hodgdon (1789-1869), noted New York surgeon, was of the Stevens family which came originally from Cornwall, England, and settled in Boston. General Ebenezer Stevens, father of Alexander, was a member of the famous Tea Party that threw the tea into Boston Harbor in 1773, and served subsequently throughout the War of the Revolution, making his home in Rhode Island. Alexander, the third of the six sons born to Ebenezer and Lucretia Ledyard Stevens, came into the world in New York City on September 4, 1789. His education was begun by private teaching and in 1807 Yale College completed his academic education with an A. B., followed by medical study under Dr. Edward Miller (q. v.) and the taking of an M. D. in 1811 from the University of Pennsylvania. He served in the surgical service of the New York Hospital for seven months and then voyaged to Europe as a despatch bearer, but was captured by an English cruiser and detained a prisoner at Plymouth, England. When freed he went up to London and attended the lectures of leading surgeons, especially Abernethy and Astley Cooper. Then followed Paris and an interne service under Alexis Boyer, whose "Surgery" he translated into English on returning to New York. Again made prisoner after embarkation, he was soon liberated and on reaching America took an appointment as army surgeon while the war lasted. In 1814-1815 he lectured as professor of surgery in the medical department of Queen's College, New Jersey, later Rutgers' and Princeton College, and married in 1813, Miss Ledyard of New Jersey. While surgeon to the New York Hospital, from 1819 to 1839, he introduced the practice of bedside instruction. The year 1831 saw him again in London and Edinburgh, correcting an error of the great Liston previous to an operation on a man for supposed solid tumor of the upper thigh, that was in reality an abscess. In London he was called in consulation by Mr. Lawrence of St. Bartholomew's regarding a case of a tibia fractured near the malleolus. He recommended sawing off the projecting end of bone to ensure reduction, thus introducing at St. Bartholomew's a procedure common at the New York Hospital. Dr. Stevens became professor of surgery in the College of Physicians and Surgeons in 1825.

When cholera broke out in June, 1832, carrying off 2,996 in two months, Dr. Stevens and his colleagues did gallant work. In 1851, after years of strenuous labor, he retired to his country home on Long Island and devoted himself largely to agriculture. After the death of his first wife he was married twice, first to a Miss Morris of Morrisiana and afterwards to a lady of Long Island. His own death occurred March 30, 1869. A firm believer in the great truths of Christianity, he said to his daughter a few days before he died: "I have spent this whole morning in scientific reading, but I come back to my Bible. It contains all I need; there is no book like it." His last public act in 1865, was the founding of the Stevens Triennial Prize ($1,000) in the College of Physicians and Surgeon, the income to be awarded for the best essay on a medical or surgical subject. He held many appointments and honors: professor of the principles and practice of surgery, College of Physicians and Surgeons; president, American Medical Association; honorary LL. D., Regents of the University of New York State, 1849; twice president and a co-founder of the New York Academy of Medicine.

As a lecturer he dealt in quaint illustrations. He wrote many medical papers, edited two New York medical journals, issued an edition of Sir Astley Cooper's "First Lines of Surgery," 1822; "Lectures on Lithotomy," 1838, and a "Plea of Humanity in Behalf of Medical Education," and an address before the Medical Society of the State of New York in 1849.

STEVENS, Edward Bruce (1823-1896), founder of the "Medical Observer," was born in Lebanon, Ohio, in 1823. He received his literary education at the Miami University, Oxford, Ohio, and was graduated at the Medical College of Ohio, in 1846, first settling in Monroe, in the same state, but after a few years he went to Cincinnati, where with George Mendenhall and John A. Murphy he founded the "Medical Observer" in 1856. He was managing editor and continued as such after the consolidation of the journal with the "Western Lancet." In 1860 he was appointed demonstrator of anatomy in the Medical College of Ohio, but resigned at the end of the term, in 1865 accepting the chair of materia medica in the Miami Medical College, which he held until he was offered the same chair in the large medical school, created by the merging of the Geneva Medical College into the College of Medicine of Syracuse University, when he resigned his position in the Miami College, sold the "Lancet and Observer," and left for Syracuse. The new position did not come up to his expectations, so after a few months he returned to Lebanon, his native town, where he became well known as a gynecologist and obstetrician. In 1878 he started the "Obstetric Gazette," in the columns of which he did his best work as medical editor. He was secretary of the Ohio State Medical Society from 1862 to 1867 and its president in 1868. On account of poor health he was unable to attend to his professional duties for several years before his death, which occurred at Lebanon, July 11, 1896.

STEVENS, George Thomas (1832-1921), opthalmologist of New York, was born July 25, 1832, in Jay, New York, the son of the Rev. Chauncey Coe and Lucinda Hoadley Stevens. After graduating in medicine in 1857 from Castleton Medical College, Vermont, he began practice in Wadhams Mills, New York. At the close of the Civil War in which he served as surgeon, participating in all the campaigns of the Army of the Potomac, and for a time as medical inspector of the 6th Corps, he took up his profession in Albany and specialized in ophthalmology. In 1870, he became professor of physiology and diseases of the eye in the Albany Medical College. Desirous of confining his attention to his specialty, he moved to New York City in 1880, turning to the study of motor anomalies. Soon after this he performed one of the first operations done in this country for removing a foreign body from the eye by the use of a magnet. In 1881, he presented and described at the International Medical Congress in London his recording perimeter, probably the first of its kind. Two years later, he won the highest prize from the Royal Academy of Medicine of Belgium for a treatise on "Functional Diseases of the Nervous System."

Stevens is especially noted for his nomenclature of motor anomalies; for his devices,—the phorometer, clinoscope, clinometer, and tropometer; for his new operative procedures for which he invented a set of instruments. A skilful artist, he illustrated his books and his interest in botany was the occasion for the making of an extensive herbarium. His "Guide to Flowering Plants," 1910, was illustrated by reproductions of his drawings from nature; he was also the author of "Flora of the Adirondacks," 1868. Many contributions concern the dependence of nervous conditions on ocular disorders, particularly the ocular muscles. His works include: "Three years in the Sixth Corps," 1866, "Les Maladies des Centres nerveux," 1883, "Functional Nervous Diseases," 1884, "Les muscles moteurs de l'Oeil et l'Expression du Visage," 1892, "Coaching through North Wales," 1895, "A Treatise on the Motor Apparatus of the Eyes," 1905, and "A Series of Studies of Nervous Affections," 1911.

On April 17, 1861, he married Harriett Weeks Wadhams; they had two daughters and a son, Charles Wadhams Stevens, now practicing ophthalmology in New York City. Doctor Stevens died at his home in New York, on January 30, 1921. He was modest and retiring; had a wide range of knowledge and was an excellent Greek and Latin scholar and also was well versed in theological literature. He was a delightful speaker in public but was timid about crowds and in meeting notable people.

STEVENS, Thaddeus Morrell (1829-1885), of Indianapolis, largely instrumental in the establishment of the state board of health, was a nephew of the political leader for whom he was named, and the son of a jurist of Indianapolis, where Thaddeus was born and died. His dates were August 29, 1829, and November 8, 1885. After graduating from private schools in his native city, he studied medicine under Dr. J. S. Bobbs (q. v.), and was graduated from the Indiana Medical College in 1853, having spent some time in study at the Jefferson Medical College. At

first he settled in practice at Fairland, Indiana, but soon removed to his native city. In 1870 he became professor of toxicology, medical jurisprudence and chemistry in his alma mater and in 1874 occupied the same chair in the College of Physicians and Surgeons. He had a taste rather for medical literature than for practice, became editor of the "Indiana Medical Journal" and devoted himself to state medicine, writing articles for the meetings of the state medical society on the treatment of the criminal insane, medicolegal science, state boards of health, the need of hospitals in Indiana and other topics. At last a state board of health was established and Dr. Stevens became its first secretary and executive officer. Shortly before his death a state hospital was established for the benefit of the sick poor. When he died he left a widow and two sons. Most of his writings are to be found in the transactions of the Indiana State Medical Society.

STEVENSON, Henry (1721-1814), pioneer inoculator of Maryland, was born at Londonderry, Ireland, in the year 1721, and educated at Oxford, England. With his brother, John, also a physician, he emigrated to Baltimore about the middle of the eighteenth century. According to George W. Archer, he and Dr. Alexander Stenhouse settled in the sixth decade of the century in Bush River Neck, Baltimore County, and there married sisters. In 1756 he erected a stone mansion, which he called "Parnassus," but which his neighbors called "Stevenson's Folly," on the banks of Jones Falls, just north of the present city of Baltimore. This was connected with the town by a long trestle bridge over the meadow or marsh. Here he maintained, at his own expense, an inoculating hospital from 1768 to 1776, and again after the Revolution, from 1786 to 1800. In 1765 he was styled "the most successful inoculator in America." He did not confine his operations to Baltimore but went out into the counties to inoculate the people of the state. Among those who submitted to inoculation at his house was Gen. James Wilkinson, afterwards commander-in-chief of the American Army, and he has left an account of the event in his "Memoirs," vol. i, p. 11. It may be interesting to note that the charge for inoculation was two pistoles, and for board and lodgings, twenty shillings a week. At the outbreak of the Revolution Stevenson espoused the royal cause and left Baltimore on the declaration of independence. His brother John left with him although he had founded the trade of Baltimore and had the title, "Romulus of Baltimore." Henry, however, after holding office as surgeon in the British Navy from 1776 to 1786, returned in the latter year and continued to practice in Baltimore until his death, March 31, 1814. Henry Stevenson was one of the founders of the Medical and Chirurgical Faculty of Maryland in 1799. In his treatment of yellow fever during the epidemic of 1797, he reported sixty-seven cases of the disease in his practice from July to October in that year with but six deaths. In the treatment he used no venesection, and little calomel, but tonics freely. Dr. Stevenson left numerous descendants in Maryland. He was married three times; first to Miss Stokes of Hartford County, and had a son and daughter, George and Martha; second, to Anna, daughter of the Rev. John Henry, and had two sons and two daughters, Cosmo, Gordon, Anna, Julia; third, to Ada C. Bondell, no issue. In the Maryland Med. Jour., Centennial Number, April 29, 1899, there is a picture of Dr. Stevens, also of his house "Parnassus."

EUGENE F. CORDELL.

STEVENSON, Sarah Hackett (1849-1910), pioneer woman physician of Chicago, was the daughter of Col. John Stevenson, and was born at Buffalo Grove, Illinois, February 2, 1849, of Scotch-Irish ancestry. Her grandfather, Charles Stevenson, came to this country after the Irish Rebellion of '98, purchasing large tracts of land in Ohio and Illinois. Her grandmother was Sarah Hackett of Philadelphia. She took her degree from the Woman's Medical College of the Northwestern University and in 1874 went to Europe for two years' study and was fortunate in having a biological training under Huxley and Darwin, fitting her to fill the chair of physiology in the Woman's Medical College to which she was later appointed. Upon her return to Chicago in 1876, she began to practice. She became a member of the Illinois State Medical Society and was sent as its delegate to the Annual Meeting of the American Medical Asociation held in Philadelphia in 1876, to the same association, which five years before had laid on the table, without a vote, the hotly discussed motion of admitting women as members. She was the first woman to serve on the staff of the Cook County Hospital, and was admitted to the International Society of Obstetricians and Gynecologists at

Brussels, became vice-president of the Pan-American Congress at Washington, was a member of the Chicago Medical and Chicago Medico-surgical Societies, was president of the National Temperance Hospital, a consultant of the Woman's Hospital, of Bellevue Hospital, and professor of obstetrics at the Woman's Medical College of Northwestern University. She was instrumental in establishing the Maternity Hospital, the Illinois Training School for Nurses and the Home for Incurables.

Dr. Stevenson was the author of a "Textbook on Biology" for beginners which had an extensive sale and was used in the schools. In 1904 she had a cerebral hemorrhage, and after six years' illness, died August 13, 1910, at St. Elizabeth's Hospital, Chicago, where she had been a patient for several years. The gathering in the hospital chapel for her funeral services was a notable one. Men and women prominent in every walk of life from East and West came to pay their last tribute to the woman whom they had admired and honored.

ALFREDA B. WITHINGTON.

STEWART, David (1813-1899), pioneer pharmacist of Delaware, was born at Port Penn, Delaware, February 14, 1813, the son of Dr. David Stewart, and was educated at Newcastle Academy, Delaware, settling in Baltimore about 1831. He was a member of the state senate in 1840 and on June 8 of that year represented the pharmaceutists of Baltimore in the founding of the Maryland College of Pharmacy. He was the first independent professor of pharmacy in the United States and lectured at the University of Maryland on that branch until 1847, where he took his M. D. in 1844. With Dr. Frick, Dr. Theobald and Dr. C. Johnston, he founded and lectured at the Maryland Medical Institute, 1847. He was chemist to the State Agricultural Society and professor of chemistry and natural philosophy and vice-president of St. John's College, Annapolis, 1855 to 1862. He removed to Port Penn, Newcastle County, Delaware, 1862, and died at that place, September 2, 1899.

Dr. Stewart was one of the most enlightened and public-spirited pharmacists of his day. To him the profession of Maryland owes the introduction of many valuable remedial agents, as collodion, cod liver oil, glycerine, gutta percha, etc. Through a committee of which he was chairman, the Medical and Chirurgical Faculty has the distinction of having been the first society in America (June 8, 1855) to propose the substitution of the decimal system of weights and measures for those then in use.

EUGENE F. CORDELL.

STEWART, David Denison (1858-1905), a physician who was noted among his Philadelphia contemporaries for his improvement in the technic of electrolytic wiring in the operative treatment of aneurysm, was the son of Franklin and Amelia Jacques Stewart, and was born in Philadelphia, October 10, 1858. He was a student of medicine at Jefferson Medical College and took his M. D. there in 1879. In 1885 he was assistant in the medical clinic of J. M. Da Costa (q. v.) under Solomon Solis Cohen and two years later was appointed lecturer on nervous diseases in the summer school at Jefferson Medical College. In later years he devoted himself especially to diseases of the stomach and intestines. He came early into notice when in Kensington, Philadelphia, by his skilful diagnosis in certain cases supposed to be cerebrospinal meningitis which he found to be lead encephalopathy caused by the local bakers using chrone yellow in cakes which were largely sold to children.

He became infected with tuberculosis in both lungs and larynx in the latter eighties but made a complete recovery under careful treatment. He died June 13, 1905, after an operation for appendicitis. Dr. Stewart was unmarried. His disposition was sensitive and his reserve sometimes took the form of impatience. He was much beloved by his patients and was passionately fond of good music. He had a supreme contempt for chicanery and for "ad captandum" methods of all kinds. As to his appointments he was clinical lecturer on medicine at Jefferson Medical College; professor of clinical medicine in the Philadelphia Polyclinic; physician to St. Christopher's Hospital for Children, and to the Episcopal Hospital; member of the Association of American Physicians, and first vice-president of the American Gastro-Enterological Association.

His first paper on the treatment of aneurysms was a contribution to the "American Journal of the Medical Sciences" for October, 1892, entitled: "Treatment of Sacculated Aortic Aneurysm by Electrolysis through Introduced Wire." His writings included many original papers, notably a third communication on "The Occurrence of an

Hitherto Undescribed Form of Chronic Nephritis Unassociated with Albuminuria," which appeared in "The Lancet" (London), September 4, 1897, after being read before the Association of American Physicians, May 1897. His most lengthy contributions to medical literature were articles on "Diseases of the Stomach," in Hare's "System of Practical Therapeutics"; "Diseases of the Spinal Cord," in Loomis' "System of Practical Medicine"; "Diseases of the Kidneys and Lithuria," in Keating's "Cyclopedia of Diseases of Children," and "Diseases of the Stomach," in Sajous' "Cyclopedia." His most important papers were on "Some Phases of Gallstone Disease," 1903; on "Primary Tuberculosis of the Kidney with Special Reference to a Primary Military Form," 1897, and the three already noted in which he called attention to a condition which had been unnoted in medical literature.

STEWART, Ferdinand Campbell (1815-1899), a founder of the New York Academy of Medicine, was born August 10, 1815, in Williamsburg, Virginia, where his father, Ferdinand Stewart Campbell, was professor of mathematics at William and Mary College for twenty years; his mother was a daughter of Samuel Griffin, colonel in the Revolutionary Army and a representative from Virginia in the first United States Congress, when his brother, Cyrus Griffin, was president of the Congress. The change of surname from Campbell to Stewart was made in 1830 when the elder Campbell fell heir to estates in Scotland and became a British subject assuming the name and the arms of the "Stewarts of Ascoy."

Young Ferdinand was educated at William and Mary, but went to Scotland with his parents in 1829 and studied under private tutors. Returning to America, he took up the study of medicine in the office of Thomas Harris, surgeon-general of the United States Navy; he took his M. D. at the University of Pennsylvania in 1837 with the thesis "Causes of Cardiac Sounds." He then went to Europe, studying until 1843 in Paris and in Edinburgh, at Edinburgh entering the office of John Thomson (1765-1846), professor of surgery at the University of Edinburgh and surgeon-general of the British Army at the battle of Waterloo. From 1843 to 1849 he practiced in New York. He had charge of certain wards in Bellevue Hospital, where he gave clinical lectures to a small class of his private medical students. When Bellevue was reorganized he was a member of the committee of medical men who drew up the plan adopted, and was appointed on the board of "visiting medical officers" made up, besides himself, of Willard Parker, James R. Wood and Alonzo Clark (q. v. to all). He was interested in and helpful in founding the New York Academy of Medicine in 1847; he was secretary of the preliminary meetings which were held in his office and acted as secretary as long as he was in New York. From 1849 to 1851 he was physician of the Marine Hospital on Staten Island, appointed by Governor Fish. In 1855 the death of his father required his removal to Europe. His health had become poor and to improve it he became surgeon on the United States mail steamship "Arago"; remaining in this position six months and in this time crossing the Atlantic eight times.

In 1838 he married, at the American Embassy, Paris, Emma, daughter of Samuel J. Fisher, of Philadelphia. He had a son, born in Paris, and a daughter, the latter the author of the "Easter Books" for the young.

His works included reports, cases, translations; he invented and presented to the Royal Academy of medicine, in 1843, a concealed bistoury, for operating on strangulated hernia.

He died at Pisa, Italy, February 11, 1899.

STEWART, Jacob Henry (1829-1884), prominent physician of St. Paul, Minnesota, was born at Peekskill, New York, January 15, 1829, and attended Phillips Academy in his native town, entering Yale College later but not graduating. He received his M. D. at the University of the City of New York in 1851, and from that date until 1855 practiced with his father, Dr. Phylander Stewart, at Peekskill. In May, 1855, his health being impaired, he went to St. Paul, Minnesota. Through his skill and learning he soon gained a leading position and in 1856 was appointed physician of Ramsey County, and in 1857 elected state senator. He received his commission as surgeon of the First Minnesota Regiment, from Gov. Alexander Ramsey, April 29, 1861. Dr. Stewart was captured at the first battle of Bull Run, while in the act of attending a wounded Confederate soldier. He was roughly handled by some of the members of the famous Virginia Black Horse Cavalry, but proved such a good fellow that they afterwards did well by him. He established a field hospital at Bull Run in Sudley Church, using the pews as beds, and the pulpit (with one of

the church doors on its top) as an operating table. He was slightly but painfully wounded in the foot, when the engagement opened, but worked unremittingly, until taken prisoner. Dr. Stewart remained in attendance upon the wounded on the battlefield, when he might have escaped with the retreating troops, and was detained a prisoner at Libby Prison. His skilful care of the wounded doubtless saved many lives and he was treated with marked consideration by the Confederates during his captivity. When Surg. Stewart was exchanged, and paroled at Richmond, Virginia, Gen. P. T. Beauregard called him to him, and asked if he had a son. Upon receiving an affirmative reply, the general returned the doctor's sword (which had been taken from him), saying: "when your son is old enough to understand, give him this, and tell him Gen. Beauregard gave back his father's sword, in recognition of his bravery, in remaining at his post of duty, when the Union Army retreated."

Gov. Alexander Ramsey, upon Dr. Stewart's return to St. Paul, appointed him surgeon-general of the state of Minnesota, an office he filled during the remaining mustering of troops. In 1864, although a Republican, he was elected mayor of the Democratic city of St. Paul. In 1879 he was surveyor-general of Minnesota, a position he retained for four years. He was president of the medical staff of St. Joseph's Hospital.

Dr. Stewart married, on October 1, 1857, Miss Katharine Sweeny of Philadelphia, Pennsylvania. Three children survived them: Mrs. Charles A. Wheaton, Dr. J. H. Stewart and Robert D. Stewart.

He died on August 25, 1884.

BURNSIDE FOSTER.

STEWART, James (1799-1864), originator of the Nursery and Child's Hospital, of New York, was the son of Charles Stewart, a wealthy merchant of that city. He was born there April 7, 1799, and began his career as a wholesale druggist in Maiden Lane, New York, afterwards studying medicine and graduating from the College of Physicians and Surgeons in 1823. He first practiced in the city of New York, and married a Miss Cushing, and had four children; one son and three daughters who survived him. In the year 1827 he founded the Northern Dispensary of New York. He paid special attention to the most obscure affections of the heart and lungs during several years of dispensary practice, and it is believed that no practitioner of New York City for many years excelled him in accuracy of diagnosis. His essay on "Cholera Infantum," which was crowned by the New York Academy of Medicine with their highest prize, is simply a record of facts and experiences gathered at the bedside through a long series of years.

In the year 1839 Stewart first became known to the profession as an author, by the publication of his translation of M. Billard's treatise on "The Diseases of Children," with an appendix of nearly one hundred pages of original matter. Stewart's treatise on "The Diseases of Children" was first published in 1841, and a second edition in 1843. His next work was entitled "The Lungs, Their Uses, and the Prevention of Their Diseases, with Practical Remarks on the Use of Remedies by Inhalation."

He used every opportunity of making himself acquainted with the effects of various professions, arts, trades, and callings on the respiratory organs, and presented the results to the profession in this work. He was also the author of several able articles and reviews in different medical journals, in particular his essay on "Dropsy Following Scarlatina," in the third volume of the "New York Journal of Medicine"; and his paper on "Animal Food in Cholera Infantum, and the Summer Complaints of Children," and his "Remarks on the Resuscitation of Persons Asphyxiated from Drowning," in the same journal.

In 1840 Amherst College conferred her honorary A. M. on him.

About the year 1853 Dr. Stewart originated a plan for the establishment of a hospital for children, and the institution was opened in 1854, under the name of the "New York Nursery and Child's Hospital." Though able to attend to his duties as medical examiner until July, 1864, chronic dyspepsia compelled him to retire to the country to recruit for a few weeks, but he died September 12 of that year, aged sixty-five.

CHARLES A. LEE.

STEWART, James (1846-1906), professor of medicine at McGill University, Montreal, was the son of Alexander Stewart by his wife, Catherine McDiarmid, and was born at Osgoode, County Russell, Ontario, on November 19, 1846. He was educated in the public school and at the Ottawa Grammar School, and in 1865 entered the School of Medicine

of McGill University, and graduated in 1869. He began to practice medicine at L'Original, afterwards at Varna, and Brucefield, then at Winchester. In 1883 he went to Scotland, where he obtained the qualification of Licentiate of the Royal College of Physicians and Surgeons of Edinburgh. In the same year he returned to Montreal and was appointed professor of materia medica and therapeutics in the Medical Faculty of McGill University. In 1884 he became registrar of the Faculty, a post which he held till 1891, and in that year was appointed to the chair of clinical medicine; in 1893 to the combined chair of medicine and clinical medicine. In addition to these university appointments he was physician to the Royal Victoria Hospital since its foundation; and in 1903 was president of the Association of American Physicians, and co-editor of the "Montreal Medical Journal." He died in Montreal on the sixth of October, 1906, in the sixtieth year of his age. At the time of his death he was professor of medicine in McGill University, and physician to the Royal Victoria Hospital. As well known in Vienna as in Montreal, he was the recipient of many honors which were not of his seeking, but were a tribute to the esteem in which he was held by the profession in Canada and the United States. His reputation was further enhanced by numerous and valuable contributions to the literature, particularly in the domain of neurology, to which he devoted special attention.

ANDREW MACPHAIL.

STEWART, Morse (1818-1906), a founder of the Detroit Medical Society, was born at Penn Yan, New York, July 5, 1818, of Scotch-Irish ancestry who had lived more than a hundred years in Connecticut ere moving to the then wilderness of West New York. His general education was obtained at a preparatory school in Pittsfield, Massachusetts, and Hamilton College, New York, where he completed the regular course at the age of twenty. He began medical studies with Dr. Samuel Foote, of Jamestown, New York, took three courses at Geneva Medical College, at Geneva, New York, and there took his M. D. in 1841. After doing some post-graduate work he settled in Detroit, Michigan, in 1842. The same year he was licensed to practice by the Michigan Medical Society. He was a founder for the first and second epochs of the Wayne County (Michigan) Medical Society; a founder of the Sydenham Medical Society of Detroit; a founder of the Detroit Medical Society (1835-59) and its first president. Stewart was very active during the epidemics of Asiatic cholera, 1849-54 and recognized the first case of cerebrospinal meningitis occurring in Detroit.

Dr. Stewart was married twice; first to Miss Hastings, by whom he had no children; second to Isabella, daughter of the Rev. George Duffield. She died in 1888, leaving three sons and two daughters. Two of the sons, Morse, Jr., and Duffield, became physicians. Stewart and his second wife were large factors in the founding and conduct of the Detroit Home for the Friendless; the Thompson Home for Old Ladies; and Harper Hospital (Detroit). Except for them the money for Harper Hospital would have gone to endow the First Presbyterian Church.

He was about five feet nine inches tall, of spare and slender build, large head covered with abundant hair to the end, high forehead, prominent nose, firm, sensitive mouth and chin, always a smooth shaven face, fine blue eyes protected by projecting bone and eyebrows. His carriage and manner were characteristic of an old-time educated gentleman. He was crippled in many ways by deafness, and a temper which occasionally got the best of him.

Most of his papers and addresses were never published, for, in the period of his greatest productiveness, the facilities for publication were meager and he had an extreme modesty.

Dr. Morse Stewart practiced till October 3, 1906, when feeling weary he lay down to rest; and on October 9 quietly passed to the unknown.

LEARTUS CONNOR.

STILES, Henry Reed (1832-1909), alienist and historian of New York and Brooklyn, was born in New York City, March 10, 1832, being a kinsman of Ezra Stiles, clergyman and educator. He was a member of the class of 1852, Williams College but did not graduate, going on to the University of the City of New York, where he took an M. D. in 1855. After serving as interne at the New York Ophthalmic Hospital he practiced in New York City, in Galena, Illinois and Toledo, Ohio. Settling in Brooklyn, New York, in 1856 he engaged in publishing educational works (1857-8) under the firm name of Calkins and Stiles. From 1863 to 1869 he practiced medicine in Brooklyn and Wood-

bury, New York, in the last year becoming librarian of the Long Island Historical Society, of which he was a founder and director. In 1868-1870 he served in the Brooklyn office of the Metropolitan Board of Health and in 1870-73 he was a health inspector of the Board of Health of the City of New York. In 1873 he was appointed medical superintendent of the state homeopathic asylum for the insane in Middletown, New York, and under his direction the first two buildings were erected and its service was organized. In 1877 he removed to Dundee, Scotland, to take charge of the homeopathic dispensary there, remaining until 1881, when he returned to New York, practicing until 1888 and then opening a private establishment for the care of mental and nervous diseases at Hill View, New York. From 1882 to 1885 he was professor of mental and nervous diseases in the New York Woman's Medical College and Hospital; in 1872 he was an organizer of the Public Health Association of New York City; a founder and officer of the society for promoting the welfare of the insane in New York; a lecturer on hygiene in the New York Homeopathic Medical College; an organizer of the American Anthropological Society in 1869, and one of the seven founders of the New York Genealogical and Biographical Society, serving as its president from 1869 to 1873. Williams conferred the honorary degree of A. M. on him in 1876. Among his writings may be mentioned: "The History and Genealogies of Ancient Windsor, Connecticut," New York, 1859; "Genealogy of the Massachusetts Family of Stiles," 1863; "The Wallabout Prison-Ship Series," 1865, 2 vols.; "History of the City of Brooklyn, New York," 1867-70, 3 vols. He edited the "Illustrated History of the County of Kings and City of Brooklyn," 1884, 2 vols.

Dr. Stiles died in 1909.

STILES, Richard Cresson (1830-1873), of Brooklyn, discoverer of the parasite of Texas cattle fever, was born in West Chester, Pennsylvania, in 1830, and was educated at Yale College, where he graduated in 1851. He studied medicine with Dr. Turner, at the Kings County Hospital, Flatbush, Long Island, and took his M. D. at the University of Pennsylvania in 1854. During the next two years he continued his medical studies in Europe, chiefly in Paris. While abroad he married an American lady whom he met in Leghorn, a daughter of Dr. Thomas Wells, of New Haven, Connecticut. On his return to this country, he was appointed professor of physiology in the University of Vermont, at Burlington. He had made assiduous preparation for such a position by a long course of physiological study and investigation during his residence in Paris, and entered upon his course of instruction with a great promise, which was abundantly fulfilled. In 1858 he accepted the chair of physiology in the Berkshire Medical Institution, Pittsfield, Massachusetts. In these positions his life was eminently to his taste. He was a student, and his time was constantly devoted to study and instruction. His microscope and his laboratory had a large part of his heart. In 1859 he settled in Pittsfield, and in 1860 established, in conjunction with Dr. W. H. Thayer, the "Berkshire Medical Journal," a monthly publication, which was issued for one year. The presence of war made it an unfavorable time for a new literary enterprise, and it was discontinued at the close of the first volume. In 1862 he was impelled by patriotism to enter the United States Army. His desire for service in the field was gratified early in 1863 by his being transferred to the Army of the Potomac as surgeon-in-chief of Caldwell's Division of Hancock's Corps. He left the service in 1864 and, going to Brooklyn, received the appointment of resident physician at King's County Hospital. Dr. Stiles resigned this office after about a year's service, and practiced medicine in that city; he was, however, made one of the Consulting Board of the hospital, and retained that position during life. His lectures at Burlington were continued, with the interruption of his two years' service in the army, until 1865. In Brooklyn he took an active part in the operations of the County Medical Society and was twice elected president. It was on his suggestion that the Pathological Section was formed in 1870, and until his sickness he was a constant attendant upon its semi-monthly meetings. He had a succession of private classes in histology during his residence in Brooklyn, which were attended by young physicians who were drawn to him by his high reputation in the Society. He was a ready writer, but the papers which he left were produced in the later period of his life. They include several monographs on physiological and pathological subjects, a memoir of Haller, which was the oration of the County of Kings, and valuable contributions to the annual reports of the Metropolitan Board of Health, especially those for 1868 and 1869. That for 1868 contains an elaborate report on the

"Texas Cattle Disease," then prevailing to an alarming extent in New York, to which he contributed the results of his careful microscopic examinations. In the course of them he discovered in the bile of the infected animals a vegetable parasite which became further developed there, and which was in his opinion the cause of the disease. His enthusiasm over what promised, in its wide suggestions, to be a discovery of great value to medical science will be remembered by all his friends. He says, "The fungus origin of zymotic disease is now conceded by the highest authorities in mycological research, and the Texas fever is one which points with unusual clearness to this mode of propagation." His conclusions were confirmed by Prof. Hallier, of Jena, to whom Dr. Harris sent specimens of the infected bile. He pronounced the parasite a new discovery, and named it in honor of the discoverer, Coniothecium Stilesianum.

Dr. Stiles never was idle, and his labors continued long past the hours that belong to sleep. This was his ruin. Early and late he labored at his engrossing science, until his mental powers began to give indications of disorder, and in the summer of 1870 a grave form of insanity was developed, from which he never recovered. His general health, however, was good, and he attended more or less to practice at different times. In 1872 he traveled again in Europe. During the latter part of winter and early spring his mental disease grew more serious; and early in April, 1873, he went home to his mother's house in West Chester, Pennsylvania. There he was attacked with pneumonia of a grave form, and died after ten days' illness.

STILLE, Alfred (1813-1900), professor of medicine in the University of Pennsylvania and author of the National Dispensatory, was born in Philadelphia, October 30, 1813, the son of John and Maria Wagner Stillé, early Swedish immigrants. Dr. Stillé began his life-work with the generation which saw the new pathology and the new clinical methods. After joining in the "conic section" rebellion at Yale, which led to the retirement of one-half of the class, he seems to have had for a time a leaning toward the law. "During the years of probation," he says, "I tested the strength of my partiality for a medical career by some medical reading, including Bell's "Anatomy" and Bichat's "General Anatomy," and attending the anatomical instruction at the Jefferson Medical College. He took an A. B. at Yale in 1832 and at the University of Pennsylvania the same year, and the latter institution gave him an A. M. in 1835, M. D. in 1836 and LL. D. in 1889.

The best of luck awaited him when, in 1835-36, he became house physician at "Blockley," under W. W. Gerhard (q. v.), a clinical teacher of the very first rank, and fresh from the wards of the great French physician, Louis. While still a medical student two of his fellow-townsmen returned from abroad glowing with the fire they had caught in Paris, the then acknowledged center of medical science. Gerhard and Pennock (q. v.) were the apostles of the school of observation under whose preaching he became a zealous convert and, as soon as it was possible, hastened to the enchanted scene of their European labors.

Method and accuracy were from the first characteristic of Dr. Stillé's work. He played an interesting part in that splendid contribution of American medicine to the differentiation of typhus and typhoid fever. I will let him tell the story in his own words. In a manuscript he says: "The year 1836 is memorable for an epidemic of typhus (t. petechialis) which prevailed in the district of the city which is the usual seat of epidemics caused or aggravated by crowding, viz., south of Spruce and between Fourth and Tenth Streets. A great many of the poor creatures living in that overcrowded region, who were attacked with typhus, were brought to the Philadelphia Hospital, where I had charge of one of the wards assigned to them. I had the great good fortune to study these cases under Dr. Gerhard. His permanent reputation rests upon the papers published by him in Hays' "Journal," in which he fully established the essential differences between this disease and typhoid fever. Every step of my study of typhus in the wards and post-mortem revealed new contrasts between the two diseases, so that I felt surprised that the British physicians should have continued to confound them. I was very dilligent in making clinical notes and dissections, spending many hours every day in the presence of the disease." In an unpublished memoir of Dr. Stillé read before the Medical Society of Observation (September 14 and 28, 1838), the two diseases are compared, symptom by symptom and lesion by lesion; and, apart from the phenomena of fever common to all febrile affections, the opposite of what is observed in the one is sure to be presented in the other.

(Valleix, "Arch. gen.," February, 1839, p. 213.)

Between two and three years of study in Europe gave Dr. Stillé a fine training for his lifework. Returning to Philadelphia, he began practice, wrote for journals, taught students, and gradually there came to him reputation and recognition. After lecturing on pathology and the practice of medicine in the Philadelphia Association for Medical Instruction he was elected, in 1854, to the chair of practice in the Pennsylvania Medical College. In 1864 he succeeded Dr. Pepper (primus) (q. v.) in the chair of medicine at the University of Pennsylvania. While always a student, he was no hermit, but from the start took a deep interest in the general welfare of the profession. He was the first secretary of the American Medical Association, and president in 1867. The local societies recognized his work and worth, and he became president of the Pathological and of the County Medical Societies, and in 1885 he took the chair of the College of Physicians of Philadelphia. He was from the outset of his career a strong advocate for higher medical education, and from 1846—the date of his first address on the subject—to 1897—the date of his last—he pleaded for better preliminary training and for longer sessions. No one rejoiced more in the new departure of the University in 1876, and he was a consistent advocate of advanced methods of teaching.

His medical writings show on every page the influence of his great master. His first important work, "The Elements of General Pathology," 1848, was based on the modern researches, and every chapter echoed with his favorite motto, "Tota ars medica est in observationibus." Apart from numerous smaller articles in the journals, there are two important monographs by him—one on "Cerebrospinal Meningitis," 1867, and the other on "Cholera." In addition, two minor studies were on "Dysentery," in the publications of the United States Sanitary Commission, and on "Erysipelas." Estimated by bulk, the most important of Dr. Stillé's works are the "Materia Medica and Therapeutics" and the "National Dispensatory." It was always a mystery to me how a man with his training and type of mind could have undertaken such colossal and, one would have thought, uncongenial tasks. Dr. Stillé was not only a booklover, but a discriminating and learned student. Our shelves testify not less to his liberality than to his taste for rare and important monographs, while the Stillé Library of the University of Pennsylvania will remain a monument to his love of the literature and history of our profession. It interested me greatly, and I only knew him after he had passed his seventieth year, to note the keenness of his mind on all questions relating to medicine. He had none of those irritating features of the old doctor, who, having crawled out of the stream about his fortieth year, sits on the bank, croaking of misfortunes to come, and, with less truth than tongue, lamenting the days that have gone and the men of the past. Hear the conclusion of the whole matter—the lesson of a long and good life. It is contained in a sentence of his valedictory address: "Only two things are essential; to live uprightly and to be wisely industrious."

Dr. Stillé was twice married. His first wife had to be kept in an asylum and when she died he married an old and intimate friend.

He died in Philadelphia, on September 24, 1900.

WILLIAM OSLER.

STILLE, Moreton (1822-1855), medico-legal expert, youngest son of John and Maria Stillé, was born in Philadelphia, October 27, 1822. On his mother's side he was descended from Tobias Wagner, who was appointed chancellor of the University of Tübingen in 1662; through his father he was chiefly of Swedish descent. Taking his preparatory training at the Edgehill Seminary, Princeton, he entered the University of Pennsylvania in 1838, whence he was graduated in 1841. In 1844 he received his medical degree from the same university. His preceptor was his brother, the equally famous Dr. Alfred Stillé (q. v.). For several years Moreton studied in Dublin, London, Paris, and Vienna; then, returning home, he entered into practice and in 1848-9, became resident physician at the Pennsylvania Hospital. Recognition had begun to come and the year of his death, 1855, he was elected to a professorship, or rather lectureship, that of internal medicine in the Philadelphia Association for Medical Instruction. He wrote frequently and well, his most importing writings relating to matters connected with the subject of medical jurisprudence. His journal articles are to be found chiefly in "The American Journal of the Medical Sciences." Together with the distinguished attorney, Francis Wharton, he composed "A Treatise on Medical Jurisprudence"—a masterpiece both of science and of literary

style. This work—the first, without doubt, on the subject, produced in America by a lawyer and a physician working conjointly—passed through several editions, and was highly esteemed by both the legal and the medical professions. The parts of this work written by Dr. Stillé were the second, third, fourth, and fifth books, those on the "Fetus and Newborn Child," on "The Sexual Relations," on "Identity," and on the "Cause of Death."

Dr. Stillé was a very ambitious, as well as an able, man. On going to Europe, he wrote to his brother: "Indifferent to the present, I live only for the future; upon it my most earnest gaze is fixed, and I strive to enter its ever receding portals, to grasp its cloudy phantoms, its beckoning illusions. If I know myself, I shall not be content with a place in the crowded middle ranks of the profession." He was one of those who "toil terribly," and the result of this trait is plainly apparent in his remarkable book. He was a man of such distinguished and charming presence that he became at once the recipient, while abroad, of marked attention from such physicians as Stokes, Graves, Churchill, Hamilton, Law, and McDonnell. Dr. Stokes, in particular was very fond of him, and the two were much together on the former's rounds and at his house.

He married, in 1850, Heloise, daughter of S. Destouet, of Philadelphia, by whom he had several children.

Early in July, 1855, he was attacked by the disease from which he was to die. For the sake of his health he went to Cape May, and was at first greatly benefited. One night, however, after bathing, he thoughtlessly slept in a draught, and this exposure produced an attack of pleurisy from which he was not able to recover, owing to his enfeebled condition. August 20, 1855—the year in which Theodric Romeyn Beck (q. v.) died—he passed away, only thirty-three years of age. He never even saw a copy of his remarkable volume—for the work was not in type till some months after his death—yet he left a name which will never be erased from the annals of medical jurisprudence in America.

THOMAS HALL SHASTID.

STIMSON, Lewis Atterbury (1844-1917), New York surgeon, writer and authority on fractures, was born at Paterson, New Jersey, August, 1844, the son of Henry C. and Julia M. Atterbury Stimson.

He received an A. B. from Yale University in 1863, and entered the Union Army serving as captain and aide-de-camp on the staff of General Terry until the end of the Civil War. He was in business several years before beginning the study of medicine in Paris; after three years there he returned for a final year at the Bellevue Hospital Medical College, where he took his degree in 1874. He occupied the chair of physiology in the New York University Medical College, 1883-1885; that of anatomy from 1885-1889; of surgery, 1889-1898. For several years he was attending physician to the Presbyterian Hospital, resigning in 1888 to become surgeon to the New York Hospital and House of Relief. At this latter institution he gained the rich experience in traumatic surgery which formed the basis for his book on fractures and dislocations. Both of these hospitals were served without interruption for nearly twenty-two years until 1909, when he became a member of the consulting staff; he was, also, visiting surgeon to Bellevue Hospital.

Stimson served on the New York State Board of Regents, 1893-1904. In 1900 he received the degree of LL. D. from Yale. When Cornell University Medical School was organized, in 1898, he became its professor of surgery. It was through Stimson and his friend, Henry F. Dimock, that his classmate at Yale, Colonel Oliver Hazard Payne, became interested in establishing the Medical College at Cornell. His wisdom in keeping the needs of the School before Colonel Payne insured the latter's continued generosity. Stimson's interest in the college was unbounded. As a member of the college council he was always present at its meetings during his twenty years of service. Stimson Hall stands at Ithaca, a memorial to his services to Cornell and to medical education. His own personal efforts brought about the affiliation of the Cornell school with the New York Hospital in 1912.

Stimson was an authority on fractures, an active agent in the early introduction of antiseptic surgery, and his works, written in classical English, showed unusual literary skill and judgment, and profound knowledge. He was the first to set the gynecological egg of Columbus on end by advocating the use of individual ligatures to the four cardinal uterine vessels in hysterectomy for fibroid tumors. This simple suggestion was the chief agent in transforming a hazardous into a comparatively safe procedure. (See "Medical News," Phila. July 27, 1889, vol. 55, p.

95.) Stimson was liked as a teacher and his personality was a great force in the community in which he lived; the development of the New York Hospital on new lines was due to his influence with the trustees. He began his active professional life by writing upon "Bacteria and Their Influence upon the Origin and Development of Septic Complications of Wounds" (Wood prize essay, 1875); in 1893, he wrote an appreciation of "Pasteur's Life and Work in Relation to the Advancement of Medical Science." His great work was the "Treatise on Fractures and Dislocations," 1883, which reached its eighth edition; it has been called a "Classic of bibliographic thoroughness and scientific critique."

Henry A. Stimson, clergyman, and John W. Stimson, artist, were his brothers. His son Henry L. Stimson, was Secretary of War in President Taft's cabinet. During the European war (1914-18) Stimson made two visits to France. While these were primarily on missions of relief for French war orphans, they included visits to the military hospitals and observations of the treatment there of compound fractures, which he incorporated in his last edition.

He died suddenly at his home in Shinnecock Hills, Long Island, September 17, 1917.

HOWARD A. KELLY.

Stites, John (1780-1807), early practitioner of Cincinnati. See Cyclopedia American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii, p. 416.

Stockbridge, Tristram Gilman (1806-1871), early physician of Bath, Maine. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912 vol. ii, pp. 417-418.

Stockwell, Cyrus M. (1823-1899), pioneer physician of Michigan. See American Medical Biographies, H. A. Kelly & W. L. Burrage, Balto. 1920, p. 1109.

STONE, Alexander Johnson (1845-1910), medical editor, educator and gynecologist of St. Paul, Minnesota, was born in Augusta, Maine, September 7, 1845. He received his education in the public schools, then took up the study of medicine and was graduated from Berkshire Medical Institution, Pittsfield, Massachusetts, in 1867. After spending a few months abroad, chiefly in Paris, he returned to Boston, where he served as an assistant of Horatio R. Storer (q. v.) for about a year, during which he received special training in the then rapidly developing specialty of gynecology. Going to Minnesota some time in 1868, he first settled in Stillwater, where he engaged in general practice. But his cherished ambition to practice his chosen specialty made him remove to St. Paul in 1870. In 1871 he founded the first medical publication in the Northwest, "The Northwestern Medical and Surgical Journal," of which he was editor and proprietor, and to which he was a large contributor. After a career of three or four years this rather pretentious publication was, for some reason, discontinued. He did not again enter the field of medical journalism until 1886 when he became editor and proprietor of "The Northwestern Lancet," which continued under his guidance and management until 1901. He loved to teach, and was a fluent speaker, with ability to impart knowledge in an interesting and impressive manner. He was the pioneer of medical teaching in the Northwest, having organized the St. Paul Medical School, in 1871. It was intended by giving a preparatory course in medicine to supplement the instruction given by preceptors in those days. The success of this undertaking led to the establishment of the St. Paul Medical College in 1879 where a full course of medicine was offered. From this time on he was identified with practically every venture in medical teaching in the Twin Cities up to the establishment of the College of Medicine of the University in 1888. In this school he ably filled the chair of diseases of women from its organization to the time of his death, on July 16, 1910. He served as president of the State Medical Association, the Association of Medical Editors, the Association of Military Surgeons, and as vice-president of the American Medical Association. In 1887 the Iowa State University conferred upon him her LL. D. At the time of his death he was surgeon-general of the State of Minnesota, and with dignity filled that position. He was also much interested in matters of public health. In 1895 he was appointed Commissioner of Health of the city of St. Paul, and under his administration was established and organized the public bacteriological laboratory.

JOHN L. ROTHROCK.

STONE, Richard French (1844-1913), editor and compiler of "Eminent American Physicians and Surgeons," was the son of Samuel Stone. He was born near Sharpsburg, Kentucky, April 1, 1844, of English and Scotch-

Irish lineage, his paternal ancestors having been pioneers in Virginia and Kentucky. His grandfather was a man of powerful physique, an associate of Daniel Boone and his grandmother, a daughter of Judge Richard French, a Kentucky orator. Young Stone grew up on his father's farm, attended the local schools and studied medicine under Dr. J. B. Cross, finally entering Rush Medical College at Chicago in 1863. He soon left, however, to act as hospital dresser and ambulance attendant in the Union Army. In 1864-5 while serving in the medical department of the Army, he had an opportunity to attend courses of medical lectures in Philadelphia and received his M. D. from the University of Pennsylvania during the centennial anniversary of its foundation, March 11, 1865, when he lacked a few days of being twenty-one years of age. Following graduation, Dr. Stone served as acting assistant surgeon in the army, helped care for a severe epidemic of yellow fever in Florida, had charge of a post hospital at Monticello and was released from duty at his own request in 1866, settling in practice at New Albany, Indiana, in 1867. Here he stayed until 1880, when he removed to Indianapolis to assist in the founding of the Central College of Physicians and Surgeons, in that city, becoming professor of materia medica, therapeutics and clinical medicine. Soon he became a member of the consulting and clinical staff of the Indianapolis City Hospital and City Dispensary and this position, as well as membership on the board of medical examiners for physicians seeking positions at these institutions, he held until his death. From 1883 until 1890 he was visiting physician to the Indiana Institute for the Blind, publishing, for the first time, annual reports concerning the health of the pupils, the sanitary condition of the buildings and statistics as to the causes of blindness. From 1885 to 1895 he was United States Examining Surgeon of the Pension Bureau at Indianapolis and he served as medical examiner to several life insurance companies and as a member of the Governor's staff.

His contributions to medical literature were not numerous but his interest in writing was such that he learned to write well. In 1885 he published "Elements of Modern Medicine," and in 1894, he gathered together 1,208 biographies of living and dead American physicians, under the title: "Biography of Eminent American Physicians and Surgeons," a quarto of 729 pages, illustrated by photo-engravings, published in Indianapolis in that year, a second edition in 1898. This was a valuable contribution and represents a great deal of labor spread over a series of years. Most of the biographies of those physicians who were living at that time were autobiographies and those collected from the past were carefully edited, so that although the unworthy too often found places, the book is still a mine of useful information to the student of medical biography. Stone's name should be kept in grateful remembrance by the medical profession of the United States.

Dr. Stone married Matilda C. Long, of Maysville, Indiana, November 24, 1869, and they had one son. R. French Stone practiced medicine, surgery and obstetrics. He was quiet and reserved in manner, and rather diffident unless in the company of those he knew well. Later in life he experienced financial reverses and disappointments that led to his sudden taking off in his office by his own hand, October 3, 1913.

WALTER L. BURRAGE.

STONE, Robert King (1822-1872), anatomist of Washington, D. C., was born in 1822, in that city. His ancestors were among the earlier settlers of Washington; both contributing to its progress and prominently identified with its establishment and prosperity. At an early age he entered Princeton College and ranked among its brightest scholars. After receiving his A. B., in 1842, he returned to Washington, and worked under Dr. Thomas Miller (q. v.). Dr. Miller selected Stone as his assistant in the dissecting room, considering him a close and minute dissector, good in anatomical studies and especially in minute anatomy. After attending a course of lectures in the National Medical College, District of Columbia, Stone went to the University of Pennsylvania, where he took his M. D. in 1845, and in 1849 that of the University of Louisville. In 1846 he went to Europe and walked the hospitals of London, Edinburgh, Vienna and Paris, paying particular attention to ophthalmic surgery and ear diseases. He was the private pupil of the celebrated Desmarres, assisting him in operations. At the same time he did not neglect his favorite studies of comparative anatomy and operative surgery. Returning to Washington in 1847 he began general practice and became assistant to the chair of anatomy in the National Medical College and was in 1848 appointed adjunct professor of the chair of anatomy and physiology, and afterwards pro-

fessor of anatomy, physiology and microscopic anatomy. A ready and fluent lecturer, he always illustrated his lectures by the most beautiful drawings and diagrams made by himself. Having a decided preference for ophthalmic and aural surgery, he was appointed to that chair, earning enduring laurels in the position. He was thrown from his carriage and his thigh was fractured and never afterwards engaged in active practice. Resigning his position in the college, he devoted himself to private patients, principally for ophthalmic and aural surgery. He died suddenly in Philadelphia on April 23, 1872, from apoplexy.

In 1849 he married a daughter of Thomas Ritchie, the founder, in 1804, of the "Richmond Enquirer," and in 1845 of the "Washington Union." DANIEL SMITH LAMB.

STONE, Warren (1808-1872), one of New Orlean's most noted surgeons, was born in St. Albans, Vermont, on February 3, 1808, the son of a farmer, Peter Stone, who married Jerusha Snow. As a boy young Warren inclined to study medicine and left home to do so under Dr. Amos Twitchell (q. v.) in Keene, graduating M. D. from the Berkshire Medical Institution at Pittsfield, Massachusetts, in 1831, but patients proving scanty, he went off in the "Amelia" to New Orleans. Cholera broke out and the passengers were landed on Folly Island near Charleston, and housed there. Stone helped with the cases but caught the disease and when landed in December at New Orleans was sick, poor, and insufficiently clothed. Dr. Thomas Hunt (q. v.), who had nursed him at Folly Island and previously seen his good work, got him at last the post of assistant surgeon at the Charity Hospital. In 1836 he became resident surgeon, then lecturer on anatomy and finally professor of surgery in the University of Louisiana, a post he held until his resignation in 1872. In 1841 he lost one of his eyes from a specific inflammation contracted in an operation.

In 1843 he married Malvina Dunreath Johnson, of Bayou Sara, and one son, Warren, (q. v.) became a surgeon.

Stone was noted as much for his diagnostic skill as his surgery; his judgment was unequalled and his attention to after treatment was painstaking. He did much to inculcate the propriety of opening diseased joints and improving surgical technic. He was the first to advise thoracotomy with drainage and the removal of a rib in cases of empyema. As a writer too he was good, and he ably edited "The New Orleans Medical and Surgical Journal" for ten years, his articles appearing chiefly in that and the "New Orleans Monthly Medical Register." They included: "Ligature of the Femoral Artery," "Ligature of the Carotid Artery," "Operation and Removal of One-half of the Inferior Maxilla," "Comminuted Fracture of the Thigh." He had a most wonderful memory and never used any notes in his didactic lectures or forgot any fact he read. He remembered patients who had been to him years before. He died in New Orleans on December 6, 1872, of diabetes mellitus followed by gangrene.

STONE, Warren (1843-1883), surgeon, was born in New Orleans, Louisiana, in 1843, and was not only known as the son of Warren Stone (q. v.) but also for his own good work. Educated at the Jesuit College, New Orleans, he afterwards served during the war in the Confederate Army and when he went home settled down to study medicine, graduating at the University of Louisiana in 1867 and getting the appointment of professor of surgical anatomy when the Charity Hospital Medical College was opened in 1874, just a year before he made what he thought to be the first recorded cure of traumatic aneurysm of the subclavian artery by digital pressure. Like his father, he gave great attention to the subject of yellow fever. When it was epidemic in Brunswick, Georgia, and the Southwest, he travelled about from one village to another healing and comforting the sick. He did not long survive the death of his father, dying on January 3, 1883, in New Orleans of Bright's disease, his death a distinct loss to the city for he was justly regarded as one of her most accomplished and promising surgeons.

STORER, David Humphreys (1804-1891), Boston obstetrician and naturalist, was born in Portland, Maine, March 26, 1804, the son of Woodbury Storer, the Chief Justice of the Court of Common pleas of Portland. He was graduated from Bowdoin in 1822 and received the degree of M. D. from the Harvard Medical School in 1825. After an apprenticeship as house student in the office of Dr. John C. Warren (q. v.), he soon obtained an excellent practice, paying special attention to obstetrics, and gradually rose to be one of the most highly respected physicians of Boston. At an early time he took great interest in teach-

ing and in 1837 with the coöperation of Drs. Edward Reynolds, Jacob Bigelow and Oliver Wendell Holmes (q. v. to all), he was active in the establishment of the Tremont Street Medical School, an institution founded largely as a protest against the formal and inefficient instruction of the Harvard Medical School of those days, which offered a school year of only four months. As a result of the great success of the Tremont Street School before long Harvard found itself forced to take it over bodily, and its corps of teachers became highly honored Harvard professors. Dr. Storer accepted the chair of obstetrics and medical jurisprudence, which he held from 1854 to 1868 and he also served as dean from 1855 to 1864. As a teacher he was one of the best that the medical school has ever had, not at all of the modern scientific type, but the teacher who possesses the secret of being able to communicate his own intense enthusiasm to his students. As dean he felt very strongly his responsibility for his charges and as a result his home was the rendezvous of the many students who in those days flocked to Harvard from distant places. In addition to the claims of a very large general and obstetrical practice and of the position of visiting physician to the Massachusetts General Hospital (1849-1858), and to the Boston Lying-In Hospital (1854-1868), and to the many demands made upon his time by the medical school, Dr. Storer was an ardent and very active naturalist. Joining the Boston Society of Natural History at an early age, he soon became a constant contributor to its proceedings and under its auspices published in 1846 "A Synopsis of the Fishes of North America" and in 1867 "A History of the Fishes of Massachusetts," monographs still highly esteemed by specialists. His fine collection of shells he left by will to Bowdoin College. He contributed over 125 papers to medical literature, several being in book form. He wrote the report on the Fishes and Reptiles of Massachusetts, ordered by the legislature and published in 1839.

Dr. Storer married in 1829 Abby Jane Brewer, a descendant of Governor Dudley of Masachusetts Bay Colony. Of his five children one son, Dr. Horatio Robinson, (q. v.) living in Newport, Rhode Island, was till 1872 one of the pioneers in gynecology and in his later years a writer on medical numismatics of international repute; another son, Francis Humphreys, was for many years profesor of agricultural chemistry at Harvard University and Dean of the Bussey Institution; while a third, Robert Woodbury, served throughout the Civil War.

Dr. Storer was a fellow of the American Academy of Arts and Sciences, member of the Massachusetts Medical Society, president of the American Medical Association, member of the Obstetrical Society of Boston (of which he was a founder), member of the Boston Society for Medical Improvement, and honorary member of the Medical Society of the State of New York. He was given the degree of LL. D. by Bowdoin in 1876.

He was very distinctly a physician of the Old School, wearing till his final illness the "swallowtail" coat so beloved of an earlier generation. He was idolized by his patients and his impetuous and unconcealed intolerance of anything he thought mean or little went far to increase the kindly esteem in which his fellow citizens held him.

At the Boston Medical Library there is a most excellent portrait of him by Vinton, the cost of which was defrayed by a number of medical friends.

MALCOLM STORER.

STORER, Horatio Robinson (1830-1922), a noted figure in gynecology and in medical numismatical circles in Boston in the middle of the nineteenth century, was born in that city February 27, 1830, the son of David Humphreys Storer (q. v.), eminent obstetrician and naturalist of Boston, and Abby Jane Brewer, a descendant of Governor Dudley of the Massachusetts Bay Colony. He was graduated from Harvard College in 1850, where he was a private pupil of Louis Agassiz and Asa Gray, and from Harvard Medical School in 1853. The next two years were spent in study in Paris, London, and Edinburgh; in the last city serving as private assistant to Sir James Y. Simpson. In 1855, he established himself in his native city as a specialist in gynecology, a new department of medical practice, while assisting his father who lectured at Harvard. In 1865, he was awarded a gold medal and a prize of $100 by the American Medical Association for an essay on "Physical Evils of Forced Abortions." During the same year, he accepted the chair of obstetrics and medical jurisprudence in the Berkshire Medical Institution at Pittsfield, a position held nominally for four years although the college closed its doors officially in 1867. In order to better fit himself for teaching medical jurisprudence, he attended the Harvard Law School and took the degree of LL.B. in 1868. For several years, he delivered

in Boston a semi-annual course of lectures upon the surgical diseases of women, popular among graduates in medicine from all parts of the country. He was visiting physician to the Boston Lying-in Hospital, St. Elizabeth's Hospital, and St. Joseph's Home; visiting surgeon to the New England Hospital for Women and Children; and consulting surgeon to the Carney Hospital.

Dr. Storer was one of the founders and at one time president of the Boston Gynecological Society, established on lines similar to the Obstetrical Society of Boston (1861). In 1870 he was secretary of the society, composed at that time of seventeen members. He was also a member of many foreign medical societies and an active member of the American Numismatic Association.

With Dr. (Sir) William O. Priestly of London, he edited "Obstetric Memoirs and Contributions of Professor (Sir) James Y. Simpson of Edinburgh" (1855) and with F. F. Heard, "Criminal Abortion, Its Nature, Its Evidence, and Its Law;" he was the author of "Criminal Abortion in America" (1859), "Why Not?—A Book for Every Woman" (1865), "Is it I?—A Book for Every Man" (1869), "On Nurses and Nursing, with Special Reference to the Management of Sick Women" (1868); and he was founder and editor of the "Journal of the Boston Gynecological Society" from 1869 to 1873—his co-editors being Winslow Lewis (q. v.) and George H. Bixby. In 1871, he was president of the Association of American Medical Editors.

In 1872, Dr. Storer's health failed and he went abroad, spending most of the next five years in Italy, where he wrote: "Southern Italy as a Health Station for Invalids" (1875). On his return he settled in Newport, Rhode Island, where he lived until his death, taking an absorbing interest in civic affairs and founding a natural history society. A remarkable collection of medical medals, which he began to accumulate in 1878, soon after his return from abroad, was presented to the Boston Medical Library in 1900, to be known as the "Storer Memorial Collection of Medical Medals," in memory of David Humphreys Storer. It is cared for by his son, Dr. Malcolm Storer of Boston, as curator. The collection has been enriched yearly by gifts of the donor and others and is now considered by numismatists the largest of all special collections, both in numbers and in the breadth of the field covered. On his ninety-first birthday, Dr. Storer was presented with a loving cup by the citizens of Newport in recognition of his public health work for nearly fifty years. Fordham, New York, gave him her LL. D. in 1912, and in 1918, he received the gold Liberty Service medal of the National Institute of Social Sciences for his work in aiding the control of pestilence among soldiers and sailors of the United States.

His wife was Elvira Gilmore, who died some years before him. He was survived by three sons and a daughter—John H. Storer, of Waltham; Dr. Malcolm Storer, of Boston; Frank Storer, of Miami, Florida; and Miss Agnes Storer of Newport.

Although an invalid for many years, Dr. Storer died after an illness of six months on September 18, 1922, at his home in Newport, aged 92, Harvard's oldest living graduate.

WALTER L. BURRAGE.

STOY, Henry William (1726-1801), pioneer clergyman and physician of Pennsylvania, was born in Herborn, Germany, March 14, 1726, and first studied theology, being ordained for that work in America in 1752. He settled in Lebanon County, Pennsylvania, but in 1756 removed to Philadelphia on account of his health, where he married Maria Elizabeth Maus. The marriage caused a great deal of dissatisfaction in the congregation, and resulted in his resignation and removal to Lancaster in October, 1758. In the early part of 1763 he resigned and returned to Europe, the Amsterdam classes reporting that he attended their meeting May 3, 1763. It is reported that he went to Leyden and studied medicine, but the matriculation books do not reveal his presence there. As a matter of fact he went to his native town, Herborn, and studied medicine with Prof. John Adam Hoffman, who was professor of the university until 1773. He returned to America, probably in 1767, for in November of this year he wrote to Holland that he had returned, had had several calls and concluded to accept Tulpehocken, the present Host church in Berks County. He was, however, not in good standing with the church authorities in Pennsylvania, who declined again to receive him as a member of the Coetus, or Synod, not for any moral delinquencies, but because of his disputation with many of the ministers and for the further reason that he was regarded as a "stirrer up of strife." He left the Host church about 1772 or 1773 and moved to Lebanon and began the active practice of medicine. While practicing, he also preached at various places, and was pastor to several country congregations. Like some of

the physicians of more modern times, he rated himself as a statesman and took an active part in politics. In 1779, during the Revolution, he wrote a letter addressed to Joseph Reed, president of the Supreme Executive Council of Pennsylvania, on "The Present Mode of Taxation," advocating a single tax on land, and he has the honor of being the first single tax man in the country, though his ideas differed from the single tax theories of the present day and were impracticable. He was elected to the Pennsylvania Legislature in 1784, and wrote frequently on political subjects for the papers. Highly educated, he was fluent in German, Latin, and English, but it was as a physician that he gained greatest prominence and came to be known far and wide, not as a preacher, but as a doctor. His cure for hydrophobia and his hysteric drops, or "mutter tropfen," gave him great notoriety, and people sent long distances for the remedies. In Gen. Washington's account book, sold at Birch's auction sale, in 1890, and bought by Mr. Aldrich for $400, appears this record: "Oct. 18, 1797. Gave my servant, Christopher, to bear the expenses to a person at Lebanon in Pennsylvania celebrated for curing persons bit by wild animals, $25.00."

Whether Dr. Stoy's success in curing the disease was due to the remedy or to the fact that possibly only a small per cent. of the so-called rabid dogs are afflicted with rabies, we are unable to say, but from the ingredients it contained we are led to believe there was not much virtue in it. The remedy consisted of one ounce of the herb, red chickweed, four ounces of theriac and one quart of beer, all well digested, the dose being a wine glassful. Red chickweed is supposed to be antivenomous, nervine and stimulating. For the information of the medical fraternity I can say his noted hysteric drops, or "mutter tropfen," were made of opium, castor, saffron and maple seed, each one dram, and Lisbon wine four ounces; possessing anodyne and antispasmodic properties they were doubtless beneficial in nervous disorders. That Dr. Stoy was a progressive physician, keeping abreast of the times, is shown by the fact that he was active in introducing inoculation for the smallpox, although there was a great prejudice against it as an attempt to thwart Providence.

After an eventful life, he died in Lebanon, September 14, 1801, and was buried at the Host Church, in Berks County.

FRANCIS R. PACKARD.

STRIBLING, Francis Taliaferro (1810-1874), Virginia alienist, was born near Staunton, Virginia, on the twentieth of February, 1810, and after receiving a good education, was for some years employed in assisting his father, clerk of Augusta County. He then took a course of lectures at the University of Virginia, and another in the University of Pennsylvania, taking his M. D. from the latter in 1831 and settling to practice in his native town. In 1836, when only twenty-six, he was elected physician to the Western Lunatic Asylum of Virginia, and in 1840, superintendent. He was one of the prime movers in the organization of the Association of Medical Superintendents of Institutions for the Insane in 1844, and was a member during the rest of his life. He was an honorary member of the Medical Society of Virginia. His entire time was devoted to the management of the asylum and the care of his unfortunate patients, the number of whom increased during his administration from seventy-two to more than 350. Possessing great professional ability, extensive knowledge of mental disorders, together with evenness of temper, and inflexible firmness, he was peculiarly fitted for the position. He entered most heartily into that spirit of reform, then growing in strength, that the insane were the subjects of disease rather than demoniacs possessed of an evil spirit, and was an ardent advocate of the modern humane and rational methods of treatment. His success gained for him an extended reputation, and he was regarded as an authority in his native State on all questions connected with his specialty. He took, also, an active interest in the establishment of a State institution for the deaf, dumb and blind, and was one of those influential public men who effected the founding of one at Staunton. As early as 1845 he began to urge the establishment of a hospital exclusively for the colored insane, and never ceased to bring it to the attention of the Legislature until his object was accomplished.

His only known writings are his annual reports, which were considered models of their kind. He was also the author of some valuable laws governing the hospitals for the insane, which were passed by the Legislature.

He married Henrietta F. Cuthbert, of Staunton, in 1833, and had three daughters and a son. He died at his home in Staunton on the twenty-third of July, 1874.

The Western State Hospital owns a portrait of him.

ROBERT M. SLAUGHTER.

STRINGHAM, James S. (1775-1817), the earliest professor of medical jurisprudence in America, and the earliest American writer on that subject, was born in New York City in 1775, where his parents gave him the foremost educational advantages of the time. After taking his degree from Columbia College in 1793 he began to study theology, but, by reason of delicate health, ceased for a time all study and afterwards his liking and attention both turned in the direction of science and medicine. To Edinburgh, therefore, the medical Mecca of the time, he went, and there received in 1799 his medical degree. Shortly after his return to New York (in 1804) he was appointed professor of chemistry in Columbia College, and prepared and delivered a course of lectures on medical jurisprudence, the first in America. When, in 1813, the medical faculty of Columbia was merged with the faculty of the College of Physicians and Surgeons, Dr. Stringham was very naturally appointed to the chair of legal medicine. His lectures were always clear, forceful, and interesting, and were greatly enriched by his wide and varied learning. These lectures were published in the "American Medical and Philosophical Register" in the following year (1814) and are highly prized at the present day by all interested in the development of American medical jurisprudence.

For the greater part of life Dr. Stringham was a sufferer from organic heart-disease. On several occasions he was obliged on this account to cease his professional work. In 1817, on the advice of his friends, he proceeded to the island of St. Croix, seeking relief from his terrible infirmity. But no relief came except death, which occurred on June 28, of the same year.

THOMAS HALL SHASTID.

STRONG, Nathan (1781-1837), the first to write on spotted fever, was born in Hartford, Connecticut, April 17, 1781, the son of Dr. Nathan Strong, an eminent divine, and Anne Smith Strong. He was graduated in arts from Williams College in 1802 and received the same degree, "causa honoris" that year from Yale; in 1805 he got the A. M. from both Yale and Williams. Two years later a complaint of the lungs caused him to abandon the study of theology for medicine, pursued under Mason F. Cogswell (q. v.). In 1810, he submitted a thesis upon petechial or spotted fever before the Connecticut Medical Society, the first published brochure in the world upon this subject. Strong was prominent in the affairs of the medical society until his resignation in 1821.

He died in Hartford, August 2, 1837.

STRONG, Nathaniel (1783-1867), born of English parentage in 1783, in Northampton, Massachusetts, served as surgeon in the War of 1812, and before coming west made a trip around the world, presumably as ship's surgeon. The printed announcement of the Censors of the Seventh District Medical Society shows that he was licensed to practice November 6, 1817, and settled in Centerville, a small village in Montgomery County, Ohio, but available details of his professional life are meager, his special claim for recognition resting upon a paper written in 1818. This essay, which discusses the whole subject of reproduction, and displays the alert observer and a remarkable familiarity with comparative anatomy, is still in existence. In it the modern doctrine of ovulation and menstruation is distinctly and clearly taught, thus antedating by four years Doctor Powers, of London, who is credited with the discovery, although it was not generally accepted until Négrier, in 1831, proved its truth by his beautiful anatomical preparations. When written (1818), Dr. Strong's manuscript was sent to a prominent medical journal, but was rejected, presumably on account of the obscurity of the author. But for this rejection, a man of genius and original thinker, though only a backwoodsman, would today stand before the world as the discoverer of one of the fundamental facts in the physiology of generation.

WILLIAM J. CONKLIN.

STRUDWICK, Edmund Charles Fox (1802-1879), pioneer practitioner of North Carolina, was born in Orange County, in that state, on March 25, 1802, at Long Meadows, about five miles north of Hillsboro, the county seat. His lineage was ancient and long-established in the community, his father being an important political factor and distinguished for those qualities which afterward graced his son. Edmund's medical studies began under Dr. James Webb, and he became a doctor of medicine at the University of Pennsylvania on April 8, 1824. He served for two years as resident physician in the

Philadelphia Almshouse and Charity Hospital. Of the North Carolina State Medical Society he was a charter member and the first president. All kinds of surgery attracted him and he sought for it. Scores of operations for cataract were performed by him, according to the now obsolete needle method, without losing an eye. If there was any special operation for which Dr. Strudwick was famous, it was that of lithotomy. Certainly he was the leading lithotomist of his time in North Carolina. He lived in a section of the State where this affection abounded. His custom was always to do the lateral operation and to introduce no tube or other drainage unless there was hemorrhage. It is said that he did twenty-eight consecutive lithotomies without a death. One case in particular has come down to us—a very large stone, wedged into the trigone and assuming its shape. On the posterior surface grooves had formed along which the urine trickled from the ureteral openings. After making the incision and finding that the calculus was too large to extract entire, Dr. Strudwick sent to the blacksmith's, secured his tongs and crushed it. Fortunately, the stone was of the soft phosphatic variety. Many breast amputations were done. In all cases he cleaned out the axilla, thus anticipating most of the surgeons of a later period. His after-results were in some cases quite surprising and were uniformly better than was the rule in those days.

He performed the operation for lacerated perineum several times, invariably using silver wire. His practice was always to sew up a perineal tear immediately after confinement and his success in these recent cases was noteworthy.

He was exceedingly active and actually up to his final hours his energy was comparable to that of a dynamo. His fine condition of health was aided also by his simple habits. He also had the gift of taking "cat naps" at any time or place—a habit that William Pepper, the younger, did so much to celebrate. Dr. Strudwick frequently slept in his chair. He was an early riser the year round, and one of his invariable rules—which illustrates the sort of stuff of which he was made—was to smoke six pipefuls of tobacco every morning before breakfast. He was a most insatiate consumer of tobacco, being practically never free from its influence. He bought all instruments and books as they came out. In a flap on the dashboard of his surrey he kept a bag in which were stored a small library and a miniature instrument shop. And often he would return with his carriage full of cohosh, boneset, and other herbs, indicating his familiarity with medical botany.

When nearly sixty years of age, he was called to a distant county to perform an operation. Leaving on a 9 o'clock evening train, he arrived at his station about midnight and was met by the physician who had summoned him. Together they got into a carriage, and set out for the patient's home six miles in the country. The night was dark and cold; the road was rough; the horse became frightened at some object, ran away, upset the buggy and threw the occupants out, stunning the country doctor who, it was afterwards learned, was addicted to the opium habit, and breaking Dr. Strudwick's leg just above the ankle. As soon as he had sufficiently recovered himself, Dr. Strudwick called aloud, but no one answered and he then crawled to the side of the road and sat with his back against a tree. In the meantime the other physician, who had somehow managed to get into the buggy again, drove to the patient's home where for a time he could give no account of himself or his companion; but, coming out of his stupor, faintly remembered the occurrence and dispatched a messenger to the scene of the accident. When the carriage came back again at sunrise, Dr. Strudwick, who was still sitting against the tree, got in, drove to the house, without allowing his own leg to be dressed, and sitting on the bed, operated upon the patient for strangulated hernia with a successful result.

Dr. Strudwick was married in 1828, two years after beginning practice, to Ann Nash, whom he survived but two years. They had five children—two girls and three boys. The girls died in infancy, and two of the boys became doctors.

The going out of this great man's life was as tragic and unusual as his career had been brilliant and useful. In possession of his customary good health, at the age of seventy-seven, he succumbed to a fatal dose of atropine taken by mistake from drinking a glass of water in which the drug had been prepared for hypodermic employment in an emergency.

He died at Hillsboro, North Carolina, in November, 1879.

HUBERT A. ROYSTER.

STURGIS, Frederick Russell (1844-1919), New York genito-urinary surgeon, was born in Manila, P. I., July 7, 1844, the son of Henry P. and Mary Georgiana Howard Sturgis. He studied in England until he was

thirteen, when he came to the United States and entered the Boston Latin School from which he went to Harvard where he received an M. D. in 1867. As an undergraduate, in 1865, he served one year as house physician of the Boston City Hospital, and, in 1866, was house surgeon to the Massachusetts General Hospital. In 1866, he was vice-president of the Boylston Medical Society and in his graduating year received the second prize of the Society for his treatise on "Human Sestoids." In the latter part of 1867, the young physician went to New York City and the following year entered into partnership with Dr. Freeman J. Bumstead (q. v.), specializing in the treatment of venereal and genito-urinary diseases. In addition to practice, he was assistant surgeon to the Manhattan Eye and Ear Hospital from 1869 to 1876; clinical lecturer on venereal diseases in New York University from 1874 to 1880 when he was appointed professor of diseases of the genito-urinary organs and venereal diseases. Also he was surgeon in the department of venereal and skin diseases of the New York Dispensary from 1876 until 1880 and visiting surgeon to the venereal and genito-urinary division of the City Hospital on Blackwell's Island, New York. In 1881, he resigned his professorship in the New York University to become professor of venereal and genito-urinary diseases in the New York Post Graduate Medical School and Hospital. From 1882 to 1888, he was Secretary of the faculty and from 1887 to 1890, served on the board of directors. In 1881, he was made president of the Medical Society of the County of New York; and in 1883, chairman of the Committee on Legislation of the Medical Society of the State of New York.

Those of his writings best known are: "Syphilis in New-born Children," 1883; "Students Manual of Venereal Diseases," lectures delivered at the Charity Hospital during the winter of 1879-1880; "Early Manhood—Some of its Dangers," 1886; "Cystoid Diseases of the Testicle," 1899; "Sexual Debility in Man," 1900; "Notes and Reflections on the Causes which induce Marital Infelicity due to Relations of the Sexes," 1908. During 1882-83, he was co-editor of "Illustrated Medicine and Surgery," New York. He also edited Diday's "Hereditary Syphilis" with notes, he revised and annotated Gross' "Impotence, Sterility, and Allied Disorders of the Male Sexual Organs," and contributed the article on hereditary syphilis in the system of genito-urinary diseases in "Syphilology and Dermatology" edited by Prince A. Morrow and that on venereal diseases in their medico-legal relations in Allan McLane Hamilton's "A System of Legal Medicine."

Dr. Sturgis married Martha De Wolf Hazard of Newport, Rhode Island, April 6, 1870.

He died at his home, May 6, 1919.

SUCKLEY, George (1830-1869), physician, naturalist and explorer, son of John Lang Suckley, the author of "Secretions the Source of Pleasurable Sensations" (New York, 1823), was born in New York in 1830. He was graduated at the College of Physicians and Surgeons, New York, in 1851, and resident surgeon in the New York Hospital in 1852. He was assistant surgeon in the United States Army from 1853 to 1856. Suckley accompanied General Isaac I. Stevens on his expedition to the Pacific (1853-1854), returning by way of Asia and Europe, and in 1859 he went to Utah, where he acquired a knowledge of Indian languages. He was brigade surgeon in 1861, staff surgeon to United States Volunteers from 1862 to 1865, and in 1865 was brevetted lieutenant-colonel and colonel.

He was the author of a paper on "North American Salmonidae," read before the New York Lyceum of Natural History in 1861, and collaborated with James G. Cooper, M. D., in writing "The Natural History of Washington Territory" (399 pp., New York, 1859). Suckley contributed articles to the "Annals, New York Lyceum, New York Journal of Medicine," and the Proceedings, Academy Natural Sciences, Philadelphia.

He died in New York, July 30, 1869.

HOWARD A. KELLY.

Sutherland, Charles (1831-1895), colonel and surgeon in the U. S. Army during the Civil War. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1117.

SUTTON, George (1812-1886), of Aurora, Indiana, who wrote a number of papers on epidemics and made them a special study, was born in London, England, on June 16, 1812, and came with his parents to America in 1819. As a boy he went to the village school and in 1828 to the Miami University, afterwards studying medicine with Dr. Jesse Smith in Cincinnati. In 1836 he was graduated from the Ohio Medical College with a thesis on the "Relation between the Blood and Vital Principle," in the spring of the same year beginning practice in Aurora, Indiana,

where he married Sarah Follre and had five children, four sons and one daughter. In 1843 an epidemic of erysipelas broke out in Aurora and Sutton's paper on it in the "Western Lancet" was practically all incorporated into Copland's Medical Dictionary. He also wrote on "The Medical History of Cholera in Indiana." In 1856 he wrote another report on erysipelas and the same year a careful study of hog cholera, which was then ravaging the State. He was one of the first to study the disease in a systematic way, these studies being published in the "Cincinnati Gazette" 1857, and when they had been more extended, in the "American Medico-Chirurgical Review," 1858. He was instrumental in organizing the Dearborn County Medical Society which met first at his house and he was president of this society, and also of the Indiana State Medical Society.

He served the American Medical Association for two years as Chairman of the Committee on Meteorology and Epidemics and compiled the reports. Keenly interested, also, in natural science, the antiquities of the West early attracted his attention, and he wrote articles concerning a large collection of geological and other specimens he had collected. One of his papers was "Evidences in Boone County, Kentucky, of Glacial or Ice Deposits of Two Distinct and Widely Distant Periods"; another an address before the Association for the Advancement of Science.

SWEAT, Moses (1788-1865). The portrait of Moses Sweat shows us a handsome man with long flowing patriarchal beard and hair, the latter pushed back from his forehead, a clean-shaven upper lip, and a placid face. He was the eldest son of Jonathan and Sarah Ayer Sweat, and was born in Portland, Maine, March 15, 1788. He had a career of over half a century as physician and surgeon, though he made no specialty of surgery, but cases of this sort for fifty miles around fell into his hands and he worked mostly in that line. In the beginning of his life he was a plain mechanic, but not liking manual labor, began to study medicine at first during his work, and later with Dr. James Bradbury (q. v.), of Parsonsfield, an early member of the Maine Medical Society. He also studied at Dartmouth with the celebrated anatomist, Alexander Ramsay (q. v.), in 1808 and, later, at Ramsay's Medical School in Fryeburg, Maine. He was demonstrator of anatomy at Dartmouth while a student there, and also at Fryeburg, so that the knowledge of anatomy then gained helped him as a surgeon.

He was a member of the Massachusetts Medical Society, and afterwards of the Maine Medical Society, and as his fame increased, he received an honorary M. D. from the Medical School of Maine in 1823, and from the Castleton, Vermont, Medical School in 1846. He was an expert in setting fractures, and in reducing dislocations, and was often called to great distances for accidents of this sort in which he possessed an extraordinarily acute power of diagnosis, and skill in manipulation. He performed during his lifetime all of the operations of the day and had no superior in Maine.

He married Elizabeth Wedgewood, of Portland, in 1811, and had eleven children, the youngest of whom became a doctor. Unfortunately, however, for the hopes of his father, this promising son who was beginning to take the drudgery of long journeys from his shoulders, died very early. From this shock Dr. Sweat never actually rallied to do his work as of old. His bright hopes were crushed; his interest for work was destroyed. Dr. Alexander Ramsay died in his house while under Sweat's care and left in his charge for futurity all of his colored anatomical plates.

Dr. Sweat died August 25, 1865.

JAMES A. SPALDING.

SWEETNAM, Lesslie Matthew (1859-1901), surgeon of Toronto, son of Matthew Sweetnam, Post Office inspector, was born in Kingston, Ontario, on August 1, 1859. As a boy he went to the Upper Canada College, Toronto, graduating M. B. from the University of Toronto and M. D. from Victoria College in 1881, afterwards doing post-graduate work in Great Britain, Europe, New York, Philadelphia and Baltimore, and in 1885 marrying Margaret Victoria, daughter of C. H. Goodesham of Toronto, by whom he had one daughter who, to his great sorrow, died before him. An untiring worker, he faithfully attended to the incessant demands of a large general practice, often making routine calls into the small hours of the night, yet building up a large surgical practice, paying visits to other clinics, being quick to adopt the best methods. An original thinker, he worked out a number of improvements in surgical technic. He showed that cases of extreme tympany might sometimes be relieved by posture alone. In one instance he placed a patient who appeared to be in a dying condition in the knee-

breast posture with prompt relief to the accumulation of gases. ("Relief of Tympanites by Posture." "Annals of Surgery," 1896, vol. xxiii.) He also devised the inflatable rubber balloon contained in a silk bag as a means of dilating rectal strictures without risk.

Sweetnam was on the staff of the Toronto General Hospital: surgeon to St. Michael's Hospital, and the House of Providence and was a professor in the Ontario Medical College for Women.

He had rare surgical judgment, was a deliberate operator and obtained excellent results. In many ways he was years ahead of his time. As a man he at once inspired confidence and as a friend was as true as steel.

Sweetnam practically wore himself out in incessant labors for the sick. He contracted nephritis which was accompanied by attacks of extreme pain and hematuria and had but partially recovered when he was poisoned in amputating an arm of a tramp infected with the gas bacillus. This added burden was too much for the crippled kidneys and he died suddenly in a uremic convulsion on December 11, 1901.

HOWARD A. KELLY.

SWEETSER, William (1797-1875), physician, teacher, author, was born in Boston, Massachusetts, September 8, 1797, and died in New York City, October 14, 1875. He was graduated at Harvard in 1815, received his medical degree there in 1818, and practiced in Boston, Burlington, Vermont, and New York City. From 1825 to 1832 he was professor of medicine in the University of Vermont, and from 1845 to 1861 he held the same chair in Bowdoin. He also lectured in Jefferson Medical College, Philadelphia, and in the medical school of Castleton, Vermont, and was professor of medicine in Hobart College, Geneva, from 1848 till 1855. Dr. Sweetser published "Dissertation on Cynanche Trachealis or Croup" and "Dissertation on the Functions of the Extreme Capillary Vessels in Health and Disease," to which were awarded the Boylston prizes for 1820 and 1823, respectively; "Dissertation on Intemperance," the Annual Discourse in 1829 to which was awarded a premium by the Massachusetts Medical Society; "Treatise on Consumption" (1823-1826); "Treatise on Digestion and Its Disorders" (1837); "Mental Hygiene" (New York, 1843; London, 1844); and "Human Life" (1867).

SWETT, John Appleton (1808-1854), physician and writer of New York, was born in Boston, Massachusetts, December 3, 1808. He was educated at the Boston Grammar School and at Harvard University where he was graduated in 1828. He studied medicine under Jacob Bigelow (q. v.) and received an M. D. at Harvard Medical School in 1831. He settled in New York and was physician to the City Dispensary. In 1835 he went to Europe for a stay of more than a year, spending most of the time in Paris in medical studies. In 1838 he lectured on diseases of the chest at Broome Street School of Medicine, and repeated these lectures at the spring course of the College of Physicians and Surgeons; the lectures were published in the "New York Lancet," and formed the basis of his work on "Diseases of the Chest" (New York, 1852). In 1842 he became a physician to the New York Hospital and held this position throughout his life. In 1853, a year before he died, he was appointed professor of the theory and practice of physic in the Medical Department of the University of the City of New York.

A sufferer with Bright's disease he made a special study of the disease and to benefit his health went to Europe in 1852 and while there attended the lectures of Robin. Returning, he attempted to go on with work but was forced to relinquish it, and died in New York, September 18, 1854. He bequeathed a legacy to the Society for the Benefit of Widows and Orphans of Medical Men.

SWETT, John Barnard (1752-1796), army surgeon and surgeon of Newburyport, Massachusetts, was born in Marblehead, in that state, June 1, 1752, the son of a merchant and the grandson of Joseph Swett, who introduced foreign commerce into Marblehead, probably a descendant of John Swett, Newbury, freeman, May 18, 1642, first settler by that name (Savage). John Swett went to Harvard College, where he took his A. B. in 1771. It had been intended that he should follow the ministry, but being present accidentally at the autopsies "on the bodies of some persons who had come to a violent death" he determined to study medicine and did so in spite of opposition on the part of his preceptor, the Rev. John Barnard. On graduating he studied medicine in Edinburgh, Scotland, for three years under Dr. William Cullen. He shipped as fleet surgeon in an expedition of merchant vessels to the Falkland Islands on completing his studies in

Edinburgh and with the funds acquired in this way finished his medical education in the hospitals of France and England, returning to America in 1778 in season to enlist as surgeon in the Continental Army, and to take part in the expedition to Rhode Island under Gen. Sullivan. The following year he served for several months in the expedition to the Penobscot River under the command of General Lovell. During the war he lost his valuable library and surgical instruments which he had collected abroad at great expense. In 1780 he settled in Newburyport, Massachusetts, as an active practitioner and during the succeeding sixteen years did a large part of the surgery of this town and the surrounding country. Being naturally of a social disposition and possessed of polished manners and good humor, he was a great favorite.

He was an original member of the American Academy of Arts and Sciences, and of the Massachusetts Medical Society, of which he was the first corresponding secretary, 1782-1789.

He had a large library and a book-plate designed to represent the profession of medicine. It is described as follows in Currier's History of Newburyport: "At the top of the plate, resting upon a couch and attended by four cupids or cherubs, is the body of a patient about to undergo a surgical operation, while under the name "J. B. Swett" the serpent of Aesculapius is twisted about a rod standing upright between retorts, and herbs growing in flower pots."

Dr. Swett married Charlotte Bourne of Marblehead soon after settling in Newburyport. They had four sons.

He died of yellow fever contracted in the summer of 1796 when there was an epidemic in Newburyport. He threw himself into the work of caring for the sick, and died, August 16, a martyr to the cause.

WALTER L. BURRAGE.

SWIFT, Joseph Kinnersley (1798-1871), of Philadelphia, who first used adhesive strips in making extension in fractures, was the greatgrandson of Dr. Samuel Swift, a physician, who settled at Moreland, Philadelphia County, Pennsylvania, in the middle of the eighteenth century, where Joseph was born March 10, 1798. On his mother's side he was descended from the Rev. Ebenezer Kinnersley, who was professor of oratory and English literature in the College and Academy of Philadelphia (now the University of Pennsylvania) from 1753 to 1773. He was a friend of Dr. Franklin and to him is given the distinction of teaching the new science of electricity to the first class in the medical department of the University of Pennsylvania. Joseph Swift was a pupil of Dr. John S. Dorsey (q. v.) and received the degree of Doctor of Medicine from the University of Pennsylvania in 1816 and soon settled in Easton. He remained in active practice only about twenty years because he was attacked with lupus of the face (epithelial cancer, according to Dr. S. D. Gross), so disfiguring him that he lived in retirement, which is the reason that his name is not as familiar to us as it would have been had he remained in the active pursuit of his profession for a longer period.

He had great mechanical skill which fitted him for surgical practice. Dr. Samuel D. Gross (q. v.), a pupil of Dr. Swift, secured for him the credit of inventing the application of adhesive strips in making extension in the treatment of fracture. This discovery was claimed for Dr. Dixi Crosby (q. v.), of New Hampshire, but as Dr. Crosby did not use it before 1849 and Dr. Gross mentions having learned its use in his treatise on "The Diseases of Bones and Joints," published in 1830, the priority must be awarded to Dr. Swift. He also was the first to employ the fine gold pin in the application of the twisted suture to the treatment of hair lip.

Dr. Swift was a man of literary attainment and general culture, having great conversational powers and was of a warm social nature, so that he attracted to himself a large circle of intelligent companions. I quote from one of his pupils: "His home was the resort of professors of the college, clergymen, gentlemen of the bar and scientific and literary persons who visited his place of residence, and this continued until the period of his death." This same student speaks of him in his professional life: "He felt that he was called upon to maintain the dignity and honor of his profession and long before we published our Code of Ethics he practiced its principles under the keenest sense of their claims upon a true physician."

In the days when there was no standard for entering upon the practice of medicine he required of his pupils a certain amount of literary culture. He made them promise that they would study three years and attend three courses of lectures and not practice until they had received their degree.

He married Miss Elizabeth Shewell Lorrain of Germantown, Pennsylvania, and she died in 1872.

He died in 1871 from the painful disease that had affected him for thirty years, all the time bearing his suffering with cheerfulness.

CHARLES MCINTIRE.

SWINBURNE, John (1820-1889), surgeon, of Albany, New York. John Swinburne's early life presented the not unusual spectacle of a clever boy, one of a large family with small means, doing uncongenial work cheerfully until he could conscientiously tread the path of inclination. The ninth child and sixth son of Peter and Artemesia Swinburne, he was born in Deer River, Lewis County, New York, on May 30, 1820. From boyhood he attended the county district school and afterwards acted as teacher, subsequently studying at Fairfield, Herkimer County, New York. In the spring of 1843 he became interested in medicine and chemistry, studying the latter under Prof. Mather and in 1844 taking up medicine under Dr. Griffin Sweet and afterwards under Prof. J. H. Armsby (q. v.). He was graduated from Albany Medical College in 1846, with a thesis on "The Anatomy of the Neck." During the first years of his practice in Albany he gave all his leisure to practical anatomical studies and the careful preparation of specimens. Owing to a serious attack of pleurisy, he was obliged to take up country practice, but was in a short time appointed demonstrator of anatomy at Albany Medical College. Three years he held this post, giving loving care to the arrangement of a private anatomical museum, where pupils attended, till 1851. The skeleton of the celebrated Dr. Edson who was exhibited on account of his "attenuated abnegation of flesh" was prepared by Swinburne for this museum. While almshouse physician Swinburne attended 800 cases of ship fever in one year with only fifteen deaths, he himself being attacked by the disease. In May, 1862, he became medical superintendent of the New York wounded troops at the front, a post which was no sinecure, for the victims of disease increased more rapidly than the government could provide accommodation. He succeeded in improving the surgical appliances of that day and published his ideas in two valuable pamphlets. His first official visit was paid to the Peninsula in 1862 when he helped as surgeon after the battles of Williamsburgh and West Point, and he was one of the eight surgeons who organized the hospital at White House. His report on the battles and the soldiers he subsequently attended, induced Gov. Morgan to appoint him superintendent of the New York State Troops and soon after he was the means of preparing an asylum for 2,500 patients in Virginia. After the war he served six years as quarantine health officer at the port of New York.

War seems to have held attractions for him, because after these six years he went abroad and served with the French Army during the Franco-Prussian War, organizing the American Ambulance Corps in Paris and taking care of it during the siege, receiving the Cross of the Legion of Honor. By 1873 he was back again in Albany taking an active share in politics as well as in medicine and doing much work as a good citizen. He maintained a free dispensary, treating thousands of cases, chiefly surgical, and was professor of clinical surgery in Albany Medical College, consulting surgeon to Albany Hospital and a member of various important medical societies. In 1882 he was elected mayor of Albany, and in 1884 he served one term in Congress. Among his writings are: "Treatment of Fracture of the Femur by Extension," 1859; "Introduction of Air into the Uterine Veins during Criminal Abortion," pronounced by Dr. Dalton the only case on record; "Compound and Comminuted Gunshot Fractures of the Thigh and Means for Their Transplantation"; "Treatment of Fractures of the Long Bones," 1861; "Reports on the Peninsular Campaign," 1863, also "A Typical American or Incidents in the Life of Dr. John Swinburne," 1888.

He married in 1848 Henrietta Judson of Albany and had four sons.

He died in Albany, March 28, 1889.

TACKETT, John (1815-1891), who performed a Caesarean section in 1847, was born in Huntsville, Alabama, November 27, 1815, and began to practice at Cooksville, Mississippi, the spring after his graduation at Louisville Medical College in 1844 and two years later moved to Richland. His wife was Bettie Dulaney, and they had five children.

In 1847 he performed Caesarean section successfully alone. This case was reported to the "New Orleans Medical and Surgical Journal," by Dr. B. Harvey, and the operation was quoted by Dr. Paul F. Eve (q. v.) in his book of "Remarkable Surgical Cases," in very complimentary terms. In 1861 he enlisted in the Confederate army as surgeon, but was subsequently called home by a peti-

tion to the governor from the fathers and the husbands of families in and near Richmond, who wished him to remain and provide for the health, comfort and protection of their wives and children.

He died in Richland, Mississippi, December 3, 1891, of pneumonia.

TALBOT, Eugene Solomon (1847-1924), stomatologist of Chicago, was born March 8, 1847, at Sharon, Massachusetts, the son of Solomon and Emily Hawes Talbot. He took his D. D. S. from the Pennsylvania College of Dental Surgery in 1871 and his M. D. from Rush Medical College in 1880. The LL. D. was conferred upon him by Keynon College in 1902, the M. S. by Whitman College in 1903, and the Sc. D. by the University of Pennsylvania in 1915. In addition to his dental practice, Dr. Talbot was lecturer on stomatology in Rush Medical College, in the Illinois Medical College, and in the Women's Medical College of Northwestern University, and he assisted in founding the section on stomatology in the American Medical Association and was chairman in 1918-19. He was actively interested in the scientific organizations of which he was a member. His contributions to the literature of his specialty concerned particularly histopathology of the jaws and dental tissues, gingivitis, and dental neurology; his published books include: "Irregularities of Teeth and their Treatment," 1888, "The Etiology of Osseous Deformities of the Head, Face, Jaws, and Teeth," 3rd. edit., 1894, "Degeneracy: Causes, Signs, Results," 1898, "Developmental Pathology, a Study in Degenerative Evolution," 1911, and "Interstitial Gingivitis, and Pyorrhea Alveolaris," 1913.

On September 20, 1876, he married Flora Estey of Chicago. He died from internal hemorrhage associated with duodenal ulcer on December 20, 1924.

TALIAFERRO, Valentine Ham (1831-1887), gynecologist, born in Oglethorpe County, Georgia, on September 24, 1831, was a descendant of one, Zachariah Taliaferro, an early colonial, and the son of Charles B. and Mildred Meriwether Taliaferro. As a boy he went to the local schools and Kellog Academy, then graduated M. D. from the University of New York in 1852, soon after marrying Mary A., daughter of his old preceptor, Dr. B. O. Jones of Atlanta. He had four daughters and two sons, one of whom, Valentine Ham, Jr. became a doctor. During the Civil War the father was surgeon to the Second Georgia Cavalry, and organized the Tenth Brigade. At the end of the war he was brevet brigadier-general. In 1857 Dr. Taliaferro became professor of materia medica in Oglethorpe College, Savannah, and successively, professor of diseases of women and children, in the Atlanta Medical College; of obstetrics and diseases of women, there, and dean in 1876. In 1881 he successfully started a private infirmary for the diseases of women, the first of its kind in the South, making his home in Atlanta for the rest of his life.

As a writer he did good work, co-editing and writing for the "Medical and Literary Weekly," "The Hygienic and Literary Magazine," and the "Oglethorpe Medical and Surgical Journal," Savannah. Among his writings are: "Medication by the Use of Uterine Tents, in the Diseases of the Body and Cavity of the Uterus," 1871; "The Application of Pressure in Diseases of the Uterus, Ovaries and Peri-uterine Structures," 1882; "Intra-uterine Tampon for Dilating the Uterus and Securing Better Drainage in Diseases of the Endometrium," 1884, published in the "Atlanta Medical and Surgical Journal."

He was known as a skilful gynecologist and one keenly interested in medical progress and in his fellowmen. In the autumn of 1887 he was persuaded by his friends to take a rest at Tate Springs, Tennessee, but, he died on September 17, 1887, of valvular heart disease. His wife survived him only a few months.

J. A. Richardson.

TALIAFERRO, William T. (1795-1871), ophthalmologist of Kentucky and Cincinnati, was born in Newington, Orange County, Virginia, in 1795. He was of Italian extraction, his ancestors having come to this country long before the Revolution. His father, Colonel Nicholas Taliaferro, served in that war, and at its close, settled in Kentucky. The son inherited his father's patriotism. In the War of 1812, he served as a volunteer in Ball's Kentucky Light Dragoons, which formed part of the left wing of General Harrison's army. At Camp Seneca he enlisted in Commodore Perry's fleet, and took part in the battle of Lake Erie. Soon thereafter he rejoined the army and served in the battle of Moravian Town, Canada West, October 5, 1813. For these services he received seven hundred dollars prize money, and a gold medal from the state of Kentucky. On

his return from the army he began to study medicine with Dr. Keith, of Augusta, and in 1818, attended the lectures at the University of Pennsylvania, where he witnessed, for the first time, the operation for cataract. He returned to Kentucky, and began practice in Washington, Mason County. In 1823 he operated successfully for cataract on a boy five years old, who had been blind from birth. After a few years he moved to Maysville, Kentucky, where his success as an ophthalmologist attracted patients from all parts of the south and west. About this time, Mr. Hitchcraft, a man of wealth and influence, became blind, and spent much time and money, but refused to try Taliaferro, and went east, and finally to Europe, seeking relief from oculists. He returned home without improvement, and disheartened, but, at the instance of friends, visited Dr. Taliaferro, who said his case was not hopeless. An agreement was drawn up by Hitchcraft's friends, that he was to pay the doctor five thousand dollars if cured. The result was a perfect success, and Mr. Hitchcraft sent for the doctor, and said to him, "You have fulfilled your part of the engagement, now I will fulfill mine, and pay you five thousand dollars." The doctor was astonished, and refused to accept so large a sum. In 1841 he moved to Cincinnati, and with Drs. Vattier (q. v.), Strader and T. N. Marshall, he established a hospital known as the "Hotel for Invalids," the second regular hospital in Cincinnati.

In 1843 he married the widow of James Ramsey, of Hamilton, Ohio. No children were born. Late in life Dr. Taliaferro accepted the chair of ophthalmology in the Cincinnati College of Medicine and Surgery, and lectured there until a short time before his death, March 22, 1871.

A. G. Drury.

TATE, John Humphreys (1815-1892), obstetrician, and gynecologist of Cincinnati, was born near Harper's Ferry, West Virginia, in 1815, and practiced for fifty years in Cincinnati, Ohio. He came of good old stock. His ancestor, Magnus Tate, the elder, came from the Orkney Isles and landed in Philadelphia, May 20, 1696. John H. was educated at Hanover College, South Hanover, and graduated there. He then studied with Professor John Moorhead of Cincinnati, matriculating in the Medical College of Ohio, and graduating in 1840. After practicing a few years, Tate went to Paris to further his education in medicine and surgery; and remained abroad for two years, most of the time being spent in Paris. In 1856 he was elected to fill the chair of physiology, hygiene, and medical jurisprudence in the Medical College of Ohio, and be a member of the staff of the Commercial Hospital. After serving two years he resigned, and in 1870 became a member of the faculty of the Cincinnati Medical College, and in 1873 was elected president of the Cincinnati Academy of Medicine, and from 1873 to 1875, acted as obstetrician and gynecologist to the Cincinnati Hospital.

Dr. John Tate was a gentleman of the old school, very studious, endowed with a most remarkable memory, occupied the highest positions in the gift of his profession and had the respect and friendship of all. His record in obstetrics is somewhat unique in that he attended more confinements than any practitioner in Cincinnati. He originated a special method of restoring an inverted uterus to its original position (known as Tate's method) and cured the longest standing case of inverted uterus on record. Tate introduced the following resolution in the Cincinnati Academy of Medicine, which was passed, and then he went to Columbus and presented it before the state legislature and secured its adoption. "All money received from the sale of tickets to medical students witnessing operations and attending lectures in the amphitheatre of the Cincinnati Hospital, shall go to the establishment and maintenance of a medical library and museum." In this way, Dr. Tate became the founder of the Cincinnati Hospital Library.

He married Margaret Kincaid Chenoweth in 1853 and had nine children. Two, Magnus and Ralph, selected medicine as a profession.

John Humphreys Tate died of cerebral hemorrhage at Cincinnati, Ohio, when seventy-six years old, on February 7, 1892.

A. G. Drury.

TAYLOR, Charles Fayette (1827-1899), orthopedic surgeon, and inventor of New York, was born and brought up on a farm in Williston, Vermont, April 25, 1827, being the date of his birth. His grandfather, John Taylor of Williston, was a great-grandson of the Reverend Edward Taylor (1642-1727) of Westfield, Massachusetts, who came to this country from England, in 1669. After taking his M. D. at the University of Vermont in 1856, he went to London and studied therapeutic exercises under M. Roth, a pupil of Ling. On returning, he settled in New York City and introduced the so-called "Swedish

movements" into this country. His book on the "Theory and Practice of the Movement Cure" (Lindsay and Blakiston), Philadelphia, was published in 1861. His experience with therapeutic exercises soon directed his attention to the neglected state of sufferers from chronic joint and spinal troubles and other deformities, and he studied with enthusiasm the problem of improving their treatment, being a pioneer in the application of the local rest and protection by proper splinting, and in the abundant use of fresh air. To these ends he devised a series of corrective and protective appliances, many of which are still standard. In this work he made use of everything which seemed of service, adding whatever of value his own original mind could suggest, regardless of tradition. He also devised a system of exercising machines for the weak and paralytic, many of which were worked by power, like the Zander apparatus. He proved his mastery in three fields, therapeutic exercises, mechanical orthopedics, and a common sense psychotherapy, somewhat on the lines later practiced by Dubois of Bern, that enabled him to effect many striking cures in bedridden neurasthenics and others.

In 1866 Dr. Taylor called the attention of Howard Potter, Theodore Roosevelt, James Brown, John L. Aspinwall, and others, to the need of a place where crippled and deformed poor might receive treatment. Becoming interested, these friends, with Dr. Taylor, founded the New York Orthopedic Dispensary and Hospital, which Dr. Taylor served for eight years as surgeon-in-chief. He was honored with medals or diplomas at Paris in 1867, at Vienna in 1873, and at Philadelphia in 1876. He was made corresponding member of the Imperial Medical Society of Vienna on Billroth's nomination, and charter member of the American Orthopedic Association; a fellow of the New York Academy of Medicine; a member of the New York County Medical Society; a fellow of the American Geographical Society, and of the New York Academy of Sciences. His published work includes between forty and fifty titles, mostly on orthopedic subjects. Those on the "Mechanical Treatment of Angular Curvature or Pott's Disease of the Spine" (1863), and its German translation (1873); "Spinal Irritation or the Causes of Backache among American Women" (1864); "Infantile Paralysis" (1867); on the "Mechanical Treatment of Disease of the Hip-joint" (1873), and its German translation in the same year; and "Emotional Prodigality" (Dental Cosmos, July, 1879) are still classic. His largest work was on "The Theory and Practice of the Movement Cure," 1861. Though not opposed to the use of drugs when definitely indicated, he found no use for them in his practice and never wrote a prescription. He was a tireless worker and always felt that he could have accomplished more except for his meager schooling, poor eyes, and ill health in early manhood. Writing in 1887, he says, "I acknowledge that deficiency of early training left me more free from bias and less hemmed in than is often the case after special training. But it has always seemed to me that I could have managed the bias if I could have had the training."

Dr. Taylor's originality, thoroughness, self reliance and enthusiastic devotion to the welfare of his patients, won the confidence of the profession and gave him a remarkably successful practice, until his health began to fail in 1882. After extensive travels in foreign countries, he settled in Southern California, where he died, January 25, 1899.

He married Mary Silina Skinner of Williston, on March 7, 1854, who with four children survived him.

HENRY LING TAYLOR.

TAYLOR, Edward Robeson (1838-1923), president of Cooper Medical College, was the son of Henry West and Mary Thaw Taylor and was born in Springfield, Illinois, September 24, 1838. In 1865, he was graduated from the Toland Medical College, now the Medical Department of the University of California. His interest then turned to law, and he was admitted to the California bar in 1872 and to the Supreme Court of the United States in 1879. When the existing charter for San Francisco was framed in 1898, he was a member of the Board of Freeholders; in 1907, he became mayor. Taylor was vice-president and president of the Cooper Medical College for thirty years—until its incorporation by Stanford University, and dean of the Hastings College of Law from 1899 to 1919. He was also president of the San Francisco Law Library, trustee of the San Francisco Public Library (1886-1921), and president of the San Francisco Bar Association during 1890-92 and 1894-96. In 1920, he was decorated with the Cross of the Legion of Honor of France.

He was twice married: to Agnes Stanford, April 20, 1870, and to Eunice Jeffers, February 8, 1908.

With Levi Cooper Lane, he published the addresses delivered on the occasion of the commencement exercises of Cooper Medical College in 1890, and he was the author of sundry collections of poems—"Moods and Other Verses," "Selected poems," "Translations of the Sonnets of Heredia," "Into the Light," "In the Court of the Ages," "Chants with the Soul," and others.

He died of the infirmities of age, July 5, 1923.

TAYLOR, George Herbert (1821-1896), of New York, early earnest exponent of mechano-therapy, was born in Williston, Vermont, January 4, 1821, son of Brimage Taylor and Miriam Taplin and a brother of Charles Fayette Taylor (q. v.). He graduated in medicine at the New York Medical College in 1852, then studied at Dr. Satherberg's Institute, at Stockholm, Sweden, during the winter of 1858-59. He was an enthusiastic student and practitioner of manual and mechanical therapeutics and had a large following. His writings include: "Exposition of the Swedish Movement Cure" 408 pp. (1860); "Health for Women" (1880); "Massage" (1884); "Pelvic and Hernial Therapeutics" (1885); "Mechanical Aids in the Treatment of Chronic Forms of Disease" (1893).

Dr. Taylor married Sarah E. Langworthy and had two children, a daughter and a son, Dr. William George Langworthy Taylor, emeritus professor of economics at the University of Nebraska.

Dr. Taylor died in New York, December 9, 1896.

HENRY LING TAYLOR.

TAYLOR, Henry (1790-1890), centenarian, Ontario county doctor, was born at Birmingham, England, January 1, 1790. His father, Samuel Taylor, M. D., had, for many years, a lucrative practice at Aylesham, England, and Henry mixed medicine in his father's surgery when his height had to be extended by standing on a stool. From the age of eighteen, until he was twenty-five, he was apprenticed as a medical student, then for three years attended Guy's and St. Thomas' Hospitals, taking his degree of M. D. when he was twenty-eight years of age, having had the advantage of studying under such men as Sir Astley Cooper and Abernethy. On graduation, Dr. Taylor went into partnership with his father at Aylesham, where he remained until June, 1839, when he emigrated to Canada and practiced for a year in Montreal. During the summer season he had a paying practice among English immigrants, but in winter he had little to do and spent his summer earnings. He therefore determined to leave, and moved to Ernestown, Ontario. Here, and in the adjacent villages of Camden, Wilton and Portland, he practiced for twenty-six years, sixteen of which were spent in the last place. He endured all the hardships incident to the practice of medicine in a pioneer Canadian settlement, and never refused to attend a poor patient. The poverty of his patients bore heavily on him at times, and more than once his chattels were sold for debts contracted for medical supplies. He did not take out a Canadian diploma, and was once arrested for practicing without a license, but the validity of his English diploma was maintained, and he was acquitted. For a time he kept three horses hard at work in making his professional calls. In earlier years he frequently travelled on foot, by the aid of a compass, between points where there was not even a foot path. On one occasion, while waiting on a woman in confinement in a lonely house, a large pack of wolves crossed the dooryard in full cry.

In 1868 Dr. Taylor moved to the township of Brook, Lanark County, where he remained a few years and then moved to Ryerson Township, Parry Sound District, to be near one of his sons. It is astonishing the amount of professional work, travelling, mostly on foot, he did in Ryerson and vicinity. At the age of ninety-three, Dr. Taylor frequently walked in one day, from Ryerson to Rousseau, a distance of twenty-seven miles, and within a year of his death, he could read ordinary print, without spectacles and had a very fair hearing.

He was a man of more than average height, just under six feet tall, and weighing about 150 pounds. He always ate in moderation and used liquor sparingly—in his latter years not at all. He was an optimist, always, when the bright side was hidden, keeping, as he said, "a stiff upper lip," until times changed. He was a member of the Methodist church for over forty years.

He married a woman, thirty years his junior, and by her had four sons and one daughter, Mrs. Snyder, of Burks Falls, with whom he made his home after the death of his wife, which occurred in 1888, at the age of fifty-eight. He died, April 3, 1890, one hundred years and three months old.

WILLIAM CANNIFF.

TAYLOR, Isaac Ebenezer (1812-1889), a pioneer obstetrician and gynecologist, of New York City and founder of Bellevue Hospital Medical College, was one of the eight children of William and Mary Taylor of Philadelphia, where he was born, April 25, 1812. Educated at Rutgers College, he afterwards took his M. D. at the University of Pennsylvania (1834), settling down to practice in New York, in 1839, with his wife, Eliza Mary, daughter of Stuart Mollau, a merchant of that city. In 1840 he visited Paris and studied under Cazeaux, and also at Dublin, and on his return to New York, had clinics at the City, Eastern, Northern and Demilt dispensaries, taking a private class of four students in "the diseases of females" at each. Thus were gynecological clinics organized. He will be remembered chiefly for his demonstration of the non-shortening of the cervix uteri during pregnancy, ("American Medical Times," June, 1862), in which he anticipated Müller, to whom credit is generally given.

As a literary contributor to the Transactions of the New York State Medical Association, of which he was a founder and ex-president, he did valuable work and also helped forward the cause of medicine by being the founder and lifetime president of the Bellevue Hospital Medical College. Elected physician to Bellevue in 1851, he became chairman of the medical board, and in 1860 drew up the charter which was presented to the legislature, the following year, and passed. In 1839, he, with Dr. James A. Washington, introduced to the medical profession in the New York Dispensary, the hypodermic treatment by morphia. He died in New York, October 30, 1889.

Among his appointments were president of New York County Medical Society; vice-president and fellow of New York Academy of Medicine; president obstetrical section of the Academy of Medicine; vice-president American Gynecological Society; physician Bellevue Hospital.

His numerous articles included: "Cases of Diseases Peculiar to Females, and Nervous Diseases," 1841; "Rheumatism of the Uterus and Ovaries," 1845; "Labor with Anteversion of Uterus in that State," 1856; "Mechanism of Spontaneous Action of Uterine Inversion," 1872. A list is given in the "Transactions New York State Medical Association." 1890, vol. vii.

TAYLOR, James Spottiswoode (1870-1922), medical historian, was born December 10, 1870 at the University of Virginia where his father, Rev. George Boardman Taylor, was chaplain. After a childhood in Rome, acquiring fluency in Italian and French and a working knowledge of German, Spanish, Latin, and Greek, he returned to America for a university education and was graduated in medicine from the University of Virginia in 1894. He entered the navy as acting assistant surgeon in 1899, was attached to the U. S. S. "Independence" at Mare Island, California, as assistant surgeon, and afterwards served at the Asiatic Station until 1901 when he was sent to the U. S. Naval Hospital at Yokahama, Japan, where he married Louise Bemis Draper of Mt. Holyoke, Massachusetts. He returned to Washington to the Bureau of Medicine and Surgery at the Navy Department and the U. S. Naval Laboratory, Brooklyn, where he remained until 1904, then was off again to the Orient to be medical officer of the Legation Guard at Peking. Between duties at sea, he became executive surgeon of the U. S. Naval Hospital, New York, in 1907-09, senior medical officer of the recently established Naval Training Station at Great Lakes, Illinois, in 1911-14, and editor of the U. S. Naval Medical Bulletin from 1917 until ill health compelled him to resign in June, 1921.

Among his most important articles on medical history are: "Medicine in Rome" ("U. S. N. Med. Bull." vol. xiv, 1), "The Arabians and the First Revival of Learning" ("U. S. N. Med. Bull." vol. xiv, 2), "Practice of Medicine in Europe during the Middle Ages" ("U. S. N. Med. Bull." vol. xiii, 4), "Surgery in the Middle Ages" ("U. S. N. Med. Bull." vol. xv, 2), "Hotel Dieu of Paris" ("U. S. N. Med. Bull." vol. xii, 4), and "Montaigne and Medicine" ("Annals of Medical History," 1921).

Dr. Taylor died of pernicious anemia at the Naval Hospital, Philadelphia, August 27, 1922. Aware of the gravity of the case, he faced death bravely and said, "I feel rather solemn over the prospects but have tried to follow the consensus of opinion, and one must keep in the road and go whither it leads."

He was a man of charm, keen mind, and remarkable memory for historical detail, and he established a reputation as essayist and medical historian. At his death, he was gathering together in book form a series of essays on popular subjects, published originally in various magazines, and was engaged in writing a history of medicine.

JOSEPH L. MILLER.

Taylor, John Winthrop (1817-1886). J. Winthrop Taylor, Surgeon-General of the United States Navy. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1125.

TAYLOR, Robert William (1842-1908), New York dermatologist and urologist, was born at Coventry, England, August 11, 1842. His family came to the United States in 1850; his father who died soon after arriving in America, was an Oxford graduate and had considerable means. Dr. Taylor had good educational advantages until he was fourteen years old, then, so that he might not be a burden on his widowed mother, he left school and entered the employ of a retail druggist; his ability was such that at the early age of twenty-one he was placed in full charge of one of the largest retail drug stores in New York City. But the wish to follow a profession more in keeping with the traditions of his family, made him enter as student under Dr. Willard Parker (q. v.), and after he was graduated from the College of Physicians and Surgeons, in 1868, when he settled in New York City, and for the first few years devoted himself to general practice. Early in his career he became acquainted with Dr. Freeman J. Bumstead (q. v.), and from this association his attention was turned from general practice to the study of skin, venereal and genito-urinary diseases.

In 1871, only three years after graduation, he published a paper on "Dactylitis Syphiltica" which was of such signal merit, that it attracted widespread attention, and at once placed him in the front rank of medical observers. In 1879, in collaboration with Dr. Bumstead, he published a notable textbook, "The Pathology and Treatment of Venereal Diseases." This book ran through many editions, the last one, rewritten by Dr. Taylor, and with the title changed to, "A Practical Treatise on Genito-urinary and Venereal Diseases," appeared in 1904. In 1887 he edited "A Clinical Atlas of Venereal and Skin Diseases," and in 1899, "A Practical Treatise on Sexual Disorders of the Male and Female." In addition to these larger works, Dr. Taylor frequently contributed to medical journals, articles on venereal and dermatological subjects, all of his writings being of marked value, his statements being always carefully thought out and concisely expressed. Helpful with his books, he was none the less so to all who knew him, and particularly to the young and struggling physician.

During his professional life, he collected one of the most valuable libraries on syphilology and dermatology, in this country, and was a generous donor to the New York Academy of Medicine of rare books on these subjects. In 1891 he was appointed clinical professor of genito-urinary and venereal diseases, in the College of Physicians and Surgeons, New York; he resigned this professorship in 1905. Prior to his connection with the College of Physicians and Surgeons, he was professor of dermatology in the Woman's Medical College of the New York Infirmary, and in the medical department of the University of Vermont.

He was one of the founders and once president of the American Dermatological Association, and one of the founders of the New York Dermatological Society, also a member of the American Association of Genito-urinary Surgeons, the New York Academy of Medicine, and the Medical Society of the State and County of New York. With but little education and no money, he succeeded in reaching the topmost pinnacle of medical fame, and when he died in New York, January 4, 1908, his reputation was international.

A full list of his writings is given in the Catalogue of the Surgeon-General's Office, Washington, D. C.

J. McF. Winfield.

TAYLOR, Thomas (1820-1910), physician, botanist, expert microscopist and prolific inventor, of Washington, D. C., was born in Perthshire, Scotland, April 22, 1820, the youngest of four children, the son of Thomas Taylor, an architect, and Anne Kennedy, both active in the religious life of Perth. Dr. Taylor took a scientific course at the University of Glasgow and had as a preceptor Professor Davy, brother of Sir Humphrey; he also studied art and drawing at the British School of Design, an accomplishment of great use to him all through life. He had a gift for invention and in 1841 made the "first interleaved electric condenser," an improvement on the Leyden jar.

He married Marjory, only daughter of Alexander McIntosh, of Perthshire, and soon after (1851) came to the United States, where he "foreshadowed the modern invention of wireless telegraphy by demonstrating that an electric current could be transmitted without wires," in experiments across the Narrows at New York. During the Civil War Taylor experimented with projectiles with commendation from Colonel J. G. Benton,

chief of ordnance. He entered the service of the Department of Agriculture in 1871 where his most important work was done, during a period of over twenty-six years; he studied numerous fungus diseases of plants, investigated the cranberry rot, and was appointed microscopist when that office was created in the Department of Agriculture. His investigations of food adulterations, especially of butter, cheese and lard were largely responsibile for Congress passing the oleomargarine bill. He found acari in the intercostal muscles and the cellular tissues of fowls; he also discovered an imported oidium affecting the grape vines. He received a silver medal in recognition of his services from the Paris Exposition (1859). In 1882 Dr. Taylor received an M. D. from the University of Georgetown and practiced for a time. He was a founder of the Chemical and Biological Societies of Washington, a fellow of the American Association for the Advancement of Science; member of the French Chemical Society, the American Society of Microscopists, the Textile Fiber Association, the American Pomological Association; and honorary member of the International Medical Society of Hygiene and the Royal Institute of Liverpool.

He wrote, among other things, the widely known and much used "Students Handbook of Edible and Poisonous Mushrooms of America" (five parts, 1897-1898); the "Diseases of Plants"; "The Differentiation of the Fatty Crystals of Butter and Oleomargarine"; "Tea and Its Adulterations"; "The Common House Fly as a Carrier of Poisons"; "Bacteria and Their Relations to Plant Culture."

Three children were born to Dr. Taylor; a son dying in infancy, another son, Dr. T. A. Taylor who died in 1901, and Miss A. R. Taylor, who survived him. He died January 22, 1910, at his home, 238 Massachusetts Avenue, Washington.

HOWARD A. KELLY.

TAYLOR, William Henry (1836-1910), first president of the American Association of Obstetricians and Gynecologists. In the life of Dr. William H. Taylor, it is hard to separate the physician from the philanthropist, so completely was his professional life permeated with his social Christianity. For 200 years his ancestors were ministers of the Friends Church, and his father lost his life in aiding his fellows while serving as a Volunteer fireman. Born in Cincinnati December 25, 1836, he died there, February 6, 1910. Dr. Taylor began the study of medicine in the office of Dr. William Wood, an associate of Dr. Daniel Drake, (q. v.) and co-editor with him, of "The Western Journal of Medical and Physical Sciences." Dr. Taylor was graduated from the Medical College of Ohio in 1858 and was resident physician of the Cincinnati Hospital and its first pathologist. In 1868-70 he studied in Berlin under Virchow, and in Vienna under Rokitansky and Scheuthauer. He was, for forty-six years, a member of the staff of the Cincinnati Hospital; for forty years professor and dean of the Miami Medical College; for thirty years physician to the House of Refuge, and he was president of the staff of the Presbyterian Hospital. He was the first president of the American Association of Obstetricians and Gynecologists, and was a large contributor to current medical literature.

Throughout a busy career he found time for extensive philanthropic work. Thus he was a founder of the Society of Natural History, an incorporator of the Union Bethel, a Christian settlement, and for some years he maintained the Grellet Bible Mission, and was always a friend of the city firemen. During the Civil War he was a member of the Sanitary Commission, and in the Middle West, Dr. Taylor was popular as a lecturer on the Bible and was secretary of the Friends Mission in Mexico, maintaining membership in the Y. M. C. A., he was its vice-president for ten years, and a trustee of the Y. W. C. A., and physician to the Home for the Friendless.

Dr. Taylor's chief interest was in dependent children, and for thirty-eight years he was physician to The Children's Home, which had been founded by his mother. He was one of its trustees for twenty-five years and its president from 1904 until his death.

All who knew him respected his unblemished character, his unselfish helpfulness to the younger members of the profession, his high ideals, his remarkable qualities as an instructor, and his large ability as a practitioner. One of his students said of him, "Instead of preaching high ethics to his students and holding them severely to account, Dr. Taylor lived up to the highest standard himself, and thus became an inspiration to his students."

A. G. DRURY.

Tebault, Alfred George (1811-1895), Virginia physician. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1127, 1128.

TEMPLE, John Taylor (1803-1877), pioneer educator of Chicago and St. Louis, was born on his father's plantation, Bears Garden, King William County, Virginia, May 5, 1803. His father was John Temple, a Virginia planter, and his grandfather, also John Temple, a Baptist minister. His maternal grandfather was Colonel Samuel Taylor of the war of the Revolution, and English ancestors are traced back to the latter part of the fifteenth century. The surrender at Yorktown, Virginia, occurred on the estate known as the Temple farm, so called for a member of this family. Dr. Temple was a graduate of Union College, Schenectady, New York, which gave him the degree of A. M. in 1824. His medical studies were under the preceptorship of Dr. George McClellan (q. v.) at Philadelphia, in whose office he remained three years, attending lectures up to the date of the duel between Dr. Granville Sharpe Pattison (q. v.) and Colonel Cadwallader. Soon after this, Dr. Pattison accepted the chair of anatomy in the University of Maryland, and by Dr. McClellan's advice young Temple took one course and was graduated in 1824. These facts will correct the statement printed in the histories of Chicago, that Dr. Temple was graduated in medicine from Middlebury College, Castleton, Vt., December 29, 1830. He married, soon after graduation, the daughter of Rev. Dr. Staughton of Philadelphia, the eloquent divine who delivered the address of welcome to Lafayette when he visited this country by invitation of Congress in 1824.

Dr. Temple retired to his farm, 17 miles from Richmond, Va., where he remained two years, when he yielded to the solicitation of his late preceptor, Dr. McClellan, and moved to Philadelphia, there to practice medicine until 1829. He then accepted a position in the Patent Office and removed to Washington, where he lived until failing health and fear of consumption made outdoor life imperative. Through Martin VanBuren, then in the cabinet of President Jackson, he secured a contract to carry the mail from Chicago to Fort Howard on Green Bay, and removed to Chicago in March, 1833. The mail route to Fort Howard was soon put in operation and a second contract secured for a route to Ottawa and Peoria, which was started on the first of January, 1834. When he was told that it took two days each way to make the trips, and that four-horse stage coaches were used in a daily service, we realize the magnitude of the undertaking. With the sale of his Virginia estates, Dr. Temple arrived in Chicago in easy circumstances. During 1833 he erected for himself Chicago's first frame dwelling, and the "Temple Building," also frame, for public meetings, in which Baptists, Presbyterians and Methodists worshipped, and through the Baptist Missionary Society he installed the first Baptist minister at Chicago. The next year, in the interest of education for the state, he attended the Educational Convention held at Vandalia as a delegate from Chicago. In 1835 the first Board of Health was established, of which Dr. Temple was a member, and the same year he was one of the organizers of the Chicago Bible Society. Dr. Temple is credited with performing the first autopsy in Chicago. In 1836, in partnership with Dr. Levi D. Boone, he took contracts for excavating two sections of the Illinois and Michigan Canal. In 1837 he sold his stage lines, and by 1840 had sublet his canal contracts, and thereafter confined his time to his practice alone.

In 1837 the charter for Rush Medical College was secured, and Dr. Temple was named a member of the board of trustees. In 1842 he removed to Galena, and then to St. Louis, Missouri. During this year he changed his practice to homeopathy. In 1857 he secured from the Legislature of Missouri a charter for the Homeopathic Medical College of Missouri, and held the position of dean until the college was merged with the St. Louis College of Medicine and Surgery, becoming the St. Louis College of Physicians and Surgeons; he served this institution as dean until his death. Dr. Temple was a member of the American Institute of Homeopathy, of which he was at one time president. He died at St. Louis, February 24, 1877.

F. D. DuSouchet.

TENNENT, John (Eighteenth century), exponent of the virtues of Seneca, (rattlesnake root), as a specific for many diseases, and especially for pleurisy, was a native of England who came to the United States about 1725 and practiced medicine in what shortly became known as Caroline County, Virginia. "He held a medical correspondence with Dr. Mead (Richard Mead, London) for many years, and it was to him that he first communicated his account of Seneca." (J. Thacher) (q. v.). He is said to have been a family connection of Mead's. In 1735-1736 Tennent visited England, where he received a written endorsement from Monro and Mead for a doctor's degree at the University of Edinburgh. The records shows that

he did not obtain a degree. He returned to America and published what appears to be the first work on medicine printed in Virginia, "An Essay on the Pleurisy," printed by William Parks in Williamsburg, in 1736. In 1738 Tennent published in the "Virginia Gazette" proposals for printing by subscription "A Treatise on the Diseases of Virginia and the Neighboring Colonies." "It is not believed, however, that this work, which would have been of great interest, was ever printed. The same year the General Assembly voted him one hundred pounds in recognition of his discovery of the virtues of the rattlesnake root, but the poor physician reaped no pecuniary benefit from the gift, as his creditors seized upon it." (Tyler). This year (1738) saw the publication in Edinburgh (published again in 1742), of "An Epistle to Dr. Richard Mead Concerning the Epidemical Diseases of Virginia, Particularly a Pleurisy and Peripneumony wherein is Shown the Surprising Efficacy of the Seneca Rattlesnake Root . . . . Demonstrating the Highest Probability That This Root Will Be of More Extensive Use Than Any Medicine in the Whole Materia Medica." Another publication was "Physical Enquiries . . . " (1742). Tennent notes the seasonal diseases of Virginia; describes its marshes, creeks, and rivers and the state of the air calculated "To bring on a relaxation of the solids and consequently a viscidity of blood." "The diseases of Virginia arise from viscidities and coagulations of the blood." By questioning the natives, Tennent found that among the Seneca Indians rattlesnake root was used as a remedy for snake-bite. They carried it powdered in shot bags for immediate use. He administered it with purity of reasoning to patients ill with pleurisy and pneumonia, and he says: "This vegetable, I do aver, is more efficacious and extensively useful than any other medicine yet discovered, whether in or out of the Materia Medica, whether Mineral, Vegetable or Animal." "The improvement of the art of medicine is at a stand," says Tennent; there were two great remedies—cinchona and mercury,—while snake-root was a great cure for pleurisy, gout, pneumonia, intermittent fever; the "modus" in gout being the attenuation of the fluids, the disease being due, he thought, to gritty particles in the blood which by the medicine is reduced to a sufficient degree of minuteness and fluidity; and so by snake-root, "tolere nodosam nunc scit medicina podagram."

Tennent engaged in a philippic against the London profession, and especially against Ward's patent pills, which seemed to have killed many people. When he speaks of fever, we must remember that there were no thermometers in those days and that simple fever even meant an augmentation of velocity of blood, induced by anger, exercise, or drinking. Pitcairn cites legitimate fever and sympathetic fever; legitimate fever being due to rarefaction of the blood, and depending on some matter retained in the body. An important note in this little book of sixty-nine pages ("Physical Enquiries") lies in an advertisement on the last page, where our author declares that he proposes to publish in July a dissertation showing reasons for regulating the practice of physic for the general good, urging that all prescriptions be written in plain English. He insists, also, "that all secret efficacious Medicines be made public; religion and Morality demand that conduct."

Tennent married Dorothy Paul in 1730; the John Tennent, physician in Port Royal, Virginia, supposed to have been their son, went to the grammar school at William and Mary College in 1753, married Anna, daughter of Archibald Campbell, of Westmoreland County, Virginia, and was the father of Washington Campbell Tennent, himself a physician.

HOWARD A. KELLY.

TENNENT, John Van Brugh (1737-1770), a pioneer obstetrician and first professor of midwifery at King's College (Columbia), New York, came of a family remarkable in the early religious and medical history of America. His grandfather, William Tennent, born in Ireland, in 1673, graduated at the University of Dublin, and became the minister in the Episcopal Church; he married a daughter of Gilbert Kennedy, a noted Irish divine. With his wife and four children, Gilbert, William, John and Charles, William Tennent came to America in 1718. He joined the Presbyterian Church and united with the Synod of Pennsylvania, writing out the reasons for his change of denomination. In 1726 he became pastor of the church at Neshaminy, about twenty miles from Philadelphia, and here established the "Log College" where students were prepared for the ministry, the forerunner of Princeton University. He died at Neshaminy in 1746. Three of his sons became ministers. Gilbert, the eldest, worked with Whitefield, who said

of him, "he is the son of thunder and does not regard the face of man"; his fervor in preaching gained him the title of "Hellfire Tennent"; John, the third son, was the third pastor of the church at Freehold, New Jersey (afterwards called "Old Tennent Church"); the second son was William (1705-1777), who succeeded his brother as minister at Freehold, was noted as a good man and famous preacher, and as having experienced a three-day trance "in which he saw the glories of heaven." When thirty-three years old, he married Catherine Noble, née Van Brugh, widow of John Noble, and they had three sons, of whom John Van Brugh Tennent, the subject of our memoir, was the eldest.

Young Tennent attended Princeton University and was graduated in 1758, then he went to Edinburgh for a medical education; he published a thesis of forty pages on the then burning subject "De insitione variolorum" (1764). While abroad, he was made a member of the Royal Society, in 1765. In 1767, when the medical faculty of King's College was organized, Tennent was appointed professor of midwifery, his associates being Samuel Clossy, professor of anatomy, John Jones (q. v.), professor of surgery, Peter Middleton (q. v.), professor of midwifery, James Smith, professor of chemistry and materia medica, and Samuel Bard (q. v.), professor of the practice of physic. The first class of two was graduated in 1769 with the degree of bachelor of medicine; the degree of doctor of medicine was conferred in 1771, the first time this degree was conferred in America. Notwithstanding so good an ancestry, an excellent education and high attainments, Tennent did not live long to enjoy the fair promise of his life, for his health failing, he went to the West Indies to benefit his condition and died there of yellow fever, in 1770. His youngest brother, Gilbert Tennent, born in April, 1742, became a physician, married and had one child. The biographer of his father says that young Gilbert "indulged in the gaiety and follies of the world," and goes on to tell of his illness and deathbed repentance. He died, March 6, 1770, and was buried in the Tennent Churchyard at Freehold, New Jersey, Where his gravestone says that when "Young, gay, and in the highest bloom of life, death found him hopefully in the Lord."

The second son of the second William Tennent, also named William, settled as a minister in Charleston, South Carolina; his son was William P. Tennent, whose son was Gilbert Tennent (1800-1855), fifth generation, educated at the "Old Field School," and at twenty studied medicine under Hamilton in the South Carolina College. In the early autumn of 1828, this Gilbert Tennent went to Lexington, Kentucky, and entered the office of B. W. Dudley (q. v.), "the father of western surgery" and professor of surgery in Transylvania University. He was graduated in 1829 and returned to Charleston, where he died, February 16, 1855.

HARRIET BLOGG.

TENNEY, Samuel (1748-1816), army surgeon, physicist and writer, was born at Byfield, Massachusetts, November 27, 1748, and died at Exeter, New Hampshire, where he spent most of his life, February 6, 1816. He was educated at Dummer Academy and graduated from Harvard College in 1772. After teaching school in Andover for a year, he studied medicine with Dr. Thomas Kittredge of that town, and settled in Exeter to begin practice, but hurried to Cambridge and joined the army as surgeon, on the day of the battle of Bunker Hill, continuing in this capacity during the war. After serving one year in the Massachusetts line, he entered that of Rhode Island and was present at Saratoga and Yorktown. At Red Bank, on the Delaware, he fought in the ranks and there dressed the wounds of Donop, the Hessian commander. At the close of the war, Dr. Tenney returned to Exeter but did not resume the practice of medicine. In 1788 he was a member of the state constitutional convention, and in 1793 was appointed judge of probate for Rockingham County, continuing in office until he was elected a member of Congress in 1800; he was twice re-elected. He was made a Fellow of the American Academy of Arts and Sciences, August 24, 1791, and contributed to its memoirs, an account of the Saratoga mineral waters, and also his "Theory of Prismatic Colors." He was a corresponding member of the Massachusetts Historical Society, to which he furnished an historical and topographical description of Exeter, and also an account of the dark day of May 19, 1780. For the Massachusetts Agricultural Society he wrote a treatise on orcharding. At various times he wrote political essays for the newspapers. Dr. Tenney was an honorary member of the Massachusetts Medical Society, from 1805 until his death, and Harvard conferred the honorary M. D. on him, in 1811. In this year and the following year, he published, in three numbers of the "New York Medical

Repository," "An Explanation of Certain Curious Phenomena in the Heating of Water."

He married Tabitha Gilman, in 1788. He was the author of "Adventures of Dorcasina Sheldon, or Female Quixotism," 1808, and "The New Pleasing Instructor."

WALTER L. BURRAGE.

TEWKSBURY, Sámuel Henry (1819-1800). Jacob Tewksbury, of Hebron, Maine, was a very clever practitioner for his time, and an active member of the Maine Medical Society. He married Charlotte Nelson, of Paris, Maine, and Samuel Henry was born in Oxford, Maine, March 22, 1819. He studied medicine with his father and at the Medical School of Maine, graduating in 1841. He then attended lectures at the Harvard Medical School and at the College of Physicians and Surgeons of New York. He began practice at Frankfort, Maine, but after marrying Miss Diana Eaton, of Paris, Maine, rejoined his father in practice. In 1850 he moved to Portland, where he practiced thirty years. Among the great things which Dr. Tewksbury did for medicine in Maine, was the introduction of the practice of gynecology, resection of the knee-joint, the successful operation for stone in the bladder, by the new method, and using the first flexion and extension in the reduction of a hip-joint dislocation. He was also active in clinical exhibits before the Maine Medical Association, as far back as 1855, showing his early knowledge of successful surgery, especially in cases of resection, and he was the first surgeon to the Marine Hospital, after its foundation about 1855.

He was twice elected president of the Maine Medical Society, and in his addresses called special attention to the need of the formation of the Maine General Hospital. It was, later, a deep disappointment to him that the rules could not have been arranged to permit any reputable physician to put patients into private rooms or in beds not then occupied, thus making the hospital more popular and preventing the diversion of charitable bequests to other institutions, managed as he suggested. Tewksbury wrote a large number of medical papers of great value, largely upon excisions and on gynecology. He was a man of noble figure, handsome face, and markedly tall. A determined and successful man, he was active but impulsive, a good anatomist and a clever, neat and skilful operator. His style in conversation was terse, but in his papers he was inclined to be loquacious. Most of his papers were published for many successive years in the "Transactions of the Maine Medical Association." He often used invectives which were sometimes more convincing than polite. Generally brusque and apparently uncivil at times, he concealed beneath harsh words, a very kind heart. After a long and successful career of nearly forty years, he died suddenly, July 28, 1880.

JAMES A. SPALDING.

THACHER, James (1754-1844). Standing at the head of the list of medical historical writers in this country, is the name of James Thacher, son of John Thacher of Barnstable and of a daughter of a Mr. Norton of Martha's Vineyard, Massachusetts. James was born at Barnstable, February 14, 1754. As soon as he had obtained a common school education, he studied medicine with Dr. Abner Hersey (q. v. in biog. of Ezekiel Hersey) of Barnstable, and then, aroused to enthusiasm by the opening events of the American Revolution, he went up for examination as surgeon's mate in the army, passed high in his tests, and obtaining his appointment, served for a year under Dr. John Warren (q. v.) at various small hospitals in Cambridge. He was then promoted to the position of surgeon in the army, and during the next seven years, traversed the Colonies, from Castine, in Maine, to Yorktown, in Virginia; next at the head of a band of sharpshooters; once on the illfated Penobscot expedition; then in charge of a chain of hospitals containing altogether five hundred beds, and finally he was present at the surrender at Yorktown. During that time he obtained wide experience in medicine and in military surgery. Retiring from the army, January 1, 1783, he settled in Plymouth, Massachusetts, married in the following year, Susannah Hayward of Bridgewater, near at hand, and to the very end of his long life, continued active in practice or in medico-literary labors. In childhood he had acquired a slight deafness which gradually increased with age, yet in spite of the burden and a distressing tinnitus, he labored cheerfully to the end, devoting his declining years to the preservation of everything connected with the Pilgrim Fathers, and nothing pleased him more than to act as a guide to strangers in Plymouth, every historic character and mansion of which he knew by heart. There he died, May 24, 1844, when in his ninety-first year.

Dr. Thacher was a voluminous writer, beginning as early as 1802, when he contributed a paper on the art of making marine salt from

sea water, to the American Academy of Arts and Sciences. His "American New Dispensatory" appeared in 1810 and a fourth edition in 1821, and "Modern Practice of Physic" in 1817, followed by a second edition in 1821. Next year came a charming book, "The American Orchardist," in which he not only showed how to grow fine apples, pears, plums and grapes, but gave space to the manufacture of cider and of wine from apples and currants. A most interesting book was his "Military Journal during the American Revolutionary War" (1823) written day by day for nearly eight years. Amongst the many noteworthy episodes in this splendid volume are, the visit of Washington to the hospital of which Dr. Thacher had charge, his accounts of the personality of our national hero at the bedside of the wounded, on horseback, or standing amidst his staff, or at a dinner given by General and Mrs. Washington, to which Thacher was invited as a particular guest. Then we pass to a word picture of the capture and execution of Major André, the pathetic scene of the court-martial of mutineers, in the midst of winter; that silver bullet swallowed by a spy, with its incriminating letters inside, brought back to the world by Thacher's dose of tartar emetic, and personal meetings with Lafayette, who was his patient for a while. The end of this famous book is enriched with unexcelled lives of Lafayette, Steuben, and other men of army fame during the Revolution.

Although Dr. Thacher wrote many papers for the medical journals of his era, on such topics as "Hydrophobia" and "Medical Plants" his "magnum opus" is the "American Medical Biography" published as two volumes in one, in 1828. This is made up of 163 biographies in 716 octavo pages, with fourteen delightful portraits of the eminent physicians of his time and of the past, the book being begun with a very readable history of medicine in America. In his preface he says: "Materials for this work have been so abundantly accumulated that the author has been obliged to suppress some memoirs, and to retrench others, lest the volume should be augmented to unwieldly size." This work remains the fountain head of American medical biography and is a perpetual monument to the fame of James Thacher. Not only does it reveal the writer's knowledge of the character and works of the leaders in medicine, but it proves his wide friendship with his contemporaries, for he received assistance from a large number of the prominent men of the day, notably Hosack and Francis of New York, Mease of Philadelphia, Thomas Miner and S. B. Woodward of Connecticut, and G. C. Shattuck of Boston.

Other works by Dr. Thacher were, a "Practical Treatise on the Management of Bees," (1829); "Essay on Demonology, Ghosts, Apparitions and Popular Superstitions," (1831); a "History of Plymouth," (1832), and "Observations Relative to the Execution of Major John André as a Spy, in 1780," (1834).

In writing even a brief notice of this once well remembered physician, we should not forget to point out that he stood so well as a teacher in medicine that he was invited, but declined, to lecture on the theory and practice of medicine at the Fairfield Medical School, in 1813, when Dr. G. C. Shattuck resigned, owing to the difficulties of winter travel. Thacher was one of those men who love to write letters, and those of his that have been preserved, only cause regret that more were not saved, exhaling as they do the charming personal traits of the writer. He believed in medicine, laughed at little doses, favored phlebotomy, at least in desperate pneumonia, and gave much time to botany and its development for the use of medicine. Harvard conferred on him her A. M. in 1808, and in 1810 both Harvard and Dartmouth gave him their honorary M. D.

To sum up in a few words the full life of this able physician it should be said that, in spite of the misfortune of deafness which long debarred him from a satisfactory speaking acquaintance with people around him, he studied assiduously for the benefit of his patients and posterity, and in his published works he has left a name that will endure so long as American medicine has a history.

JAMES A. SPALDING.

THACHER, James Kingsley (1847-1891), clinician of New Haven, Connecticut, was born in that city on October 19, 1847. His father was Professor Thomas A. Thacher of Yale University, his mother the daughter of the Rev. Jeremiah Day, one of the honored presidents of the same institution. Dr. Thacher took his A. B. from the academic department of Yale in 1868. The next two years he spent in California. Upon his return to New Haven he was appointed tutor in physics, and subsequently in zoology, in the academic department. He continued to give instruction in zoology until 1888. Meanwhile he had begun the study of medicine at the medical school, and in 1879 took his degree of M. D. In the latter part of the same year he was appointed professor of physiology in

the school, and in 1887 the department of clinical medicine was also placed in his charge, and he was on the staff of the New Haven Hospital. Already, in 1880, he had entered into the general practice of medicine. While ably discharging his duties as tutor he had still found time to make valuable investigations in regard to vertebrate evolution. His work on this subject, published in 1877, in which he opposed in certain particulars the views of Huxley and Gegenbauer, secured widespread attention and praise, both in this country and Europe. Indeed, when in the summer of 1885, Dr. Thacher visited the various European medical centers, he found that his work had won him many warm friends. But although greatly interested in this department of science, and especially fitted to conduct original investigations, he found himself drawn into other lines of work, for shortly after his appointment to a professorship in the medical school that institution was reorganized to meet better the requirements of the present times. To this work of reorganization and development Dr. Thacher devoted himself. A skilled organizer and indefatigable worker, a tireless student, he had the qualities which ensured success. The attainment of one object was but the incentive to another, and the work grew and prospered under his hands.

Well versed in all branches of clinical medicine, he was especially interested and skilled in diseases of the nervous system. A large portion of his time, both at the medical school clinic and at the State Hospital, where for years he had been one of the staff, was spent in studying this class of disease. Among these manifold duties and interests little time was left for the preparation of articles for the medical press. Still, Dr. Thacher furnished a number of scholarly papers, several of which were published in the "Transactions of American Physicians," of which body he was one of the original members. One of his last noteworthy articles was on the "Pulse-wave Velocity and Ventricular Close-time in Health." His skill in differential diagnosis caused his advice to be sought often in consultation. To the young practitioner especially was Dr. Thacher a delightful and profitable consultant. His genial spirit of comradeship, his genuine and unselfish interest in a case, his delight in investigating and in clearing up obscure and difficult points, in bringing out the important features of the disease, and his skill in deciding upon their rational treatment, will long be gratefully remembered by many.

In the midst of increasing honors and duties he was stricken down with pneumonia, and after an illness of a little over two days died on April 20, 1891. His wife, the daughter of the Hon. Dwight Foster of Boston, and three children survived him.

THACHER, Thomas (1620-1678), preacher and physician, author of the first publication on a medical subject in America, was the son of the Rev. Peter Thacher, rector of St. Edmunds, Salisbury, England, and was born in England May 1, 1620, coming to this country when fifteen years old with his uncle, Anthony Thacher, in the "James," and landing in Boston June 3, 1635. In that same year he went to Ipswich with his uncle. In a letter published by Anthony Thacher ("Young's Chronicles of Massachusetts, 483), we learn that Thomas had a narrow escape from shipwreck, for Anthony, with the Rev. John Avery and a party of friends, twenty-three in all (even then it would seem an unlucky number), sailed August 11, 1635, from Ipswich to Marblehead, where Mr. Avery was to be settled. Thomas fortunately preferred to go by land. A violent storm arose, and Anthony's pinnace was cast away on a desolate island off the tip of Cape Ann, and he and his wife alone were saved. The island, carrying two lofty granite lighthouses and lights of the first class, bears the name of Thacher's Island to this day.

Before coming to America Thomas received a good school education, his father planning to send him to Oxford or Cambridge. He was educated for the ministry by Charles Chauncy (q. v.), the second president of Harvard College, and, it is probable, received something of a medical education from the same source, for Chauncy was skilled in the medicine of the day. At all events, Thacher was learned in many things. He was a scholar in Arabic and composed a Hebrew lexicon. Dr. Mather tells us that according to Eliot he was a great logician, and understanding mechanics in theory and practice, could do all kinds of clock work to admiration. He was ordained as pastor in Weymouth, January 2, 1644, and removing to Boston in 1667 was installed as the first minister of the Old South Church, February 16, 1670. The last sermon he preached was for Dr. Increase Mather.

Dr. Thacher married a daughter of the Rev. Ralph Partridge of Duxbury, May 11, 1643, by whom he had two daughters and three

sons, one of the latter a noted minister. He married a second time, June, 1664, Margaret, widow of Jacob Sheafe and daughter of Henry Webb. He died of a fever, October 15, 1678, following "a visit to a sick person."

The title of the publication, issued by Dr. Thacher in the year 1677, was "A Brief Rule To guide the Common People of New England how to order themselves & theirs in the Small-Pocks, or MeaSels." A reprint of this dated 1702 is a little pamphlet of eight pages, 5½ by 3½ inches, and signed "I am, though no PhySitian, yet a well wiSher to the Sick; And therefore intreating the Lord to turn our hearts, and Stay His hand, I am, A Friend; Reader to thy Welfare, Thomas Thacher, 21, 11, 1677, 8." The reprint is marked "Boston, Reprinted for Benjamin Eliot, at his Shop under the WeSt-End of the Exchange, 1702," and may be found in the Boston Medical Library.

WALTER L. BURRAGE.

THAYER, Addison Sanford (1858-1923), pediatrist and internist of Portland, Maine, was the son of Addison Parsons and Lydia Sanford Partridge Thayer, of Medway, Massachusetts, where he was born, August 5, 1858. Educated at Phillips Exeter Academy he went to Harvard and received his A. B. "Cum laude" with the class of 1881. He then taught Latin and physiology in the Portland high school off and on for four years, at the same time studying medicine with the teachers of the Portland School of Medical Instruction and taking the lectures at Bowdoin Medical School, where he was given an M. D. in 1886. His graduation thesis mirrored the entire course of his professional career: "Alimentation in Disease", for during his practice he studied this topic constantly. Following graduation Dr. Thayer became house officer at the Maine General Hospital, 1886-1887, when he moved to a similar position at the McLean Asylum (for the insane) at Somerville, Massachusetts. While there he attended the exercises at Harvard Medical School and took a second M. D. from that institution in 1888. He found time to make trips to Germany, and to New York and Baltimore for further study, and, settling in Portland, married in 1891 Miss Ida Lawrence Greene, a daughter of Dr. William Warren Greene (q. v.), a man, who during his lifetime, had dominated surgery in Maine. Mrs. Thayer was of great assistance to her husband both in his professional and in his literary work and survived him when he passed away, December 14, 1923.

Fresh from a long course of medical study Dr. Thayer entered into work at Bowdoin Medical School with enthusiasm. He held the following positions there: demonstrator of anatomy, 1889-1895; assistant in pathology and the practice of medicine, 1895-1897; lecturer on the diseases of children, 1897-1898; professor of diseases of children, 1898-1911; professor of internal medicine, 1911-1921 and dean of the medical faculty, 1911-1921. Dr. Thayer may be regarded as the pioneer pediatrician of Maine although he transferred his energies to the larger field of internal medicine in 1911. After 1894 he was a visiting physician to the Maine General Hospital. He wrote a most courteous and able reply to Abraham Flexner's report to the Rockefeller Foundation advising the discontinuance of the Bowdoin Medical School that was published in the "Maine Medical Journal"; he contributed to International Clinics, 1902, a paper on "To What Extent Can General Practitioners Make Use of the Newer Diagnostic Methods"; to the "Boston Medical & Surgical Journal," January, 1903, an article on "The Side Chain Theory", also many other papers, notably those on "Medicine of Today" and "Modern Medicine". His address as president of the Maine Medical Association, in 1921, excited favorable comment from the members of the association. To the Fraternity Club, a society of 30 bright men who met once a week, he prepared yearly some attractive paper, one that was not long but might open a discussion. Among these was a paper on "Twentieth Century Medicine" and a paper entitled: "An Alien Enemy", the enemy proving to be a child of thirteen from over seas, an enemy because her nation was at war with the United States. He held membership in the American Medical Association, the National Association of Life Insurance Medical Directors and in several social clubs. In 1921 Bowdoin gave him her honorary Sc. D.

Personally, Dr. Thayer was a very courteous gentleman—a trifle inaccessible to visitors unless he had been informed in advance of the object of their calls. To those who had valid claims on his time he was ready always with his wisdom and advice. He had a whimsical smile and an odd fashion of twisting his features when talking. His warmth of heart and geniality endeared him to a large clientele, not only in Portland but throughout the State.

THAYER, Proctor (1823-1890), a surgeon of Cleveland, Ohio, was the son of Daniel Thayer, a farmer, and was born in Williamstown, Massachusetts, October 16, 1823. The death of his father in 1830 compelled his mother to break up her home in the East, and accept the invitation of her eldest son to live with him in Aurora, Portage County, Ohio. Here the son, Proctor, received such education as was attainable, and was designed to be apprenticed to a shoemaker of the town, but the boy rebelled and positively refused to learn this humble trade. By dint of industry and economy he succeeded in working his way through the Western Reserve College at Hudson, Ohio, in the scientific department of which he was graduated in 1842, and eventually studied medicine with Dr. Delamater (q. v.), of Cleveland. Here he attended medical lectures in the Cleveland Medical College, until his graduation there in 1849. In that year he was appointed to the charge of the cholera hospital in the city of Cleveland, and won many encomiums for his courage, skill and success. In 1852 he was appointed demonstrator of anatomy in the Cleveland Medical College, in 1856 was elected to the chair of anatomy and physiology, and this was exchanged in 1862 for that of the principles and practice of surgery, to which was annexed, at his own request, the chair of medical jurisprudence. During the Civil War Thayer was active as an examining surgeon, and in the volunteer medical service in South Carolina and at Pittsburg Landing and Corinth. On returning to Cleveland he resumed duties in the college, until, in 1890, failing health compelled him to claim a few months of rest. Unfortunately neither rest nor medical treatment sufficed for his restoration, and he died in Cleveland October 1, 1890.

Dr. Thayer was a prudent and skilful surgeon of bluff and hearty manners and a ready and caustic wit, which won him both friends and enemies. As an expert witness upon the witness stand he was at his very best, and woe to the unwary lawyer who aspired to entangle or confuse him in the toils of medico-legal ambiguities. As a teacher he was distinguished by positiveness and a clearness of statement which rendered him very popular among students. If we add to this that Dr. Thayer is said to have been the first teacher in the Cleveland Medical College to discard written lectures and even notes, and to deliver his lectures extempore, his popularity in college circles is readily understood. He was a member of the Ohio State Medical Society and of the Cuyahoga County Medical Society.

On June 27, 1861, he married Mary Ellen Mesury, and had two boys and two girls. One of these boys, Joseph M., became a physician.

A good portrait (crayon) of Dr. Thayer will be found in the parlors of the Cleveland Medical Library Association.

HENRY E. HANDERSON.

THOMAS, Amos Russell (1826-1895), dean of the Hahnemann Medical College of Philadelphia, was born in Watertown, New York, on October 3, 1826, the son of Colonel Azariah Thomas, whose Welsh ancestors were among the earliest settlers in Massachusetts. At first Thomas tried being a business man, but soon began to study medicine at the Syracuse Medical College, graduating in 1854, and practicing that same year in Philadelphia, meanwhile taking his medical degree at the old Penn Medical College. In this college he was first demonstrator and afterwards professor of anatomy for ten years. Soon after going to Philadelphia he became a convert to homeopathy, and in 1867 was made professor of anatomy in the Hahnemann Medical College.

Besides contributing scientific papers to the journals of his school, Thomas wrote a valuable book on "Post-Mortem Examinations and Morbid Anatomy," also "Diseases of the Pancreas," "History of Anatomy," "Evolution of Earth and Man," and edited the "American Journal of Homeopathy" four years, besides being co-editor of the "Hahnemannian Monthly".

Early in life he married Elizabeth Bacon of Watertown, and one son, Charles M., followed his father's profession. His only daughter, Florence, died in 1880, fifteen years before her father, who died at his house in Devon of carcinoma of the bladder in December 1895. His portrait is in the Surgeon General's Library at Washington, D. C.

Thomas, Charles Widgery (1816-1866), city physician of Portland, Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1135.

THOMAS, Flavel Shurtleff (1852-1922), physician and author, was born in Hanson, Massachusetts, September 7, 1852, the son of Isaac and Abby Shurtleff Thomas. Having finished his preparatory work in the Phillips Academy, Andover, Massachusetts, he began at nineteen to study medicine with Wood-

bridge R. Howes of Hanover. He attended three courses of lectures at McGill University and at Howard Medical School where he was graduated in 1874. That year, he began practice in Ithaca, New York, but in a few months moved to Hanson and from 1879 was the town physician. Pursuing study, he successively won the degrees of A. M. at Shurtleff College in 1876; the V. S. of Montreal Veterinary College in 1879; the B. S. of Illinois Wesleyan University; the B. S. of Syracuse University in 1885 and the M. Sc. in 1886; the D. V. Sc. of McGill University in 1890, the LL. D. of Shurtleff in 1892, and the diploma of the Authors' League of the American Health League of the A. A. A. S. in 1907. He devoted much time to zoology in which he received the Ph. D. from the National University, where he was under Prof. Edward A. Birge, and the D. Z. The latter, Doctor of Zoology, being a European degree ranking with the Ph. D., was introduced into this country when first conferred on Dr. Thomas. His Ph. D. thesis on "Birds of Hanson" describes sixty birds and is illustrated by specimens prepared by him. He was also a special and post-graduate student in zoology at Cornell under Law, Gage, and Wilder; at Syracuse under Underwood; and in the Boston Museum of Natural History under Van Vleck and Hyatt. Dr. Thomas was lecturer on comparative anatomy at the College of Physicians and Surgeons, Boston, in 1883, and was appointed professor and dean of the correspondence department of the National University in 1889. In 1891, he became physician to the Gordon Rest Sanitarium, Hanson, and after the Maquam Sanitarium was opened by him in 1894, he served as physician there. He was also an examiner for the New York Mutual and Manhattan Life Insurance Companies. The community appointed him a member of the Hanson School Committee, inspector of animals and provisions, and trustee of the Plymouth County Agricultural Society. One article read before the Farmers' Institute of the County on "Insects Injurious to Vegetation in Hanson" was illustrated by insects he had preserved.

He married Caroline Moore Smith of Titusville, Pennsylvania, July 9, 1879; their children were Percival Shurtleff and Saba Drew.

Widely known for his writings on the subject of university degrees, notably the "Dictionary of University Degrees," Dr. Thomas was also the author of articles on public health, preventive medicine, comparative anatomy and several papers on medical education, its value, and what it should mean. He was the editor of the department of university degrees and education of the "New Standard Dictionary of the English Language," Funk & Wagnalls, New York, 1915.

He passed away on November 20, 1922, following a long illness.

THOMAS, James Carey (1833-1897), a trustee of Johns Hopkins University, educator, philanthropist, was born July 13, 1883, of a medical family, his father, his father's brother, his half brother, his son and grandson all being physicians. His father, Richard Henry Thomas (1805-1860), M. D., University of Pennsylvania, professor of obstetrics and medical jurisprudence in the University of Maryland, 1847-1858, a well-known Baltimore physician and minister of the Society of Friends, was the first of his immediate family to live in Baltimore, although the Thomases and his mother's family, the Snodens, had been in Maryland for many years, having originally settled at West River on the western shore of the Chesapeake on coming from Wales in 1651 and 1679 respectively. His mother was Martha Carey, daughter of James Carey, a prominent Baltimore merchant of Irish ancestry whose country place, Loudon, is now Loudon Cemetery, and of Hannah Ellicott of English descent, whose family had lived in Ellicott City, Maryland, since 1771.

James Carey received the degrees of A. M. from Haverford College in 1851 and M. D. from the University of Maryland in 1854. He practiced medicine in Baltimore for 46 years, but found time, outside of a busy professional life to work unremittingly for the educational, religious, philanthropic and civic betterment of the city. He was appointed a trustee of the Johns Hopkins University in 1870, three years before the death of its founder, Johns Hopkins, and six years before the opening of the university. He served on the trustees' executive committee from its first meeting, and was its chairman from 1894 until his death. In close cooperation with President Gilman and other early trustees, he was active in determining and carrying out the noteworthy liberal policies of the board which built up a great university. His medical training, high educational ideals and sincere belief in women's intellectual capacity made him very influential in organizing the Johns

Hopkins Medical School with higher standards of admission and graduation than those of any other existing medical school, and opening it to women on equal terms with men. His intimacy with Francis T. King, the first president of the board, and other trustees of the Johns Hopkins Hospital made his medical experience readily available, and it was frequently called on in the early planning of the hospital. He served later on its medical board, and as consulting physician from 1889 until his death in 1897. His educational interests extended beyond Baltimore. He was a charter member of the board of trustees of Bryn Mawr College, which opened in 1885, and was for many years a member of the board of managers of Haverford College. His religious activities were many and varied. As a minister of the Society of Friends he preached always once, and often twice, weekly, and was the friend and religious counsellor of many of the members of Baltimore meeting. He organized and conducted for many years a large mission Bible school, meeting on Sunday afternoon in Light Street, and through his influence and personality persuaded several generations of young society men and women to act as teachers in the school. He was deeply interested in the Young Men's Christian Association, of which he was president from 1877-1881; in the last year he represented the association at the world's convention in London, and he was vice-president from 1881 until his death. His religious influence over young men was very remarkable. He knew how to win their love and confidence, and maintained the happiest relations with the younger professors and students of the Johns Hopkins University and Medical School, making them feel that his house and his heart were always open to them. His philanthropic interests were also unusually wide. He was a member of the first commitee to promote public baths in Baltimore and served as a member of the Municipal Commission on Free Baths, until his death. He was a charter member of the Society for the Suppression of Vice and worked in its executive committee from its organization until his death. He was a member of the original board of Trustees of Thomas Wilson Sanitarium for Sick Children. In addition to the other positions mentioned above, he was at the time of his death, president of the Board of the Boy's Home, president of the Thomas Wilson Fuel Saving Society, president of the Baltimore Manual Labor School, and vice-president of the Charity Organization Society.

In 1855 Dr. Thomas married Mary Whitall, daughter of John M. Whitall and Mary Tatum Whitall of Philadelphia. She seconded him ably in all his religious and social activities, and was as well known as her husband for her religious and philanthropic work. They had ten children, eight of whom survived him. One of his sons is Dr. Henry M. Thomas, the clinical professor of neurology at the Johns Hopkins University Medical School. His eldest daughter, M. Carey Thomas, was president of Bryn Mawr College; another daughter, Margaret Thomas Carey, continued as a minister of the Society of Friends, her parents' religious work in Baltimore; still another daughter, Mary Grace Worthington, was connected with the New York School of Philanthropy, and the youngest daughter, Helen, became the wife of Dr. Simon Flexner, director of the Rockefeller Institute for Medical Research, New York.

Dr. Thomas died suddenly of thrombosis of the coronary artery, in Baltimore, November 9, 1897.

HOWARD A. KELLY.

THOMAS, James Grey (1835-1884), pioneer in the public health service in the State of Georgia, was born near Bloomfield, Nelson County, Kentucky, June 24, 1835; his ancesors were English and Welch. He attended the Bloomfield High School and the Roman Catholic College (St. Joseph's) at Bardstown, Kentucky, and began the study of medicine at Louisville, then entered the medical department of the University of the City of New York, graduating in 1856. He practiced in Bloomfield, and then moved to a site near Sardis, Mississippi. While here the Civil War began. He served in the Confederate army throughout the War, was chief surgeon of McLaw's division and medical director of Hardie's Corps. In 1865 he settled in Savannah, Georgia, marrying the same year. From 1875 to 1876 he was in the State Legislature, selected as a "judicious and public-spirited medical man who would lead in procuring the enactment of laws relating to the interests of hygiene in the State." He was author of the law creating the State Board of Health and requiring the registration of all births, deaths and marriages, and was the first president of the board. For the first time in Georgia, "physicians were recognized as an active working element in its government"; efforts were made to secure vital statistics, to estab-

He married Mary T. Willard of Troy, New York, in 1862.

He died at Thomasville, Georgia, February 28, 1903; his widow, with two sons, J. Metcalf and Thomas Gaillard, Junior, surviving him.

A tolerably full list of his papers is given in the Surgeon-general's Catalogue, Washington, D. C.

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THOMPSON, Abraham Rand (1781-1866), prominent physician of Charlestown, Massachusetts, was born in that town, May 20, 1781, the year of the founding of the state medical society, and there he lived, dying of paralysis, May 11, 1866, having served two generations as medical adviser, delivered several orations and acted for three terms as chairman of the board of trustees of the newly created lunatic hospital at Worcester. At the age of ten years he went to live with his uncle, Abraham Rand, at Salem, Massachusetts, and here he prepared for Dartmouth Medical School, but returned to Charlestown in 1799 to the home of his father, Timothy Thompson, who was of the fifth generation from James Thompson, the immigrant, who settled in Charlestown in 1632. Dr. Josiah Bartlett (q. v.), physician, orator and statesman, received Thompson in his family as a student, and after three years' study he obtained a certificate of licensure from the Massachusetts Medical Society, preceding entrance into full fellowship in 1806. In 1803 Thompson married Elizabeth Bowers of Billerica, Massachusetts, and in the course of time they had thirteen children. The doctor was dearly beloved by his fellow townsmen. He rode to his visits on a large black horse, and having a tall and commanding presence, his appearance on the streets was marked by all. He was a man of strong religious convictions, and a regular attendant at church, albeit his habit was to be a trifle late. Just as he sat down in his pew he would raise his full wig with both hands several inches from his head, if the weather happened to be hot, much to the edification of the younger generation. Dartmouth conferred the honorary M. D. upon him in 1816 and Harvard did the same in 1826.

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was soon an accomplished fact. Thirty years she labored there doing all the surgical work, with wonderful precision and dexterity of manipulation.

But professional eminence was not her only claim to remembrance; her philanthropy was catholic, and she was also a firm suffragist and agitated the question among her pupils. The Chicago Medical College Department of North Western University conferred a degree on Dr. Thompson in recognition of her work, the only one it had ever granted to a woman. She also became a member of the International Medical Association in 1887, and of the Chicago Medical Society.

Dr. Thompson passed away in the midst of her activities after an illness of only twenty-four hours on May 21, 1895. Several years after her death a memorial bust of Dr. Thompson, the work of the well-known sculptor, Daniel C. French, was presented by her friends to the Art Institute of Chicago.

ALFREDA B. WITHINGTON.

Thompson, Robert (1797-1865), of Columbus, Ohio, a founder of the Ohio State Medical Society and inventor of surgical instruments. See American Medical Biographies, H. A. Kelly & W. L. Burrage, Balto. 1920, page 1142.

THOMSON, Adam (———-1767), was born and educated in Scotland, the date of his birth not having been ascertained. In his memorable and eloquent "Discourse on the Preparation of the Body for the Smallpox" he refers to "the Famous Monro of Edinburgh" as one of his first masters in the healing art. He settled in Prince George's County, in the Province of Maryland, early in the eighteenth century. In 1748 he went to Philadelphia, where he continued to practice, his services being in demand throughout the colonies because of his eminence and success as an inoculator. In 1738 he began his method of preparing the body for smallpox. It consisted of a two week's course of treatment or "cooling regimen" preparatory to inoculation, to wit: a light, non-stimulating diet, the administration of a combination of mercury and antimony, and moderate bleeding and purgation. He admitted that Boerhaave's Aphorism No. 1392* advanced the "hint" that mercury and antimony properly prepared and administered "might act as an antidote for the variolous contagion." Dr. Thomson's phenomenal success with the method convinced him that "mercury under proper management is more of a specific agent against the effects of the variolous than the venereal poison." He was careful to give it within the bounds of salivation and to modify the regimen to suit the patient's age and constitution. In his "Discourse" he says: "On every occasion for the space of twelve years where I have been called to prepare people for receiving the smallpox, either in the natural way or by inoculation—having prepared many for both—I have constantly used such a mercurial and antimonial medicine as Boerhaave has described, and I can honestly declare that I never saw one so prepared in any danger under the disease."†

His explanation of the manner in which immunity is acquired against smallpox is most interesting, and suggests to readers of today Pasteur's exhaustion hypothesis. He states: "It seems to me highly probable that there is a certain quantity of an infinitely subtle matter which may be called the variolous fuel, equally, intimately and universally diffused through the blood of every human creature; in some more, in others less, that lies still and quiet in the body never showing itself in any manner hitherto discovered until put in action by the variolous contagion, at which time it is totally expelled by the course of the disease." He found the average medical practitioner of America poorly educated, and therefore a source of danger in the community. He recommends in the discourse that the Legislature interpose in behalf of the safety of the people and appoint proper persons to judge of the qualifications of those permitted to practice.

Dr. Thomson delivered his "Discourse on the Preparation of the Body for the Smallpox" before the trustees and others in the Academy of Philadelphia, on Wednesday, November 21, 1750.‡ It was published by Benjamin Franklin, and was reprinted in London in 1752, and in New York in 1757. It met with favorable reviews in America, England and France. Dr. James Thacher (q. v.) ("American Medical Biography," 1828, vol. i, p. 66,) refers to the "Discourse" in the following manner: "This

*Boerhaave's 1392'd Aphorism. Some success from antimony and mercury prompts us to seek for a specific for the small-pox in a combination of these two minerals reduced by art to an active, but not to an acrimonious or corrosive state.

†Dr. Thomson makes a similar assertion in a letter which appeared in the Md. Gaz., Nov. 25, 1762.

‡An original Franklin print of the Discourse is on file in the Library of the surgeon-general's office, Washington, D. C. Copies of it may be seen in the Libraries of the Johns Hopkins Hospital and of the Medical and Chirurgical Faculty of Maryland.

production was highly applauded both in America and Europe, as at this period (1750) the practice of inoculation was on the decline. The author states that inoculation was so unsuccessful at Philadelphia that many were disposed to abandon the practice; wherefore, upon the suggestion of the 1392'd Aphorism of Boerhaave, he (Thomson) was led to prepare his patients by a composition of antimony and mercury, which he had constantly employed for twelve years, with uninterrupted success."

Dr. Redman, and Dr. Kearsley (q. v. to both) of Philadelphia, and others, first opposed the method, but later it was universally adopted in the colonies and was favorably received in England. It soon became known as the American method for inoculation and was introduced as routine procedure in the first inoculating hospitals which were established near Boston, Massachusetts, in February, 1764. Dr. William Barnett was called from Philadelphia to supervise the work because of his reputation there as a successful inoculator. He used Dr. Thomson's method, but was not generous enough to admit the fact. (See address, Quinan, "Maryland Medical Journal," 1883, vol. x, p. 115). In England, the method was highly recommended by Huxham, Woodward and others.

Woodville in his "History of the Inoculation of the Smallpox in Great Britian" (1796, p. 341) quotes from Dr. Benjamin Gale's (q. v.) "Dissertation on the inoculation of the Smallpox in America" as follows: "Before the use of mercury and antimony in preparing persons for inoculation one out of one hundred of the inoculated died, but since only one out of eight hundred," and (Ibid., p. 342), by last accounts 3,000 had recovered from inoculation in the new method by the use of mercury and antimony and five only had died, viz: children under five years of age." Dr. Gale and others conceded Dr. Thomson to be the most successful inoculator in America.

Thomson married the widow of James Warddrop, of Virginia. She was Lettice Lee, daughter of Philip Lee, of Virginia, a great-granddaughter of Richard Lee, the emigrant. After Thomson's death she married Colonel Joseph Sims. She had issue only by Dr. Thomson, two daughters: Mary Lee and Alice Corbin.

Dr. Adam Thomson died in New York City, September 18, 1767. The following notice of his death appeared three days later in the New York "Mercury:" "On Friday morning early, died here, Adam Thomson, Esq., a physician of distinguished abilities in his profession, well versed in polite literature, and of unblemished honor and integrity as a gentleman."

H. Lee Smith.

THOMSON, Samuel (1769-1843). Associated with a system called the Thomsonian and as having implicit faith in steam and in lobelia as curative agents, Thomson should not by any means be deemed a quack if the term means a vain and tricky practitioner, for he told all he knew in as plain a manner as possible and acquired much knowledge of hitherto unknown virtues of plants. He experimented on himself, then published the results, leaving others to form their own opinions.

He was born on February 9, 1769, in Alstead, Cheshire County, New Hampshire, the son of John and Hannah Cobb Thomson. He began early as an herbalist, for, discovering by self experimentation when four years old the emetic properties of lobelia, he amused himself inducing boy friends to chew it, and made further researches as a boy by associating with an old woman herbalist, the only "doctor" in that wild region. When sixteen he offered himself as a pupil to a "root doctor," one Fuller of Westmoreland, but owing to deficient education was refused. Later he bought a farm in Surrey and married. In 1796 his second child having scarlet fever and the doctor (Bliss) practically giving up the case, Thomson made his first experiment with steam and saved the girl. After that, wise in herbal lore, particularly that relating to lobelia, he became a traveling doctor, riding on horseback through New Hampshire, Maine, Vermont and Massachusetts, first patenting his remedies at Washington. He finally settled down to practice in Beverly, Massachusetts, and naturally met with opposition among the faculty, though he also made converts to his system who, as he did, used lobelia emetics, sweating, capsicum, composition powder and hot drops. The author was once in jail on a charge of murder by lobelia poisoning, but was acquitted and afterwards opened an office and infirmary in Boston. For twenty years the Thomsonian System flourished in New England, such men as Benjamin Waterhouse (q. v.) and Samuel L. Mitchell (q. v.) in their private correspondence approving with reservations the system and unreservedly the author's frankness and zeal.

Thomson passed from life on October 4, 1843, heroically partaking of his own remedies to the very end.

"His New Guide to Health" was first issued in 1822 and, passing through various editions with enlargements, became "Thomson's Materia Medica or Botanic Family Physician." This reached a thirteenth edition edited by Dr. John Thomson, his son. Two journals were started, "The Botanic Watchman," in 1834, and the "Thomsonian Recorder," 1833, which furnished curious and amusing reading.

DAVINA WATERSON.

THOMSON, William (1833-1907), ophthalmologist of Philadelphia, was born in Chambersburg, Pennsylvania, January 28, 1833, one of the three sons of Alexander Thomson, judge of the Sixteenth Judicial District of the State, and Jane Graham. He studied medicine at the Jefferson Medical College, and graduated M. D. in 1855, and early attracted the attention of Dr. John Kearsley Mitchell (q. v.), being led by him to take over the practice of Dr. Clark, of Merion, on the Pennsylvania Railroad, where he settled as a country physician. Four years later he married Rebecca George, a member of a well-known family of Friends then living on the original grant of land from William Penn to their ancestor.

In the summer of 1861, as assistant surgeon, with rank as lieutenant, he entered the regular service, just before the disaster of Bull Run. He served in this position in the Army of the Potomac and in Washington and Alexandria until, in 1862, he joined General McClellan's headquarters as chief of staff to the medical director, Jonathan Letterman (q. v.). He was present throughout the peninsula campaign and at Antietam. In 1863 he was placed as surgeon in charge of the Douglas Hospital, Washington, and in 1864 made medical inspector at Washington, which contained in its various hospitals over 23,600 beds. In 1866 he organized a hospital for the treatment of cholera, and had charge of the Post Hospital. After a brief stay on duty in Louisiana, he resigned in 1868 and was elected a fellow of the College of Physicians of Philadelphia in April, 1869.

While in Washington he was largely interested in the Army Medical Museum—the creation of John H. Brinton (q. v.)—and was the largest contributor to the first published catalogue, for which he wrote valuable descriptions of osteomyelitis and wounds of joints. With his friend, William Norris (q. v.), he had utilized photography in the study of wounds, and had induced the Surgeon-General to establish, in connection with the museum, a photographic bureau. Thomson and Norris were the first to make negatives by the wet process of the field of the microscope with high and low powers, and led the way to the splendid success obtained later through the resources of the Surgeon-General's Office. These studies in optics finally dominated the future of Thomson and Norris, and led to their practice and teaching of ophthalmic surgery. Dr. Thomson, thus led by his mastery of photography to a close study of optics, began soon to display that facility of resource in ophthalmic medicine which characterized all he did. Early in his career his attention was directed to the subjective methods of determining the static refraction of the eye, and in 1870 he described a test for ametropia based on the experiment of Scheiner, and later in the same year brought his method to the notice of the members of the American Ophthalmological Society. In 1902 he brought before this society a new apparatus for the correction of ametropia, and upon its constant improvement he spent much time during the last years of his life, working at it almost until the day of his death. In 1896 he wrote his important article on "The Detection of Color Blindness."

Two institutions in Philadelphia are especially indebted to one work of William Thomson, namely, the Wills Eye Hospital, with which he became connected in 1868, and the Jefferson Medical College, with which he was identified from 1873 until 1897, first as lecturer on diseases of the eye, later as honorary professor of ophthalmology, and finally, in 1895, as full professor of ophthalmology, with a seat in the faculty.

He was a member of the Philosophical Society, the Academy of Natural Sciences, honorary member of the New York Neurological Society, sometime physician to the Episcopal Hospital. Dr. Thomson died August 3, 1907.

A list of his ophthalmic papers is given in the "Transactions of the College of Physicians" of Philadelphia, 3 s., 1909, vol. xxxi. They include: Chapter on diseases of the eye in Gross' "Surgery" (fifth edition); "History of First Case of Tumor of Brain Diagnosticated with the Ophthalmoscope in Philadelphia"; "System Adopted by the Pennsylvania Railroad in 1880 for Examinations of Employees for Color-blindness, Vision and Hearing, with Instruments, Color-stick, etc."';

"Normal Color Sense and Detection of Color-blindness in Norris and Oliver's System"; chapter on diseases of the eye in "American Text-book of Surgery"; "Relation of Ophthalmology to Practical Medicine."

S. Weir Mitchell.

THOMSON, William Hanna (1833-1918), eminent Christian citizen, teacher, writer, neurologist, was born November 1, 1833 in Beirut, Syria, the son of the missionary, Dr. William McClure Thomson, widely known through the English speaking world as the author of "The Land and the Book" (1859), in the preparation of which the son greatly assisted his father, traveling with him, noting the customs, the geography, and the botany of the country, and for the first edition drew in India ink many of the illustrations. His mother dying when he was yet a boy, he came to the United States for his education and entered Wabash College, Indiana, but dropped out at the age of sixteen to return to Syria; in 1850, the college gave him an A. B. In his early twenties, he returned to America to enter the medical college at Albany, New York, where he was graduated in 1853; he received the A. M. of Yale in 1861 and the LL. D. of New York University in 1885. While a student at the medical college he supported himself by writing for the New York Observer and by teaching, the hardships of these early years creating an intense sympathy for the poor and especially for young men struggling for an education.

Soon after graduation, he was appointed quarantine officer of the Port of New York. He had intended to return to Syria as a medical missionary, but as he was ready to leave, a terrible Turkish massacre stopped him; his plans for Syria were abandoned when the Civil War broke out and his work here absorbed him. He volunteered as a medical officer and was made an examiner of troops as they passed through New York; he was one of the first men whom the mob wished to kill, and the riots of three days in New York started in his office. "The public spirit aroused in him by the War never died down. At its close his mind grappled with the great problems then confronting the nation. He became one of the charter members of the Civil Service Reform Association, and in its work he actively cooperated to the end of his life." Dr. Thomson was assistant physician at the Quarantine Hospital in 1859; United States medical inspector in 1861-65; physician to the Charity Hospital in 1868; attending physician to the Roosevelt and Bellevue hospitals, and consulting physician to the New York Manhattan Hospital for the Insane and to the New York Red Cross Hospital (now the Park Hospital). In 1867, he became professor of materia medica and diseases of the nervous system in the medical department of New York University. He was president of the New York Academy of Medicine for two years (1898-1900) and was active in the New York Neurological Society. Among his writings are, "Brain and Personality" which passed through many editions, "What is Physical Life?" "Some Wonders of Biology," and "Clinical Medicine," 1914, containing numerous articles and addresses extending through many years; he contributed widely to magazines, notably a delightful series to "Everybody's Magazine" under the title "As to Ourselves" and another to "Harper's Magazine" on "Arabia, Islam, and the Eastern Question." He was also the author of several religious books: "The Great Argument; or, Jesus Christ in the Old Testament," "Life and Times of the Patriarchs," "Parables by the Lake," and "Parables by the Way." He had "a tireless mind and a ready pen" and was always thinking, reading, and writing.

In May, 1861, he married Catherine S. Van Dyke, of Albany; they had two sons and a daughter. He died of pneumonia in New York City on January 16, 1918.

Dr. Thomson was a deacon in the Broadway Tabernacle, New York City, for fifty-two years. For twenty-five years, he conducted a Bible class; "His intimate knowledge of the Holy Land, his extensive acquaintance with Oriental literature and with the Arabic language, his gift of the power of luminous statement, and his enthusiastic desire to spread abroad the knowledge of Jesus Christ, combined to make him a teacher of extraordinary attractiveness and efficiency. Into his lessons he poured the whole wealth of his richly stored mind, and the full charm of his rare personality." His Christian faith was simple and childlike, and he was a type of all that is best in a highly educated, well trained physician contributing his life to the public service.

Howard A. Kelly.

THORNDIKE, William Henry (1824-1884), Boston surgeon, was born at Salem, Massachusetts, June 5, 1824, and died at his home in Boston on the site of the Hotel Thorndike, December 26, 1884. His preliminary training

was in the Salem Schools and at Harvard College, where he took an A. B. in 1845. After graduating he began to read medicine, according to the custom of the time, in the office of Dr. A. L. Peirson of Salem (q. v.). Later, he entered the Harvard Medical School, and received his degree of Doctor of Medicine in 1848. He then served as house pupil at the Massachusetts General Hospital. He began the practice of medicine in East Boston, an isolated community, where he was thrown upon his own resources. Thus was developed, as his associate at the Boston City Hospital, Dr. D. W. Cheever (q. v.), has said, "a peculiar roundness and completeness of character usually found only in the country doctor." In his locality he quickly became one of the foremost physicians. He had been in practice only a few weeks when he performed his first major operation, which was the removal of the lower maxilla, followed by recovery of the patient. During his residence at East Boston he was in the habit of crossing over Shirley Gut to Deer Island, and at the morgue obtained material for dissection. While living in East Boston he met his wife, Miss Sarah Wayland-Smith, whom he married December 18, 1851. She was a daughter of Ebenezer Smith, a prominent business man of Boston. In 1866 he removed to Boston proper, and was appointed one of the six visiting surgeons at the Boston City Hospital, which had been opened two years previously. He served until shortly before his death, a period of seventeen years.

He was a typical New England-bred man, and stood for all that such a heritage implies. He was descended from an English ancestor, who settled the town of Ipswich, Massachusetts, with Governor Winthrop in 1633. He had an enormous practice and acquaintance, and for this reason was much sought after by lawyers as an expert in court. It was said that it was almost impossible to empanel a jury which did not number among its members a former or present patient of Dr. Thorndike. He operated in all fields of surgery. Cheever says of him, "Natural taste, acquired dexterity, long practice, had made him a deft, intrepid and successful operator. He loved his art. With him to see clear was to do. Diagnosis was followed by action. . . . He tied the internal iliac artery, behind the peritoneum, for secondary hemorrhage from a perforating wound, and the patient lived to attend the funeral of his surgeon. He tied the external iliac vein for primary hemorrhage from a stab, with success. He tied the gluteal artery at its point of emergence from the sciatic notch for a traumatic aneurysm in the nates. He removed a cobblestone, five inches by three, and weighing two pounds, from the peritoneal cavity, with success." He opened the gall bladder and removed calculi by incision. These feats were performed before the days of antiseptic surgery. A large and exacting private practice gradually wore him out, sepsis from an operating wound received while performing an ovariotomy in 1881 undermined his constitution, the end coming from a double pneumonia.

One of his daughters married Dr. Herbert Leslie Burrell (q. v.), professor of clinical surgery in the Harvard Medical School, and a son, Dr. Townsend William Thorndike, was professor of dermatology and syphilis in Tufts College Medical School, Boston.

TOWNSEND W. THORNDIKE.

THORNTON, Matthew (1714-1803). The last name to be signed to that memorable document, the Declaration of Independence, was that of Matthew Thornton, who was born in Ireland in 1714. His father emigrated to this country in 1717 and settled in Wiscasset, Maine. From there the family removed to Worcester, Massachusetts, where Matthew received his education. Here he studied medicine and then settled in Londonderry, New Hampshire, where he acquired an extensive practice and became conspicuous for professional skill as well as having the distinction of being an aggressive and public-spirited patriot. Dr. Thornton shared in the perils of the expedition against Louisburg as surgeon of the New Hampshire Division of the army. When the political crisis arrived, Thornton abjured the British interests. He was a member of the convention which declared New Hampshire to be a sovereign state, and was elected its president. He served in the Continental Congress from 1776 to 1778, and in the last year resigned to accept the chief justiceship of Hillsborough County. He held this position only two years, resigning to accept a position on the supreme bench of the state. In 1783 Thornton was elected a member of the State House of Representatives, and the next year a member of the State Senate. He wrote political articles for the papers, even after the age of eighty, and during his last days was at work on a metaphysical article on the origin of sin, which was never published.

In 1780 he purchased a farm at Merrimack, N. H., on the banks of the Merrimac river, near Exeter, and spent the remainder of his life there, dying in Newburyport, Massachusetts, while on a visit to his daughter, on June 24, 1803.

IRA JOSLIN PROUTY.

THORNTON, William (1761-1828), who was in charge of the United States Patent Office at its beginning, was born on Tortola Island in the West Indies, May 27, 1761, held the Edinburgh M. D., and after graduation continued his medical studies in Paris and traveled extensively through Europe, then came to the United States, married in 1790 and returned to Tortola. In 1793 he came back to Washington, and that same year published his "Elements of Written Language," and afterwards many papers on other subjects, including medicine, astronomy, philosophy, finance, government and art. He was also associated with Fitch in early experiments in propelling boats by steam. Always inventive, he was wisely put in charge of United States patents from the passage of the Act of Congress in 1802 until his death. During the war of 1814 he was the means of preserving the records of the Patent Office from destruction by the British. He was the first architect of the Capitol, as also its designer, and of many buildings in the District of Columbia and elsewhere.

In 1794 he was appointed by Washington one of the three commissioners of the District of Columbia. He died March 27, 1828.

DANIEL SMITH LAMB.

THURBER, Daniel (1766-1836), pioneer physician of Mendon, Massachusetts, had this inscription on his tombstone, probably of his own composition:

"A stranger to this town I came,
And left my father's house and home;
To heal the sick my mind was led,
And now I'm numbered with the dead."

Thurber was a man of no mean skill, served the inhabitants of a small town and the surrounding country most acceptably and took under his care a large number of apprentices in the healing art. He was born in Rehoboth, in the same state, September 28, 1766, the son of Daniel Thurber and a descendant in the fifth generation of James Thurber, who came from England and settled in Rehoboth sometime between the years 1680 and 1690. He had a scanty education in times when there were few schools and colleges, yet by virtue of natural ability he succeeded in preparing himself for professional studies which he began with Dr. Isaac Fowler of his native town at the age of seventeen. He served the usual period of three years and then set up practice at Pawtucket, Rhode Island the year he came of age. He had no diploma, and he needed none. It has been estimated that at that time out of some 3,500 practitioners of medicine in the colonies there were less than 400 who had received degrees in medicine. Practice not proving satisfactory Dr. Thurber moved to the southeastern part of the town of Mendon, where he spent the rest of his life. The attraction was the "Green store", kept until recently as a general store, and then known as the Penniman store and public house, the center of trade for miles around. There he built up an extensive practice and a large circle of friends. An obituary of him records that for many years Dr. Thurber was at the head of the medical profession in his community and his counsel was much sought by other physicians. The History of Milford, an adjoining town, says that he was "one of the most popular, trusted, and beloved physicians that ever gladdened the sick chamber". He must have taken his student with him on some of his rounds and inculcated the proper care of the sick, a bit of training which the laboratory of today does not furnish, nor even the hospital, with its wholesale handling of individuals.

In 1811 Dr. Thurber became a Fellow of the Massachusetts Medical Society and in 1825 Brown University conferred on him her honorary M. D. to be followed the next year by the same degree from Harvard, therefore we may assume that he had made good before reaching sixty. In 1809 he was elected representative to the General Court of the state and was reelected for twenty years, also serving as a delegate to the Constitutional Convention in 1820.

Dr. Thurber was twice married but left no children. His first wife was Olive Penniman, who died September 14, 1823, and his second was Harriet Taft of Uxbridge, who died before him. On his birthday in 1835 he wrote in his diary: "This day I am 68 years old. I begin to feel more and more the infirmities of old age, my limbs begin to fail, my hand trembles, my speech is impaired, my memory is decaying, and I am sensible that I shall have but a short time to remain an inhabitant of this world. With a heart overflowing with gratitude, I give thanks to Almighty God that he has preserved my life

another year and that I am permitted to enjoy a comfortable degree of bodily health." He died four months later, on January 22, 1836, aged sixty-nine.

Seventeen years after his death the physicians of the neighboring parts of the counties of Worcester, Norfolk and Middlesex, met in the office of Dr. Francis Leland in Milford, and upon motion of Dr. John George Metcalf of Mendon, orator of the Massachusetts Medical Society in 1856, a worthy contemporary and successor of Dr. Thurber, passed a vote organizing the Thurber Medical Association, a society which with its library and regular meetings, is in active existence today, and claims to be the oldest independent local medical society in the country.

JOHN M. FRENCH.

TIFFANY, Flavel Benjamin (1846-1918), ophthalmologist of Kansas City, Missouri, was born at Cicero, Oneida County, New York, April 28, 1846, the son of Ambrose and Electa Shepard Tiffany. He early removed with his parents to Rutland, Dane County, Wisconsin, and afterward to Baraboo. The following year he removed again, to Rice Lake, Minnesota, where his mother died. The war breaking out, he enlisted at the age of seventeen in Battery B, Fourth Minnesota Light Artillery, and served till the close of the strife. Returning to Minnesota, he went to school at Faribault, living with a Dr. Bemis, and doing manual labor for his board. Before he was twenty years of age he entered the state university at Minneapolis, but could not quite complete the literary course because of failing health, the result of overwork and great privations. In 1872 he entered the medical department of the University of Michigan at Ann Arbor, receiving his degree in 1874 and settling first in Grand Haven, Mich., but being unsuccessful, went again to Minnesota, thence to East St. Louis, where, however, he could not gain a practice. Returning once more to Minnesota, he was ably assisted by a worthy and wealthy lady, Mrs. Esther Fuller, and opening an office at a town called Medford, soon had a large practice.

In 1876-77 he studied the eye, ear, nose and throat at London, Berlin, Vienna and Paris, in the last city meeting Miss Olive E. Fairbanks, whom he afterwards married in Kansas City, Missouri in 1879. In 1878 he settled as ophthalmologist and oto-laryngologist in that city and soon was widely known as lecturer and operator. In 1880 he founded the Kansas City University, in which institution he held the chair of ophthalmology, otology and microscopy till 1893, and occupied it as well as that of laryngology until about the time of his death. For many years he was president of the institution.

Dr. Tiffany was oculist to the Burlington Railroad and to the Missouri, Kansas and Texas Railroad. He was a fellow of the American Medical Association, the Mississippi Valley Medical Association, Missouri Valley Medical Association, and the Tri-State Medical Association. He was president once of each of the two last mentioned institutions.

He was a small, spare man, smooth-faced, of fair complexion with blue eyes and brown hair, brisk, alert, frank and friendly. Fond of travel, he made the "grand tour" twice, and altogether sixteen separate trips through Europe. He liked music and was greatly interested in the French.

His first wife died in 1910. In 1912 he met, in a railway station at Kansas City, Miss Zoe Clark, a high school teacher, who afterward came to his office for treatment for her eyes. As the doctor says in his latest book, "this was a case of love at first sight." The marriage occurred September 12, 1912, at "Tiffany Castle," the doctor's residence at Garfield Avenue and Cliff Drive. The couple left at once for a honeymoon trip around the world, a trip which the doctor describes enchantingly in his volume, "Journey Round the World by an Oculist." Two daughters were the issue. The doctor was sixty-eight when his son was born, the crowning happiness of his life.

Dr. Tiffany died at St. Luke's Hospital, Kansas City, Missouri, January 4, 1918, of arterio-sclerosis, survived by his wife and children.

He wrote numerous books and articles, the most important of the former being "Anomalies of Refraction and Diseases of the Eye," "A Trip Around the World by an Oculist," "A Sojourn in Switzerland," "A Sojourn in Spain." The more important journal articles deal with cataract and glaucoma.

THOMAS HALL SHASTID.

TIFFANY, Louis McLane (1844-1916), was the surgical teacher at the University of Maryland of thousands of students and a skilled and original surgeon of the modern era, who successfully bridged the chasm between the old and the new. He was born in Baltimore, October 10, 1844, the son of Henry

Tiffany of Rhode Island and Sally Jones McLane, daughter of the statesman, Louis McLane (minister to England, and Secretary of State under President Van Buren). He received his early training in private schools in New England and Paris before going to the University of Cambridge, England, where he took his A. B. degree in 1866, and later received his A. M. While there he won a reputation as an athlete and took honors in cricket and rowing. On returning to Baltimore he was graduated in medicine at the University of Maryland in 1868. In 1871 he married Madeline Borland of Boston, Massachusetts; one daughter, Mrs. Gordon Abbott, survived him and lived in Boston. After his wife's death he married Evelyn May Bayly of Virginia.

Dr. Tiffany's surgical career began under the old-fashioned pre-antiseptic régime, in Baltimore, in 1868. First, as resident and then visiting physician at Bay View, and from 1869 to 1875 as demonstrator of anatomy in the University of Maryland; from 1874 to 1880 professor of operative surgery, succeeding Allen P. Smith, and in 1881, on the withdrawal of Christopher Johnson, he was made professor of surgery. His active practice closed with his resignation of this position in 1892. For fifteen years he was surgeon-in-chief of the Baltimore and Ohio Railroad, and during this time he was visiting and consulting surgeon at St. Joseph's Hospital, the Church Home, and consulting surgeon at Johns Hopkins Hospital. He held many local and national offices in his profession. He was president of the Baltimore Medical Association, of the Old Clinical Society, of the Medical and Chirurgical Faculty of Maryland, of the American Surgical Association and of the Southern Surgical and Gynecological Association.

Tiffany was a pioneer in many domains of surgery; with him, modern antiseptic surgery had its birth in Baltimore. He calls the newer methods "Listerism" in a paper published in 1882. He contributed much to surgical literature. In the "Reference Handbook of the Medical Sciences," the "International Encyclopedia of Surgery," the "International Textbook of Surgery," and in Dennis' "System of Surgery," he furnished articles on appendicitis, breast tumors, surgery of the blood vessels, cranial surgery and surgical diseases of the jaws and teeth. In "Sajou's Annual" for a number of years he supplied the chapters on surgical diseases. His most characteristic writings are his addresses before surgical societies. Let me list some of his surgical achievements for the decade 1882-1892. An article on the treatment of irreducible epiplocele (1882) throws an interesting light on the surgical problems of a period when surgery was just coming out of her swaddling clothes; an important question here is whether or not the vessels of the amputated herniated omentum ought to be ligated. Tiffany ligated and removed the omentum four times, twice he tied in mass, when both patients died of a rapidly spreading peritonitis, and twice he tied the individual vessels when both recovered. He operated successfully for renal calculus in 1885. He remarks that "exploration and catheterization of the ureter from the bladder in the female has been attempted not over successfully," but he says that "the territory between the kidney and the bladder, 'the dark continent,' is not beyond the reach of surgical investigation." In 1887 he wrote a suggestive but too brief statistical account of the differences in the surgical diseases of the white and colored races. Keloid is very common in the negro and carcinoma very rare; he declares that there is not recorded a single instance of epithelioma of the face or lip of a negro. Various congenital malformations have not been met in the dark negro. On the whole, surgical injuries are better borne by the negro, while surgical diseases of the lymphatic system are more fatal.

In 1887 Tiffany operated for stone in the kidney in the fifth month of pregnancy, opening an abscess, touching the stone with a needle, using this to guide a grooved director, and then on this sliding in a slender forceps he opened the forceps and enlarged the hole, and so made room for his finger, which at once touched the stone. This obviated any bad hemorrhage. In 1887 he sutured an oval area of the liver to the abdominal wall, and through this opened up an extraperitoneal route for the evacuation and drainage of a liver abscess; the patient recovered. He also in a like manner extracted gallstones through the liver substance in a case where the liver was enlarged and intestines adherent along its margin. An elaborate article is that on "Pregnancy and Operative Surgery and their Mutual Relations" (1889), where, building upon the work of Verneuil (1889) he adds the more recent literature with his own work. He was also a pioneer in gastric surgery, doing the first gastroenterostomy in Baltimore, in 1892.

On resigning his chair of surgery in 1902, his active career came to an end on account of ill health, and he devoted his remaining years to his farm interest and to hunting.

He was ambidextrous and a most graceful operator. His lectures were always delivered informally, sitting on the rail of the amphitheatre in a conversational manner and without a logical sequence of subjects, but interesting and impressive because of the speaker's experience and personality.

After a short illness he died of angina, October 23, 1916, at his farm in Virginia.

FRANK MARTIN.

Tilden, Daniel (1788-1870), pioneer physician of Ohio. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1148 and 1149.

TILTON, James (1745-1822), Surgeon-General of the Army, was one of the first recipients of the degree of M. D. from the Philadelphia School of Medicine. He was born, June 1, 1745, in the county of Kent, then one of the three "lower counties" of the province of Pennsylvania, but now of the State of Delaware. As a practitioner in Dover, Delaware, he entered the army in 1776 as surgeon of the Delaware Regiment, with which he saw much service until his promotion in 1778 to the grade of hospital surgeon, in which capacity he proved of much value, strenuously opposing the combination of purveyor and director-general in one person and the overcrowding of hospitals; from the latter cause he himself acquired typhoid. While commanding hospitals at Trenton and New Windsor he introduced the hut system, and upon the reorganization of the medical department in 1780 was appointed senior hospital physician and surgeon. Perhaps he is best known by his untiring efforts to secure army medical organization reform. While serving with the forces in Virginia he was present at the capitulation of Yorktown and was mustered out in 1782. This was followed by one term in Congress and many re-elections to the Legislature, during which period he was engaged in civilian practice with horticulture as a recreation. The year 1812 saw his brochure upon "Economical Observations on Military Hospitals, and the Prevention and Cure of Diseases Incident to an Army," published at Wilmington, Delaware, that made so deep an impression as to cause his appointment as physician and surgeon-general of the army in 1813. By personal inspection and supervision he enormously improved the sanitary conditions of the army and materially reduced the sick rate. He served several times as president of his State Medical Society.

During the latter part of his service as physician and surgeon-general he developed malignant growths which prevented further active service until mustered out at the close of the war. One of these growths affected one lower extremity, necessitating its amputation, during the course of which the patient supervised and directed the operation with unexampled fortitude.

Dr. Tilton was of a spare habit and of a jovial disposition. Six feet six inches tall, his hair and complexion were dark. He was a bachelor and a bit odd in his habits. Drinking neither tea or coffee he plumed himself upon the fact that he had neither cups nor saucers in the house. His declining years were passed in a stone mansion overlooking the city of Wilmington, surrounded by his fields and gardens he loved so dearly. He died, May 14, 1822, at his home, at the ripe age of seventy-six.

JAMES EVELYN PILCHER.

TODD, Archibald Stevenson (1798-1883), of West Virginia, physician and botanist, one of a family of five physicians, was born April 10, 1798, the son of John Todd, an officer in the American Revolution, and Jane Caldwell. His grandfather was a physician, who came from the north of Ireland, and settled in Washington County, New York, in pre-Revolutionary days. His brother, Martin Luther Todd, also a physician, instructed him in medicine. Archibald was graduated M. D. at the Transylvania University in 1824. He was a founder of the West Virginia State Medical Association in 1867 and its president; a founder of the Wheeling and Ohio County Medical Society in 1868; and organizer of the first Wheeling dispensary and vaccine institution, in 1845. Dr. Todd's interests were far-reaching and included botany, mineralogy and astronomy. As a botanist and mineralogist he was looked upon as a leader in western Virginia, and was the author of a book on botany entitled "Wild Flora of West Virginia"; his "Astronomical Observations" appeared in some of the leading magazines. For half a century he was identified with all that was concerned with the prosperity and good name of Wheeling. He was an earnest, active Christian and an elder in the Presbyterian Church.

His wife was Mary E. Jarrett, of Morgantown, West Virginia; they had one son, Martin Luther, who became a minister, and four daughters, one of whom, Carolene Louise, married John Cox Hupp, M. D. (q. v.)

FRANK LEMOYNE HUPP.

TODD, Eli (1769-1833), the first superintendent of the Hartford Retreat, was born in New Haven, Connecticut, July 22, 1769. His father was Michael Todd, a wealthy merchant, who died insane. Having one sister who was also insane, Dr. Todd became apprehensive lest he himself might lose his reason and therefore devoted much time to the study of insanity. He was fitted for college by private instructors and graduated from Yale in 1787. The following year he spent in the West Indies and unfortunately contracted yellow fever at Trinidad. When he recovered, he returned to New Haven and studied medicine with Dr. E. Beardsley. In 1790, before his twenty-first birthday, he began the practice of medicine in Farmington, Connecticut, won respect and confidence at once and gradually acquired a large practice and high repute as a skilful physician. During an epidemic of "spotted fever" in 1808, when such panic prevailed that the greater number of well people fled the town, and outside help could not be obtained, his extraordinary devotion to the sick elicited public commendation from the Governor of the State.

Dr. Todd practiced four years in New York, and in 1819 removed to Hartford, where he continued the practice of general medicine until he was elected physician to the Connecticut Retreat for the Insane. Twice he was elected president of the State medical society.

Dr. Todd was a man with a captivating personality, rare mental gifts, keen perceptive faculties and a retentive memory. He was a diligent student with remarkable aptitude for discerning values and the orderly accumulation of knowledge. He possessed an active but well-disciplined imagination and ready wit. "His conversations were fascinating and his occasional public addresses were impressive and magnetic."

While the project to build a public asylum for the insane had been agitated by local and other members of the State Society, before Dr. Todd settled in Hartford, he soon became the acknowledged leader in that humane movement. In some way he had obtained a comprehensive understanding of the new and revolutionary methods of treating the insane, which a tea-merchant, William Tuke, had inaugurated in a private asylum in York, England. This "Quaker" system of "moral treatment" appealed to the judgment, as well as the philanthropic sentiments of Dr. Todd, who readily convinced all interested parties that Connecticut needed an asylum for the insane with aims and methods copied from the "York Retreat." By strenuous exertions, continued for several years, the Connecticut Medical Society raised sufficient money to the "Connecticut Retreat for the Insane," at Hartford, in 1824. Dr. Todd was its first physician and continued in charge until his death, from angina pectoris, November 17, 1833, at the age of sixty-four. There, for about ten years, he devoted all his natural abilities and acquired skill in caring for the afflicted insane. His exceptional oratorical powers, the skilful arrangement of facts, the command of wit and pathos and the power of sincerity were assiduously employed in cheering despondent patients and soothing irritable ones. The beneficent influences emanating from Dr. Todd's example and his remarkable success in treating the insane, were felt, ere long, in many foreign countries through the instrumentality of Dorothea L. Dix, whose knowledge and convictions respecting the insane, as well as prophetic zeal for their betterment, were grounded upon the brilliant operation of Todd's system of the management of a hospital for the insane, as applied in two Massachusetts institutions. By following Todd's methods and radiating the inspiration received from him, Dr. S. B. Woodward (q. v.) at Worcester and Dr. J. S. Butler (q. v.) at South Boston, produced illuminating results, within the knowledge and under the observation of Miss Dix.

He married, August 9, 1796, Rachel Hill of Farmington, and in November, 1828, Catherine Hill, her sister.

CHARLES W. PAGE.

TOLAND, Hugh Hughes (1806-1880), has been styled by some "the great surgeon of the Pacific slope." He was born on his father's plantation, Guilder's Creek, South Carolina, April 6, 1806, the fourth of ten children. His father, John Toland, emigrated from the north of Ireland, and came to South Carolina after the War of Independence. Hugh read medicine under Dr. George Ross, and helped in the doctor's drug store, afterwards going to Transylvania University of Lexington, Kentucky, taking his degree while barely of age. In 1829 he settled in Pageville, South

Carolina, and during this time performed several important operations which gave him considerable reputation in the neighborhood. This circumstance gave the young doctor a desire to perfect himself in surgery, and, determining to go to Paris, he utilized his time. During the two years at Pageville Dr. Toland saved about three thousand dollars, and in the spring of 1833 he sailed for France and sought quarters in Rue de l'Ecole de Médicine, Paris, where he lived economically for the next two years and a half, and applied his time in constant attendance under illustrious surgeons in the hospital clinics.

During the succeeding twelve years, Dr. Toland practiced alone, and married Mary Goodwin, who lived only a few years. In 1844 he married Mary Avery, of Columbia, who in 1852 accompanied him to California. Early in 1852 the doctor purchased a quartz mill and had it shipped to San Francisco, but his mining ventures did not succeed. Until 1860 Dr. Toland included obstetrical cases in his practice, but determined to give this up on account of the disturbance of his night's rest. At this time he married his third wife, Mrs. Mary B. M. Gridley. On the breaking out of the Civil War in 1861, Dr. Toland's annual income was over forty thousand dollars. He had been appointed surgeon to the Marine Hospital in 1855, and the appointment was renewed yearly until the establishment of the City and County Hospital, where he was appointed visiting surgeon. Patients from the entire Pacific Coast sought the San Francisco City and County Hospital for treatment.

In 1866 he founded a college of Medicine, known for the next six years as "Toland Medical College." He had secured a suitable lot on Stockton, near Chestnut Street. He alone supplied the funds necessary to erect a substantial brick building and to furnish it with the adjuncts deemed requisite. Toland had, for some years previously, been publishing the "Pacific Medical Journal," which in 1872 was renamed the "Western Lancet."

As a surgical operator Dr. Toland was rapid, direct and abundantly resourceful in the presence of unexpected developments. To the disinterested witness he perhaps might not appear to be particularly dexterous, but he always knew exactly what he meant to do, and did it in the most direct way. Toland took especial pleasure in operating for urinary calculus, and he always used the "lithotome cache double" of Dupuytren.

Although Dr. Toland was accredited with some sternness of manner when dealing with men patients, his manner toward women and children was exceedingly gentle and sympathetic.

He had often expressed the hope that he would not die a lingering death. This hope was realized, for when the final summons came, he was about to go down stairs to begin his daily round of work, when he fell to the floor, expiring at once. Although no autopsy was performed, it was understood that a fainting fit had caused him to fall, striking his forehead violently upon the floor, and causing cerebral hemorrhage. His death caused sincere mourning in many a home.

ROBERT A. MCLEAN.

TOLMIE, William Fraser (1812-1886), surgeon of the Hudson's Bay Company, linguist, was born at Inverness, Scotland, and educated in Glasgow and from the university there he held his L. S. P. and S. He left Scotland for America in 1832, in the service of the Hudson's Bay Company, coming around Cape Horn on a sailing vessel and arriving at Fort Vancouver on the Columbia River, then the chief trading post of the company, in the spring of 1833. In 1834 he joined the expedition under Mr. Ogden, which traded along the Northwest coast as far as the Russian boundry, establishing trading posts at different points for the Hudson's Bay Company, and after five years as surgeon in Fort Vancouver he visited his native land, and the following year was placed in charge of the Hudson's Bay Company's posts on Puget Sound. He took a prominent part during the Indian war of 1855-56 in pacifying the Indians, being an excellent linguist.

Dr. Tolmie was known to ethnologists for his contributions to the history and linguistics of the native races of the west coast. In 1884 he published, in conjunction with Dr. G. M. Dawson, a nearly complete series of short vocabularies of the principal languages met with in British Columbia. He retained to the day of his death accurate recollections of the stirring events of the early Colonial days, and there was no one so intimate with the Indian affairs of the province.

OSWALD M. JONES.

TOMES, Robert (1817-1882), physician and author, was born in New York, May 27, 1817. He graduated from Washington College—now Trinity College—at Hartford, Connecticut, in 1837; after graduation he studied medicine in Philadelphia, then at the University of Edinburgh, where he received his

degree of M. D., in 1840, subsequently going to Paris and returning to New York to take up the practice of medicine. After a few years of active practice there, he was appointed surgeon to the Pacific Mail Steamship Co., and made several voyages between Panama and San Francisco. In 1865 he was appointed United States Consul to Rheims, France, and held this position for two years. In 1867 he returned to the United States and from that time until his death, which occurred in Brooklyn, New York, August 28, 1882, he spent most of his time in literary work, his chief interest in life. In all his varied experiences he had the desire of the literary man to give his conclusions to the world at large. This is evidenced by the following list of his writings which show that most of the happenings of life were sooner or later turned into "copy": "My College Days," a small book of 211 pages, containing reminiscences of the grammar school of Columbia University, Trinity College at Hartford, The University of Pennsylvania, the University of Edinburgh and a residence in Paris; "Panama in 1855"; "The Comparative Anatomy and Psychology of the African Negro," translated by Robert Tomes and Julius Friedlander; "The Bazaar Book of Health"; "The Bazaar Book of Decorum"; "The Bazaar Book of the Household"; "The Youth's Health Book". These were a series of small books published for Harper and Brothers, Leisure Hour Series. They were written in an easy, rambling, colloquial style, and did much to popularize health and hygiene. Dr. Tomes also wrote "The Champagne Country, Rheims, France," 1867. His longest works were "The Battles of America, by Sea and Land, with biographical sketches of great military and naval commanders, from the siege of Louisburg, to the close of the Civil War." He also wrote "The War With The South, with biographical sketches." By an arrangement with the publishers, this was issued in serial form, and when Dr. Tomes stopped writing, it was continued—from 1864 to the end of the war—by Benjamin G. Smith.

TOMLINSON, Harry Ashton (1855-1913), alienist, was born in Pennsylvania, July 3, 1855. His parents, George Washington Tomlinson and Sarah McCahon, were natives of the same state. His father belonged to an old Quaker family, and his mother was of Scotch-Irish parentage. At the opening of the war, his father went to the front as a lieutenant in the 26th Pennsylvania, and when mustered out in 1863, reenlisted in the 99th Pennsylvania, rising to the rank of major. He participated in all of the engagements of the Army of the Potomac, and at Deep Bottom, Virginia, near the close of the war, was wounded, sustaining injuries which eventually caused his death. His son, Harry Ashton Tomlinson, attended school at intervals during his youth, but from the age of sixteen was dependent entirely upon his own resources. While in a general store at Bath, New York, for six years, he occupied his leisure in the study of the rudimentary principles of medicine. He thus won a scholarship offered by the University of Pennsylvania, and in 1877 matriculated at that institution. He was graduated in medicine in 1880, and engaged in practice at Muncie, Pennsylvania, for eight years. In June, 1899, he was appointed assistant physician of the Friends' Hospital at Frankford, Pennsylvania, and remained three years. In 1891 he became assistant superintendent of the St. Peter State Hospital, and in June, 1893, following the resignation of Dr. C. K. Bartlett, he was made superintendent. During his twelve years at St. Peter State Hospital, he inaugurated new methods in the treatment of the insane, and the hospital became one of the first rank through his efforts. He recognized and practiced hospital methods and discarded the old asylum ideas. He introduced women nurses into the men's wards, and equipped the building with modern appliances, and through his work, became a recognized authority in psychiatry. In 1912 a state hospital for inebriates was established at Willmar, Minnesota, and he divided his time between the two cities, superintending his own hospital and watching the construction of the new institution, of which he later became superintendent.

He was a student, who kept up with the progress of medicine, particularly that which related to the care and treatment of the insane. He wrote much on topics connected with his special work, but did not hesitate to discuss general medical problems as he saw them. Although his views on pathology were looked upon by some of his associates as unique, they were fundamentally sound. He was an ardent debater and speaker and a genial and wholesome companion, and had many friends in Minnesota.

He was a member of the American Medico-Psychological Association, the American Neurological Association, the New York

Medico-Legal Society, the Philadelphia Neurological Society, the Minnesota Academy of Medicine, the Minnesota State Medical Association, the Minnesota Valley Medical Association, and the National and State Conference of Charities and Corrections.

He married, in April, 1884, Miss Mary Vandever of New Castle, Delaware.

On February 24, 1913, he had a cerebral hemorrhage which produced complete left-sided hemiplegia, and he died at his home in Willmar, on May 30, 1913.

WILLIAM A. JONES.

TONER, Joseph Meredith (1825-1896), himself a faithful biographer of his medical confrères, well deserves that his own biography should be written. He was born on April 30, 1825, in Pittsburgh, Pennsylvania, and went, as a boy, to the Western University of Pennsylvania, and Mt. St. Mary's College, Maryland. His medical education was received at the Vermont Academy of Medicine and the Jefferson Medical College, where he took his M. D. in 1853. He practiced successively at Summitsville and Pittsburg, Pennsylvania, Harper's Ferry, Virginia, and finally at Washington, District of Columbia, where he established himself in November, 1855. He was president of the American Medical Association in 1874, was a member of the Medical Society and Medical Association of the District of Columbia; an honorary member of the New York and California State Medical Societies. He was a founder of Providence Hospital and St. Ann's Infant Asylum, Washington, to which he was visiting physician, and from 1856 was attending physician to St. Joseph's Orphan Asylum, Washington. In consideration of the perishable character of much of the early medical literature of this country, Dr. Toner devised a scheme for a repository of medical works that should be under the control of the medical profession of the United States and situated at the National capitol. His resolution on that subject was adopted by the American Medical Association in 1868 and resulted in the establishment of the library of that organization. The collection was placed in the Smithsonian Institution and reached the number of several thousand volumes, including pamphlets.

In 1871 Dr. Toner founded the Toner lectures, by placing $3,000 (which afterwards increased to nearly double that amount) in the hands of trustees charged with the duty of annually procuring two lectures containing new facts valuable to medical science; the interest on the fund, save ten per cent., which was added to the permanent fund, was paid to the authors of the essays. These lectures were included in the regular list of publications of the Smithsonian Institution. Dr. Toner devoted much time and research to early medical literature, collected over a thousand treatises published before 1800, and besides publishing numerous monographs, had in preparation a "Biographical Dictionary of Deceased American Physicians," of which more than four thousand sketches were completed. He was an authority on the medical, biographical and local history of the District of Columbia, and devised a system of symbols of geographical localities adopted by the United States Post Office Department. A member of numerous medical, historical and philosophical associations, he published more than fifty papers and monographs upon subjects of interest to the medical profession, of which the more important are: "Arrest of Development of the Cranial Bones—Epilepsy," 1861; "Propriety and Necessity of Compelling Vaccination"; "History of Inoculation in Pennsylvania," 1865; "Anniversary Oration before the Medical Society of the District of Columbia"; "The Portability of Cholera and Necessity for Quarantine," 1866, joint paper with Charles A. Lee, M. D.; "History of Inoculation in Massachusetts"; "Medical Register of the District of Columbia," 1867; "Address at Dedication of Medical Hall, Washington," 1866; "Necrology of the Physicians of the Late War," 1870; "Medical Register of the United States," 1871; "A Sketch of the life of Dr. Charles A. Lee"; "Facts of Vital Statistics in the United States, with Diagrams," 1872; "Free Parks, Camping Grounds or Sanitariums for the Sick Children of the Poor in Cities"; "Statistical Sketch of the Medical Profession of the United States"; "Statistics of the Medical Associations and Hospitals of the United States," 1873; "Dictionary of Elevations and Climatic Register"; "Annals of Medical Progress and Education in America"; "Contributions to the Study of Yellow Fever in the United States—Its Distribution; with weather maps," 1874; "Annual Oration before the Medical and Chirurgical Faculty of Maryland," 1875; "Biographical Sketch of Dr. John D. Jackson"; "Medical Men of the Revolution," an address before the Alumni of the Jefferson Medical College, 1876; "Sketch of the Life of Dr. T. M. Logan"; "Biography of Dr. John Mor-

gan, of Philadelphia"; "Addresses on Biography before the International Medical Congress," 1876, and "Rocky Mountain Medical Association," and a "Memorial Volume with a Biography of Its Members," 1877; also addresses before various societies and colleges.

In 1874 he placed a gold medal, struck at the United States Mint, and bearing his likeness, at the disposal of the Faculty of Jefferson Medical College to be awarded annually to the student producing the best thesis based upon original research. In the same year he established a medal to be granted annually by the faculty of the University of Georgetown, District of Columbia, to the student who should collect and name the greatest number of specimens in any department of the natural sciences. In 1882 he gave his entire library, including manuscripts, to the United States Government. It consisted of 28,000 books and 18,000 pamphlets.

Dr. Theophilus Parvin (q. v.) says of Toner in the "Transactions of the seventy-fifth Anniversary of the Medical Society of the District of Columbia," 1894, p. 22:

"He was one whose genial manners, generous heart and kindly deeds have endeared him to all who have known him; one who had made for himself a name in the profession by important historical researches, and by his large and valuable collection of medical works donated to the public, Congress, in acknowledgment of the doctor's present to the nation, of 28,000 books and pamphlets, ordered both his bust and portrait to be made and placed in the Library of Congress —a just and honorable recognition of his great and generous gift. He should be held in honored remembrance as the faithful historian, who, through years of painstaking and laborious investigations collated the early history of the profession in this district, from municipal and national records, newspaper publications, family reminiscences, legend and tradition. He verified and arranged these data with such accuracy and completeness in an address delivered September 26, 1866, that it is now and always will be accepted as the standard history of the medical profession of this district prior to 1866." "No one ever approached, much less equalled him, in the painstaking collection of data, of personal history that might prove of interest, and it was a mystery to many how he managed to have his facts apparently within immediate reach, whenever the occasion called for them."

He died at Cresson Springs, Pennsylvania, on July 30, 1896.

DANIEL SMITH LAMB.

TORNEY, George Henry (1850-1914), Surgeon General of the United States Army from 1909 to 1914, was born in Baltimore, June 1, 1850. He was educated at Carroll University, New Windsor, Maryland, and studied medicine at the University of Virginia, where he obtained the degree of doctor of medicine in 1870. In the following year he entered the United States Navy as assistant surgeon but resigned in 1875 and was at once appointed assistant surgeon in the United States Army. He served at various military posts, was made captain in 1880 and major in 1894. From 1894 to 1898, Torney served as surgeon at the Military Academy at West Point. During the Spanish-American war he was in command of the hospital ship "Relief." From 1899 to 1902 he was in charge of the army hospital at Hot Springs, and then served for a year in the Philippines. In 1903 he obtained the rank of lieutenant colonel, and was appointed chief surgeon of the Department of California. From 1904 to 1908 he was in charge of the United States General Hospital at San Francisco. In this position he rendered valuable services, by his tact, energy and administrative ability, during the great earthquake and fire which destroyed the greater part of the city. Torney was made colonel in 1908 and appointed surgeon-general of the United States Army, in the following year. Under his administration of the Medical Department the important work of antityphoid inoculation in the army was carried out as well as the successful campaign against beri-beri in the Philippines. He died in Washington, December 27, 1914. General Torney was a stern and conscientious man, a true soldier and an administrative officer of rare ability.

A. ALLEMANN.

TORREY, John (1796-1873), best known as a botanist, the son of Captain William Torrey, a Revolutionary soldier, and Margaret Nichols, was born in New York, August 15, 1796. He was graduated M. D. from the college of Physicians and Surgeons, New York, in 1818, with a thesis on "Dysentery," and, although eminent as a chemist and mineralogist, it was as a botanist that his fame reached the highest point. Throughout the world he was regarded as one of the foremost in this department of science. In 1824

he was appointed professor of chemistry, geology, and mineralogy in the military Academy at West Point. From 1827, when he resigned this position, to 1855, he was professor of chemistry and botany in his alma mater, and subsequently was professor emeritus. From 1830 to 1854 he was professor of chemistry and natural history in the College of New Jersey, at Princeton, and, in 1853, assayer of the United States Assay Office. No political change in war or peace disturbed him in this position, to which a son succeeded. He was one of the earlier presidents of the New York Lyceum of Natural History. His published works are numerous and of the highest value. A list of his works, which may be imperfect, is as follows: "Catalogue of Plants Growing Within Thirty Miles of New York," published in 1819; "A Flora of the Northern and Middle States of North America; or, a Systematic Arrangement and Description of all the Plants Hitherto Discovered in the United States of North America," 1824; "Compendium of the Flora of the Northern and Middle States," 1826; "Cyperaceæ of North America," 1836; "Flora of the State of New York," 2 vols., 1833-4; "Botanical Reports of the Various Land Exploring Expeditions of the United States from 1822 to 1858"; "Appendix to Dr. John Lindley's Introduction to Botany," 1831; "Flora of North America," 1838. This work was edited jointly with Dr. Asa Gray.

Yale College gave him the honorary A. M. in 1823, Williams in 1825, and Amherst, that of LL.D. in 1845. He was president of the American Association for the Advancement of Science and twice president of the New York Lyceum of Natural History.

Torrey will be remembered by the students of the College of Physicians and Surgeons as an excellent teacher. No man had a better understanding of their character. Were they uproarious—he joined in their glee, and they soon lent an attentive ear. Were they stupid—he was patient and painstaking. Were they rude—he was always a gentleman, and at once commanded respect. He quietly pursued his course, giving them the plain truth in a simple and comprehensive manner. The boys always had a good time in his room, for he relished a joke as much as any of them. In a serious and quiet manner he was closing a lecture with some remarks upon formic acid, when he was interrupted by the reception of a note from one of the students. His eye twinkled, and his benevolent face changed to a smile as he glanced at the question asked. "Is not formic acid an 'ant acid?'" He at once dismissed the class amid shouts of laughter, remarking that he was not prepared to give an immediate answer, but they should have the rest of the hour to themselves.

Among his good works should be mentioned the gift of his valuable and extensive herbarium and his botanical library to Columbia College. Torrey's knowledge of old New York was great and interesting. He botanized along the stream which passed from the Collect across Broadway under a bridge to Hudson river, and many a stately mansion now stands in what he knew as a pasture or a wild wood. The city was a hamlet when he first knew it, and as late as 1831, in the notice of his father's death, the friends are informed that "carriages will be in waiting at St. Paul's Church until half-past four o'clock" to take them to 402 Hudson Street to attend the funeral at 5 o'clock.

He married Elizabeth Robinson, a daughter of William Shaw, who came from Dublin, Ireland, by whom he had several children.

John Torrey died at his house in the grounds of Columbia College on March 10, 1873.

TOUATRE, Just Charles (1838-1901), of New Orleans, La., writer on yellow fever, was born at Puycasquier, department of Gers, France, on September 2, 1838, received his early education and his degrees of bachelier és lettres and bachelier és sciences, at the Lyceum of Auch, graduating in medicine from La faculté de Paris, March, 1868. Prior to receiving his diploma he served as auxiliary surgeon and later as surgeon-major on the frigate "Admiral Belloc" and the transport "Polikart." Soon after graduation, he decided to seek his fortunes in America, which he had visited while serving as marine surgeon. He was attracted naturally to Louisiana by the large element of French speaking people there, and though reaching New Orleans while that unfortunate city was still in the throes of the Reconstruction Era, following the war of Secession, he built himself a most prosperous clientèle among the Franco-Louisianan element. A thoroughly educated man, a physician of ability, he was also a splendid diagnostician; also he was a delightful "raconteur" and a most pleasant companion at table, or at a medical meeting. When he came to Louisiana, he brought the first clinical thermometer ever used in the state. This was a French naval centigrade thermo-

meter, and it became of great use in 1869 when the next yellow fever epidemic appeared. It was by the use of this that his colleague and contemporary, Dr. Jean Charles Faget (q. v.), was able to establish as proven, an observation which he had made some years previous on the loss of correlation of pulse with temperature in cases of yellow fever. Later, in the severe epidemic of 1878 he rendered such signal service to his compatriots of French birth and origin, that the French Republic recognized these services, by decorating him as an Officer de la Légion d'Honneur. He remained many years after this in Louisiana, and it was the pleasure and great advantage of the writer of these notes to consult with him in 1897, during a small epidemic of yellow fever, which broke out in New Orleans.

His literary work, which is very extensive, was published for many years in different journals. In 1898 Dr. Charles Chassaignac, the editor of the "New Orleans Medical and Surgical Journal," compiled and translated from his articles, a complete work or monograph on "Yellow Fever," which was published in book form, and has remained to this day, a most valuable clinical report. It is specially useful in diagnosis and in treatment, for it proves the theory of absolute rest and horizontal position with no food in the stomach, except flushing the kidneys with water, and that, principally by Vichy water. This book he dedicated to the profession in New Orleans, and was his last serious work. Feeling the fatigue of practice and having saved an ample competence, in 1898 he left the land of his adoption "la seconde mère," as he loved to call Louisiana, to go and finish his days in la belle France.

He retired from practice, bought a little farm in the country of his birth and became a gentleman farmer. There he died, September 21, 1901, away from the friends and admirers in the far-away land, who still remembered him and bitterly mourned his loss.

LOUIS G. LEBOEUF.

TOWLES, William B. (1847-1893), anatomist, was born in the County of Fluvanna, Virginia, March 2, 1847, the second son of Dr. W. B. and Harriet Johnson Towles. He was educated in the schools of Buckingham County, studying medicine at the University of Virginia, graduating in 1867, within one year after matriculation, a feat admissible in that day, attempted by many but accomplished by very few, as it required great proficiency and stamina. When about seventeen he volunteered in the Confederate Army, and served in a Virginia regiment until the close of the war. He was a member of the Medical Society of Virginia from 1872 until his death. After graduating he settled in Carroll County, Missouri, and practiced successfully for five years, when, at the urgent request of Dr. John S. Davis (q. v.), professor of anatomy and materia medica at the University of Virginia, he accepted the position of demonstrator of anatomy in the university, and on the death of Dr. Davis in 1885, was elected to succeed him. During the later years of his life he also filled the chair of anatomy in the University of Vermont, his lectures there being given in the spring after the completion of the course at the University of Virginia. He was repeatedly invited to accept the chair of anatomy in other schools, but always declined.

He was a profound anatomist, and as a demonstrator has never been surpassed in facility and ability to instruct. As a professor he was second only to that great teacher of anatomy, John S. Davis, whose most efficient style of teaching he acquired in a marked degree. His knowledge was not confined to anatomy, for he was well informed in all branches of medicine, and general subjects.

He married, in 1880, Mary E. Thompson, of South Carolina, who, with two sons and a daughter, survived him.

He died on September 15, 1893, from hemorrhage of the stomach, after a few hours' illness, having been taken while delivering his first lecture of the session.

He was the author of Towles' "Notes on Anatomy," which were based upon Dr. Davis' lectures "Syllabus of Notes on Osteology" and "Syllabus of Notes on Materia Medica."

ROBERT M. SLAUGHTER.

TOWNSEND, David (1753-1829), of Boston, son of Shippie and Ann Balch Townsend, was born in Boston, June 7, 1753, and died in the same town, April 13, 1829. He was descended in the fourth generation from Thomas Townsend of Norfolk, England, who came to Massachusetts in 1637. David was graduated from Harvard College in 1770 and received his honorary M. D. in 1813. He studied medicine under Gen. Joseph Warren, (q. v.) and accompanied him as surgeon to his regiment at the battle of Bunker Hill; was commissioned surgeon to the sixth regiment of foot, commanded by Col. Asa Whitcomb, January 1, 1776; was senior surgeon to the General Hos-

pital, Northern department, in March, 1777, and was with the army under Washington during the winter at Valley Forge. On October 9, 1781, he was made surgeon-general of the hospital department. For many years and up to the time of death he was physician in charge of the U. S. Marine Hospital in Chelsea, Massachusetts.

Dr. Townsend was an active member of the Massachusetts Medical Society from 1785 to 1824, when he retired, and he was one of the charter members of the Society of the Cincinnati, being secretary of the Massachusetts chapter from 1817 to 1821, vice-president from 1821 to 1825 and president from 1825 to 1829.

He married Elizabeth Davis, May 24, 1785. Their son, Solomon Davis Townsend (q. v.), became a noted surgeon of the Massachusetts General Hospital, and there were six other children.

Dr. David Townsend was an ardent Universalist in religion and published a book entitled, "Gospel News,' in 1794. He was a Mason and was buried according to their rites, in Revere Beach, at low tide.

WALTER L. BURRAGE.

TOWNSEND, Solomon Davis (1793-1869), surgeon to the Masachusetts General Hospital, Boston, was the son of Dr. David (q. v.) and Elizabeth Davis Townsend, and was born in Boston, March 1, 1793. He died September 19, 1869.

Solomon Davis was graduated from Harvard College in 1811, and took his M. D. there in 1815, after he had served three years as naval surgeon, chiefly in the Mediterranean on the "Independence" under Com. Bainbridge. Here he became a friend of Farragut, then a midshipman, afterwards admiral, and a warm friendship began which lasted through life.

Townsend was a member of the surgical staff of the Massachusetts General Hospital, Boston, for twenty-five years, and was present at the first operation performed under ether anesthesia in October 1846. From 1840 to 1843 he was corresponding secretary of the Massachusetts Medical Society. He was president of the board of directors of the Massachusetts Charitable Eye and Ear Infirmary.

He married his cousin, Catherine Wendell Davis, October 5, 1819, and had four children. Charles Wendell Townsend, a grandson, son of Thomas Davis, became a physician in Boston, and a noted ornithologist and author.

WALTER L. BURRAGE.

TOWNSEND, Wisner Robinson (1856-1916), New York orthopedist, was born at Clifton, New York, August 5, 1856, the son of Wisner Helme Townsend, a merchant, and Emily Haywood Kyle Townsend. He received his preparatory education in the Charlier School, New York City, and took an A. B. degree at Columbia College in 1877, and an M. D. from its College of Physicians and Surgeons in 1880, the same year taking an A. M. He then served as surgical interne at Bellevue Hospital, and moved to South Pittsburg, Tennessee, where he engaged in general practice until 1888. Returning to New York he became assistant surgeon to the hospital of the New York Society for the Relief of the Ruptured and Crippled, and from that time practiced orthopedics.

He was a Fellow of the American Medical Association; second vice-president in 1914-1915; a member of the House of Delegates from 1906 to 1908; a member of the Board of Trustees from 1908 to 1911, and secretary of the board the last two years of that period. He had been secretary of the Medical Society of the State of New York from 1896, and for twelve years previous to his death he had been secretary of the board of trustees of the New York Academy of Medicine. He was also a member of the American Orthopedic Association and its president in 1899, and was president of the New York State Association of Railway Surgeons in 1902. He was professor of orthopedic surgery in the New York Polyclinic; associate surgeon to the Hospital for Ruptured and Crippled; orthopedic surgeon to the French Hospital, New York; consulting orthopedic surgeon to the J. R. Smith Infirmary, Staten Island, and consulting surgeon to the Bayonne (N. J.) Hospital, and was a voluminous contributor to the literature of orthopedic surgery. A list of his writings may be found in the History of the College of Physicians and Surgeons, John Shrady, Lewis Publishing Company, N. Y., vol. i, p. 603.

He was twice married. In 1887 to Marguerite Zewald of South Pittsburg, Tennessee, and in 1888 to Elizabeth McGunnegle Walker. She and two sons survived him.

Dr. Townsend had been in bad physical condition for some time previous to his death, suffering from diabetes and frequent attacks of vertigo, and had been a victim of insomnia. It is believed that he had attempted to open the bathroom window, which was only about two feet from the floor, and seized with ver-

tigo, fell out to his death, during the night of March 22, 1916.

Dr. Townsend was a man of great executive ability and winning personality and his tragic death was a great shock to his many professional friends throughout the United States.

TRALL, Russell Thâcher (1812-1877), hydropathist of New York City, was born in Vernon, Connecticut, August 5, 1812. He was brought up by his parents in western New York when he was a child, and for several years worked on a farm. He afterwards studied medicine, began practice and settled in New York City in 1840, where he became a hydropathist. In 1843 he founded an establishment in that city for the water-cure treatment, and in 1853 opened, in connection with it, a medical school for both sexes, which was chartered in 1857, under the title of the New York Hygeiotherapeutic college. It was afterwards removed to Florence, N. J. He edited the "New York Organ," a weekly temperance journal, and the "Hydropathic Review," a quarterly magazine, from 1845 to 1848; he was also the editor of other medical journals, and the author of "Hydropathic Encyclopedia" (New York, 1852); "New Hydropathic Cook Book" (1854); "Prize Essay on Tobacco" (1854); "Uterine Diseases and Displacements" (1855); "Home Treatment for Sexual Abuses"; "The Alcoholic Controversy" (1856); "The Complete Gymnasium" (1857); "Diseases of the Throat and Lungs" (1861); "Diphtheria" (1862); "Pathology of the Reproductive Organs" (1862); "The True Temperance Platform, or an Exposition of the Fallacy of Alcoholic Medication" (1864-66); "Hand-Book of "Hygienic Practice" (1865); "Sexual Physiology" (1866; London, 1867); "Water-Cure for the Million" (1867); "Digestion and Dyspepsia" (1874); "The Human Voice" (1874); and "Popular Physiology" (1875).

Dr. Trall died in Florence, New Jersey, September 23, 1877.

TRASK, James Dowling (1821-1883), obstetrician and a founder of the American Gynecological Society, was born at Beverly, Massachusetts, on August 16, 1821. He was graduated at Amherst College in 1839 and took his A. M. in 1842, and his M. D. from the University of the City of New York in 1844, immediately after beginning practice in Brooklyn. In 1845 he married Jane Cruickshank, daughter of Thomas O'Darrell, K. C. B., of Belfast, Ireland.

From 1847 to 1859 he practiced in White Plains, Westchester County, New York, then settled in Astoria, New York City, and became for a few years professor of obstetrics and diseases of women in the Long Island College Hospital (1861-65), until ever increasing private practice compelled him to speak to the medical world through his writings and at the meetings of various societies. His writings showed most painstaking labor and a fine intellectual quality. His first, "On the Nature of Phlegmasia Dolens," "American Journal of Medical Sciences," January, 1847, met with high commendation from O. W. Holmes, (q. v) and the second, on "Rupture of the Uterus," in the same journal in October, 1847, presented a summary of 303 cases; followed in July, 1856, by a sequel with over one hundred more cases. His "Occlusion and Rigidity of the Os Uteri and Vagina," "American Journal of the Medical Sciences," July, 1848, was a valuable showing, from sixty-eight cases, that in obstinate rigidity of the os uteri, incisions are not fraught with danger to the adjacent organs. "Statistics of Placenta Previa," "Transactions of the American Medical Association," 1855, received the prize from this Association, and fills ninety-four pages of the "Transactions," and other articles were contributed to the "New York Medical Journal" and the "American Journal of Obstetrics." He was always longing for leisure to write more, but was not very strong during the last five years of his life and died on Sunday morning, September 1, 1883, after an illness of only five days' duration.

TREADWELL, John Dexter (1768-1833), of Salem, Massachusetts, was responsible for drawing the act of the Massachusetts Legislature, passed March 2, 1803, which reorganized the Massachusetts Medical Society and gave it the form of government under which the society has lived ever since. The son of Rev. John and Mehitabel Dexter Treadwell, he was born at Lynn, Massachusetts, May 29, 1768, and graduated from Harvard College in 1788. As was the custom of the day, he apprenticed himself for the term of three years to a prominent practitioner of medicine and was fortunate to be a pupil of Edward A. Holyoke (q. v.) of Salem, the first president of the state medical society. Finishing his novitiate, Treadwell practiced three years in Marblehead, nearby, and returned to Salem to pass the rest of his life. He was a man of strong individuality and extensive

learning, being versed in the Greek and Hebrew scriptures; his practice was large.

On June 3, 1801, Dr. Treadwell became a member of the Massachusetts Medical Society when its membership was limited to seventy fellows; he read a paper at that meeting on the "cow-pox." Seeing that the society, then in an inert condition, needed to be democratized, and its charter altered so that it might accomplish its aims, he was instrumental in having a committee appointed at a meeting in January, 1803, to consider what changes should be made. The committee reported during the same month, outlining the alterations desired, and Treadwell, with the assistance of Samuel Sewall of the Harvard Class of 1776, later Chief Justice of Massachusetts, drew the bill which was submitted to the legislature. That it was a good and workable law is attested by the fact that in its chief features it is still in force, after a period of one hundred and twenty-five years. Dr. Treadwell's name appears as being present at many of the meetings of the Society in subsequent years; he served as councillor from the Essex District from 1805 to 1828. He received the honorary M. D. from Harvard in 1815, and was a Fellow of the American Academy of Arts and Sciences.

In 1804 he married Dorothy, daughter of Jonathan and Dorothy Ashton Goodhue. Their son, Dr. John Goodhue Treadwell (1805-1856), was a prominent practitioner of Salem; his bequest of $50,000 and his library founded the "Treadwell Library" at the Massachusetts General Hospital in Boston.

Dr. J. D. Treadwell died at Salem, June 6, 1833. The Council of the Massachusetts Medical Society happened to be holding a meeting on that day and a vote was passed in which it was stated that the members had "great respect for the character, talents and professional learning of their late associate, and a high sense of his service to this society; especially in its renovation in the year 1803."

WALTER L. BURRAGE.

TRENAMAN, Thomas (1843-1914), statistical officer in the registration department of Halifax, N. S., was born in that city, July 16, 1843, a son of Samuel and Mary Ann Trenaman, who settled in Nova Scotia from the West of England about the year 1835. He was educated at King's College, Windsor, N. S., and pursued his preparatory medical studies in the office of Dr. D. McN. Parker, Halifax, graduating in 1869 at the College of Physicians and Surgeons, New York. The degree of doctor in medicine "ad eundem" was conferred by the University of King's College, N. S., at its Ericoenia in 1887. From the date of the formation of the 66th Volunteer Battalion of Infantry in 1869, to the spring of 1885, he was one of its surgeons. The pressing nature of professional duties, which were continually increasing, necessitated his retirement, at this date, from active service. In the year 1876 he was chosen by acclamation as city councillor, and for nine years consecutively was alderman for his home district. From 1879 to 1882 he was a member of the Board of School Commissioners of Halifax, being chairman the last year of his term. In 1881 Dr. Trenaman was elected county physician, and in 1883 was chosen by the city council, city medical officer. He was attending physician to the Victoria General Hospital, visiting physician to the Poor's Asylum, and also to the city prison, as well as being police surgeon and surgeon to the fire department. In June, 1881, he was elected president of the associated alumni of King's College, Windsor; in 1883 he was selected by the Dominion government statistical officer for the registration of mortuary statistics in the city of Halifax.

Dr. Trenaman traveled extensively through the United States and Canada. In 1871 he married Harriett Helen Robinson of Windsor, N. S.

He died April 27, 1914.

TREVETT, Samuel Russell (1783-1822), surgeon of the United States Navy, was educated at Harvard University, and graduated A. B. in 1804, receiving from the same university an M. B. in 1807 and an M. D. in 1811. He studied medicine under Dr. Holyoke (q. v.) of Salem, and Dr. John Warren (q. v.), and entered the United States Navy as surgeon's mate. He had a great liking for this service, his heart and soul belonged to it. "His imagination," says Thacher, "was prolific in calling up the brightest visions of the future glories of the American Navy." During the War of 1812 Trevett was on duty on the "Constitution" and later was on the "President" and was commended publicly for his bravery and skill. At the close of the war he was appointed surgeon of the Charleston Navy Yard. He was a passenger on the steamer Phoenix when it was burned on Lake Champlain, in 1819 and by his exertions saved many lives. In 1822 he was ordered

as surgeon on the sloop of war "Peacock," but was seized with yellow fever and died at Norfolk, Virginia, November 4, 1822. Trevett was a most able, conscientious and amiable gentleman, an enthusiastic servant to his country and a model of an American naval officer.

ALBERT ALLEMANN.

TRIMBLE, James (1818-1885), was born in Tyrone, Ireland, in 1818. But little is known of his early life and antecedents except that he studied medicine, and, having obtained his M. D., entered the British Navy as a surgeon, then resigned his commission and settled in California in 1849—the year of the great gold rush. He practiced very successfully in the Golden State until 1858, when he moved to Victoria, then the capital of the Crown Colony of Vancouver Island. No doubt he was induced to take this step by reason of the rich discoveries of gold in the bars of the Fraser River. At this time thousands of miners and adventurers were flocking to Victoria from California, on their way to the new gold fields. He succeeded in the new colony and soon became well known and popular. For two years he was Mayor of Victoria, and when the Crown Colony of British Columbia entered the Dominion of Canada he again entered the political arena, 1874. Greatly respected and trusted by his fellow members, he was unanimously elected Speaker of the first provincial Parliament after Confederation, presiding over the debates with dignity and impartiality. He achieved an enviable reputation as a successful practitioner, and for many years was one of the leading members of the profession. Many of the men and women now eminent in British Columbia were ushered into this world by the kindly and learned physician who did so much to uphold the honor of the profession in these early days in Vancouver. He was a fine example of the pioneer physician and surgeon. It should be remembered that in his day there were none of those medical conveniences which now abound in the Province of British Columbia. In common with all other pioneer medical men he had to depend entirely upon his own exertions, and that he was eminently successful speaks volumes for his resourcefulness.

Dr. Trimble died on New Year's Day, 1885, after a short illness, from gangrene, complicated by heart disease.

OSWALD M. JONES.

TRIPLER, Charles Stuart (1806-1866), army surgeon, was born in New York City in 1806, and graduated M. D. at the College of Physicians and Surgeons, New York, in 1827. He at once entered the army as assistant surgeon, but July 2, the same year, was made full surgeon. During the first years of his practice he was situated at various posts about and within Michigan. In the Mexican War he was medical director of General Twiggs' Division. After the war he was on duty at various posts throughout the West. In 1861 Dr. Tripler was first appointed medical director of General Patterson's Army in the Shenandoah Valley. Upon General McClellan's assuming chief command, he was made general director of the Army of the Potomac and organized the medical service in that department. After the battles of the Peninsula, he was appointed to duty in Michigan and soon brevetted colonel for meritorious service; shortly before his death he was promoted to brevet brigadier-general, and was chief medical officer of the department of Ohio, and lived with his family in Detroit. In 1849 he was president of the Michigan Medical Society.

He died in Cincinnati, Ohio, in 1866, from epithelioma, leaving a widow and one daughter.

Among his writings are the following: "Gunshot Wounds of the Stomach" "Peninsular Medical Journal," vol. iv.); "Tripler and Blackman; Handbook for the Military Surgeon," 1861; "Report on Rank of Medical Department of the Army" ("Transactions, American Medical Association," vol. xvi.); "Manual of the Medical Officers of the Army of the United States," Part I.; "Recruiting and Inspection of Recruits" (Cincinnati, Ohio, 1858). An epitome of Tripler's "Manual for the Examination of Recruits" was prepared by Major Charles R. Greenleaf (q. v.), Washington, Government Printing Office, in 1884.

LEARTUS CONNOR.

Triplett, William Harrison (1836-1890), professor of anatomy at Georgetown University, writer. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1161.

TROWBRIDGE, Amasa (1779-1860), of Watertown, New York, a surgeon of the War of 1812, was born at Pomfret, Connecticut, May 17, 1779. Brought up on his parents' farm, he attended the country school and an academy, beginning the study of medicine with Dr.

Avery Downer of Preston City, Connecticut, at the age of seventeen and receiving a license from the state medical society three years later. Returning to his native town, Dr. Trowbridge spent a year under Dr. Thomas Hubbard (q. v.), the chief surgeon of the place. Settling in Lanesboro, Massachusetts, he practiced for a time and was married, then moving to Trenton, New York, he followed his profession for two years in company with Dr. Luther Guiteau, and finally settled permanently in Watertown in 1809. Here he prospered, wrote a series of political essays for a paper in Utica, having for its object the support of the administration in its controversy with Great Britain. On the breaking out of war Dr. Trowbridge was assigned as surgeon to General Jacob Brown's command by the Governor of the State. During the entire war he saw service on the frontier; in the winter of 1812-13 his headquarters were at Sacket's Harbor; in August, 1813, he received an appointment as surgeon in the United States Army, and was attached to Colonel Ripley's Twenty-first Regiment of Infantry. At the battles of Chippewa and Lundy's Lane he had a busy time attending to the wounded, and was commended by General Ripley in his report of the operations.

At the close of the war, on his return to private practice, Dr. Trowbridge was appointed an assistant justice of the bench of the county court; in 1818 he became a judge, and the following year sheriff, practicing medicine all the while. The winter of 1822 was spent in Philadelphia studying medicine, incidentally forming a lasting friendship with Dr. Parrish (q. v.). In 1824 he was appointed professor of surgery and medical jurisprudence in Willoughby University of Lake Erie, Ohio. There he lectured for eight weeks every year until 1838, while living in Watertown, and then moved to Painesville, Ohio, to be near the medical school. A runaway accident in 1841, causing the death of Amasa Trowbridge, Jr., a promising and dearly loved son who had taken over his father's practice, Dr. Trowbridge returned to Watertown and resumed his routine work until death claimed him in the spring of 1860.

Dr. Trowbridge was said to have performed amputation of the thigh ninety-six times. A portion of one of his lectures has been preserved from notes by his son. It was on "Gunshot Wounds" and appeared in "American Medical Times," 1861, vol. ii., p. 334-335, summarizing much practical experience gained in his war service.

TRUDEAU, Edward Livingston (1848-1915), pioneer of tuberculosis work in America, founder of the first sanitorium in this country for the treatment of tuberculosis, and of the first laboratory devoted exclusively to its study, was born in New York City, October 5, 1848. He had a long medical ancestry. His maternal grandfather, François Eloi Berger, practiced medicine successfully in New York City, and his father, James Trudeau, there and in New Orleans. His paternal great-grandfather was governor of "Les Illinois." Shortly after Trudeau's birth, the youngest of three children, his parents separated, and at the age of three, he accompanied his grandparents, mother (Cephise), and brother, to Paris, where he lived until his eighteenth year, when he returned to New York. He resigned an appointment as midshipman, when his brother, to whom he was devoted, fell ill of pulmonary tuberculosis. From September to his brother's death in December, Trudeau nursed and even at times slept with him. He then studied for a while at a school of mines, and was later in a broker's office, but finally, having been thrown upon his own resources, he took up, seriously, in 1868, the study of medicine at the College of Physicians and Surgeons in New York.

His desire to win the confidence, approbation and love of Miss Charlotte G. Beare of Douglaston, Long Island, influenced him profoundly, steadied him in his purpose to study medicine, and after his marriage, throughout his life, her wise judgment, high ideals, loyalty and devotion to him, were what made possible his career, a debt he repeatedly acknowledges in his autobiography. He was anxious to marry and, learning that the Stranger's Hospital was to open January 1, 1871, he qualified as house physician, two months before he graduated in medicine. He was married June 20, 1871, and began practice (as he had only a modest income) on Long Island, in the fall, but later (1872) moved to New York, where he became associated with Dr. Fessenden Otis (q. v.), and engaged in teaching and dispensary work.

On Long Island he had suffered from several attacks of "malaria" and even though he had already had a cold abscess and swollen cervical glands, the shock of the diagnosis in 1873, of rather extensive pulmonary tuberculosis, was severe. After a brief stay in Aiken, S. C., he went, in May, 1873, to Paul Smiths in the Adirondacks for the summer. The next winter was passed in Minneapolis, and he returned to the Adirondacks in the

spring, worse than before. In 1876, A. L. Loomis (q. v.), who alone advised him to spend the first winter in the Adirondacks, wrote the first medical article on the value of this region in the treatment of tuberculosis, and described Trudeau's case. (See "Medical Record," 1879, vol. xv, p. 385, 409.)

Until 1880 Trudeau did little in medicine, but from then on, his practice increased at his summer home, Paul Smiths, and more and more patients spent the winter at Saranac Lake to be under his care. The work of Brehmer or Dettweiler suggested to him the idea which led to the development of the Adirondacks Cottage Sanitarium, now the Trudeau Sanatorium, for working men and women, established on sixteen acres of land bought and presented to him by Adirondacks guides, his lifelong friends. The first two patients were received in 1884 and the first cottage opened February 1, 1885. At Trudeau's death, it consisted of over thirty-six buildings in the midst of sixty acres, and accommodated one hundred and fifty patients. For thirty years its founder, practically unaided, raised funds to meet an annual deficit, which finally rose to $30,000, as well as providing an endowment of $600,000.

A few years after the publication of Koch's "Etiology of Tuberculosis," he obtained a complete translation. In a corner of his house, tubercle bacilli were first grown in America, but the thermostat was defective and his home burned. This led to the erection in 1894 of the Saranac Laboratory, the gift of Mr. G. C. Cooper. Here he performed many experiments on immunity and on the effect of vaccines on guineapigs, while, in a hole in a corner of his yard and on an island, he proved the value of fresh air upon tuberculous rabbits. He showed that the only definite immunity that could be induced in experimental animals was through the use of live tubercle bacilli. He had worked with tuberculin before Koch's publication of its discovery, but unlike the great German, he was not led astray in determining its value. His contributions to clinical medicine are limited chiefly to papers on sanitorium work and on tuberculin, in which his belief was strong but tempered with moderation, a characteristic of his writings.

His health began to fail in 1906, after the sudden death of his son Edward, and in the next few years his old pulmonary disease gradually became more active until it had involved the left lung so extensively that only when it was compressed by nitrogen, was a brief respite obtained. He was greatly incapacitated, however, and spent much time in bed, but his influence on tuberculosis work throughout America was unrivalled and unabated. His strength gradually failed, and on November 15, 1915, he died at his home in Saranac Lake.

The village of Saranac Lake grew about Trudeau, who was its first president, its chief citizen, and long guided its development. He raised funds for the erection of St. John's-in-the-Wilderness, the Episcopal Church at Paul Smiths, of which he was warden until his death, and where he and three of his children are buried. His firm but broad and tolerant religious convictions were largely instrumental in building St. Luke's Church at Saranac Lake, of which he was Senior Warden.

Trudeau was long a member of the Association of American Physicians, and in 1905 its president. In 1910 he was elected president of the Congress of American Physicians and Surgeons, and many will remember the spirit of the man, too weak to be heard, who chose as the theme for his presidential address "Optimism of Medicine." He was the first president and director of the National Association for the Study and Prevention of Tuberculosis. In 1899 he received the honorary degree of Master of Science, from Columbia University, and that of Doctor of Laws, from McGill University in 1904, and from the University of Pennsylvania in 1913. He refused other degrees as he was unable, on account of his health, to be present to receive them. He was a member of the Century Association of New York.

Trudeau was deeply interested in the early diagnosis and treatment of pulmonary tuberculosis. His ability to interest others, his choice of forceful, picturesque diction, his wide sympathies, and above all, the indescribable charm of personality which he possessed, made him a great physician. His search for a cure for tuberculosis ended only with his failing strength. It led him to experiment with and to discard many remedies and dominated all his experimental work. "The Sanitorium represents what we know now," he said; "the laboratory what we hope to know in the future." He was not a student but grasped quickly the fundamentals and was able to present his ideas clearly and forcibly. His never failing enthusiasm in his work and his eagerness to explain it to everyone interested in it, his modesty of thought, his deference to the opinions of the younger medical

men, made him a great teacher and developed in them individual thinking, which highly pleased him.

LAWRASON BROWN.

TRYON, James Rufus (1837-1912), who instituted the first medical school of the United States Navy, was born September 24, 1837, at Coxsackie on the Hudson. He was graduated with the degree of A. B. in 1858 at Union College, Schenectady, New York, from which he also received the degrees of Ph. D. in 1891 and LL. D. in 1895. He was graduated in medicine in 1860 at the University of Pennsylvania, March 19, 1863, and was appointed an acting assistant surgeon in the Navy, Sept. 22, 1863, an assistant surgeon, Dec. 22, 1866, passed assistant surgeon, June 30, 1873, surgeon, Sept. 22, 1881, medical inspector and chief of bureau of medicine and surgery, Navy Department (surgeon general), May 12, 1893. On January 21, 1897, he was appointed medical director. He served in the West Gulf Squadron, during the Civil War; was in the fight at Mobile Bay; later was in charge of the Naval Hospital at Pensacola, Florida. At the close of the war he was placed in charge of the Naval Hospital, Boston, Massachusetts. From June 30, 1866, to February 4, 1870, he was on duty as assistant in the Bureau of Medicine and Surgery. He was then ordered on sea duty in the Asiatic Squadron; in 1871 was in charge of the temporary smallpox hospital at Yokohama, Japan, during an epidemic, he also superintended the building of the U. S. Naval Hospital at Yokohama. Returning to the United States, he was for some time again in charge of the Naval Hospital at Pensacola, during an epidemic of yellow fever, and afterwards was on special duty in New York city. He was on the Board of Examiners in 1888-9. In 1884 he was a delegate to the International Medical Congress at Copenhagen. Later he served for a while at Montevideo, Uruguay and Laguayra, Venezuela, where, because of service rendered to the Venezuelans, he was decorated with the order of El Busto del Liberator. In 1898 he was a delegate to the Congress of Hygiene and Demography at Madrid, Spain. From March 26, 1895, until his retirement from active service, September 24, 1899, by operation of law, he was actively engaged in the inspection, modernization, enlargement and equipment of the Naval hospitals at Portsmouth, New Hampshire; Chelsea, Massachusetts; Newport, Rhode Island; New York City, Philadelphia, and Norfolk, Virginia. His early work in this connection and in other ways for a year or more before the Spanish-American war was responsible in a great measure for the preparedness of the Naval medical department in that conflict. As surgeon general he instituted a Department of Instruction which was the first medical school of the Navy. He was also a member of the committee of the American Public Health Association, in July, 1896. When he was placed on the retired list, he was given charge of the Sailor's Snug Harbor, Staten Island, where he remained six years and rebuilt and reorganized the institution. Dr. Tryon never married. He died March 20, 1912, at the Naval Hospital, Brooklyn.

DANIEL SMITH LAMB.

Tucker, David Hunter (1815-1871), professor of theory and practice of medicine in the Medical College of Richmond, Virginia and founder of the Franklin Medical College. See American Medical Biographies. H. A. Kelly and W. L. Burrage, Balto. 1920, page 1164.

TUFTS, Cotton (1731-1815), of Massachusetts, who planned a state medical society in 1765 and helped to promote another sixteen years later, was the youngest son and fourth child of Dr. Simon Tufts, Senior (q. v.) of Medford and Abigail Smith Tufts, and a brother of Dr. Simon Tufts, Junior, of Medford. He was born in Medford, May 31, 1731. His given name, Cotton, came from his grandmother, Mary, daughter of the Reverend Seaborn Cotton, second wife of Peter Tufts, Junior. The Tufts genealogy was: Peter, Senior, the immigrant, who settled in Charlestown about the year 1650; Peter, Junior; Dr. Simon of Medford and Dr. Cotton of Weymouth. Early in life, Cotton evinced a studious disposition and was admitted to Harvard College when fourteen years of age. Here he took the degree of A. M. in 1749, and in 1785 the college conferred on him the honorary degree of M. D. After leaving college he taught school and then studied medicine with his older brother, Simon in Medford, and finally fixed his residence in Weymouth. According to a letter of Dr. Tufts, in the Fifield collection in the Boston Medical Library, this was April 8, 1752. In 1749 he was in Weymouth, for we find these entries in the diary of the Reverend William Smith, for that year. "Books lent, 1749. To Cotton Tufts, several books," "October 15, I preached. Mr. Thaxter and Cotton Tufts here." During the year 1751, the "Throat Distemper or Putrid Sore Throat" (diphtheria) was very prevalent and fatal

among the inhabitants of Weymouth. The Reverend Mr. Smith records the death of nineteen children and four adults from this disease, between July 12 and November 15. October 5, he enters: "11 died this week, 6 in our parish, 5 in Mr. Bayley's," and November 21, "Fast Day at Mr. (James) Bayley's Parish on account of the throat distempers prevailing there. Mr. Cotton preached from 2 Jer. 30. 'In vain have I smitten yr children; ye rec'd no Correction,' and Mr. (Samuel) Porter P. M. fm. 2 Cor. 12, 8 and part of the 9, 'For ys thing I besought the Ld thrice that it might depart from me. And he said unto me, My grace is sufficient for thee."

According to James Thacher it is related that Dr. Tufts introduced a new and original treatment for the throat distemper that helped him make a successful start in practice.

He was married by the Rev. Mr. Smith, December 2, 1755, to Lucy Quincy, daughter of Colonel John Quincy, of Braintree, by whom he had one son, Cotton. His wife died, October 30, 1783, and he married Mrs. Susanna Warner of Gloucester, October 22, 1789. He had a large practice in Weymouth and the surrounding country. According to his diary he made frequent journeys to Boston and kept in close touch with his Brother Cotton in Medford.

It was while planning for the formation of a state medical society that he wrote the subjoined letter, found among his papers. It is in his handwriting, but without signature or date:

"Sirs:

"Divers gentlemen of the profession have met together for the friendly purpose of forming an association for the advancement of medical knowledge, promoting good will and harmony and discountenancing empirics. This meeting was in consequence of a paper wrote by an anonymous writer proposing such a scheme in which were invited as underneath. The meeting is adjourned to the first Wednesday in June at Gardiner's Tavern on Boston Neck at two o'clock p. m. The gentlemen have desired me to invite you to attend the same and join them in accomplishing so benevolent a scheme and any plan that you can suggest for the [word illegible] of such meeting will be kindly received. In behalf of the gentlemen I now act as scribe, and am,

"Your Very Obedient Servant,

"To Dr. John Wilson
of Hopkington."

In 1765 he wrote the spirited and patriotic instructions to the representatives of the town of Weymouth against the Stamp Act, and in 1784 he was a member of the Massachusetts Senate. Dr. Tufts was an incorporator of the Massachusetts Medical Society in 1781, being the second vice-president of the society from 1785 to 1787, and its fourth president from 1787 to 1795.

From the first meeting of the Council of this society, July 18, 1782, through his term as president, thirteen years, Dr. Tufts was absent from only two of the forty meetings held during that time. A record of fidelity when it is considered that he lived twelve miles away.

In 1780 he was one of the incorporators of the American Academy of Arts and Sciences, and he was a member of the convention to adopt the Constitution of the United States.

For more than forty years Dr. Tufts was deacon of the old North Church in Weymouth, and he was one of the trustees of Derby Academy in Hingham, besides being president of the Society for Moral Reform.

It is said of him that "In social life he was distinguished by urbanity of manner and courteous address; in conversation pleasant, interesting and instructive."

His death occurred in Weymouth, December 8, 1815. A very interesting and quaint oil painting of the doctor hangs on the wall of the Fifield Room in the Boston Medical Library, the gift of William Tufts Brigham, A. B. Harvard, 1862, of Honolulu, Hawaii.

Walter L. Burrage.

TUFTS, Simon (1700-1747), the earliest physician in Medford, Massachusetts, was born January 31, 1700, in that town, the youngest son of Peter Tufts the second, son of Peter Tufts the first, who came to Charlestown from England in 1650. Simon was the ninth child of Peter and his second wife, Mary, daughter of the Rev. Seaborn Cotton. As there were twelve children by this wife and four by the first, it is plain that there was no race suicide in this family. He was graduated A. B. from Harvard College in 1724, probably studying medicine at the same time, for he began practice in Medford the year of his graduation.

He married Abigail Smith and had seven children, the oldest son, Simon (1727-1786), succeeding him in the practice of medicine in Medford; the fourth child being the eminent Cotton Tufts, M. D., of Weymouth (q. v.).

He had an extensive practice, and was called often to visit the sick at Harvard College, refusing to receive fees, however, from

the students. The doctor was a justice of the peace and a special justice.

He died on his birthday, January 31, 1747. Funeral sermons were preached in his honor in Medford, Boston, Cambridge and Charlestown.

WALTER L. BURRAGE.

TULEY, Henry Enos (1870-1923), pediatrician of Louisville, Kentucky, was born January 11, 1870 in that city, the son of Enos S. and Mary Eliza Speed Tuley. After taking a degree from the medical department of the University of Louisville in 1890, he was graduated from the New York Polyclinic in 1891, and became resident physician, first, of the New York Infant Asylum, 1891-92, then, of Sloane Maternity Hospital, 1892. In 1893 he took the M. D. of the Kentucky School of Medicine in Louisville. At the time of his death, he was dean and professor of pediatrics at the University of Louisville Medical School and superintendent of the Louisville City Hospital. For twenty-five years, Tuley was secretary and in 1922-23, president of the Mississippi Valley Medical Association. Among his works are "Obstetrical Nursing," 1902, "Pediatrics," 1904, and "Diseases of Children," 1909.

On June 26, 1894, he married Ethel Brown Engelbach of East Hampton, Connecticut. He died of heart disease, October 21, 1923.

TULLY, William (1785-1859), was born at Saybrook, Connecticut, November 18, 1785. Although he was a delicate boy, and a poor scholar in arithmetic, he was graduated from Yale College with honors at the age of twenty-one (1806). He then began to teach school in his native town, and to study medicine during his spare time. His medical instructors were Dr. Mason Fitch Cogswell (q. v.), who founded the asylum for the deaf and dumb in Hartford; Dr. Nathan Smith (q. v.), the great surgeon who, beginning at Dartmouth, established several medical schools and taught in three or four at the same time; Dr. Samuel Carter, of Saybrook, and Dr. Eli Ives (q. v.) of New Haven, whose botanical garden of medicinal herbs so interested Tully that he made materia medica his specialty, often taking more time to botanize and combine drugs than to attend to patients. This fondness for chemistry and botany, together with a natural irritability of temper, and an air of superiority in his relations with patients and colleagues, made it difficult for Tully to obtain a good practice readily, so that after receiving his license to practice in Connecticut, in 1810, he practiced in six towns during the following eighteen years.

The first of these "locations" was Enfield, where he fell in love with Mary Potter, a doctor's daughter, marrying her in 1813, and taking her to Milford to make a home. Here his talents were slowly recognized, and botanical studies were not lucrative, so that, dissatisfied with his emoluments, Tully once again moved, this time to Cromwell, in 1815. Success in gaining patients there, and in making friends with his colleagues brought him an invitation to settle in Middletown, one of the largest cities of the State, in 1818; the following year he was given an honorary degree of M. D. from the Medical School at Yale, then five years old, and from that time Tully's abilities never failed of recognition and appreciation. In 1820, while in Middletown, Tully published his first long medical article, an essay on hydrophobia and its alleged cure by scutellaria. This was published in the "Middlesex Gazette," and contained 7,400 words in fine print, addressed with ill-concealed sarcasm to such physicians as accepted hearsay evidence as to the value of drugs without scientific proof of the accuracy of the statements. In 1823, in collaboration with Dr. Thomas Miner (q. v.) he published a volume entitled "Essays on Fever." The greater part of this work concerned the thirty-five cases of yellow fever which occurred in the Connecticut Valley in 1820, with a discussion of the impossibility of finding a cause for the contagiousness of any fever, and an enumeration of the specific remedies for each disease in doses which now seem heroic, such as seventy grains of tartar emetic in typhus, one thousand grains of calomel in the early stage of yellow fever, and whiskey in unlimited amount, from a quart to a gallon in twenty-four hours. In explanation of this dosage, Tully says, "Neither weight nor measure is to be at all regarded until there is an alleviation of the disease." His ordinary dose of opium was seven or eight grains in a day, or a teaspoonful of laudanum every half hour "to keep the calomel from running off at the bowels." He also advocated Fowler's solution as a tonic in the case of half a drachm three times a day, but he frequently denounced the universal phlebotomies.

It is small wonder that Tully's colleagues chafed under his self-assumed superiority, and his criticism of their methods, but he became so irritated at their controversial attitude that he decided to leave Middletown,

and therefore moved to East Hartford in 1824, where he had many friends, including his former teacher, Dr. Cogswell, and Dr. Eli Todd, to whom he had been of great service in founding the Hartford Retreat for the Insane. He remained there only two years, however, before moving to Albany, where he entered partnership with Dr. Alden March (q. v.). This move was due to the fact that he had accepted the presidency of the Vermont Academy of Medicine, at Castleton, together with the "settee" of materia medica and theory and practice of medicine. Three years later he also accepted an invitation to fill the same chair at the Yale Medical School, made vacant by the resignation of Dr. Eli Ives. For fourteen years Tully continued to teach at both these places, lecturing for fourteen weeks each year to classes which numbered more than were to be found in any other medical school in New England.

In 1828 Tully moved with his family to New Haven. His wife, though an invalid, bore him eleven children, of whom the four who lived to grow up, were educated in New Haven, their home for twenty years, notwithstanding the fact that Tully, indignant because of the criticism of one sort and another, had handed his resignation to the authorities of the Medical School every year. In 1841, however, probably to his complete surprise, the resignation was accepted; and as he had already resigned from his position at Castleton, and had refused a call to the University of South Carolina, in 1833, and had rejected a tentative call to Bowdoin College, he found his teaching days ended. Therefore, at the age of fifty-six, although in poor health on account of a bladder trouble, he was free to compile his "briefs" and publish a ponderous encyclopedic materia medica, as the culmination of his life work. But the eighteen remaining years of his life only sufficed to see two volumes of the work finished, for he died in 1859, leaving no one sufficiently interested in the arduous task of compiling the remaining briefs, or able to do it, without assurance of remuneration from the sale of the books. Tully himself felt that his life had been a failure. He called his years of teaching "wasted years, fourteen in one institution and sixteen in another," but of his ability and value as a teacher, we have ample testimony from students and contemporaries. He was long-winded and pedantic, most minute in description of drugs and lacking in perspective, for he believed that every plant had some special value, but his knowledge and scientific accuracy compelled the attention of his students, and the more earnest of them profited well by his instruction; but triflers, however, irritated him and he was not slow to show that he felt that it was not worth while to try to teach them. As to Tully as a practitioner, we find that he was overbearing with his colleagues, and criticized their methods so openly that they refused to ask him in consultation over a difficult case; while with patients he was often discourteous as to their "garrulity," preferring to talk rather than listen to their symptoms, so that, one by one, they dropped him for some other, possibly less learned, but more agreeable doctor. It was thought that his skill in diagnosis was less than his ability in describing a disease; and his treatment was evidently aimed at the symptoms and not at the patient, for he continually experimented with some favorite drug in order to watch its effect and write besides notes while the patient might be suffering or even dying. These notes were his "octets," from which, presumably, the "briefs" for his Materia Medica were supplemented.

We can not wonder, then, that when Tully resigned from his position as a teacher he found himself with a very limited practice. He felt that his professorships had cost him more than they had brought him of financial reward, and as his professional fees were scanty, he went to South Carolina for a year to regain his health, and collect materials for his writings; after which he returned to New Haven to compile his "briefs." His publications had included such titles as, "Ergot" (1822); "Datura"; "Sanguinari" (1828); "Ferns Growing Near New Haven"; "Narcotics and Morphine"; "Actaea Racemosa"; "Chlorite of Potassa," and "Congestion." He defined many words for two editions of Webster's Dictionary (1840 and 1847), such as anatomy, physiology, and botany, by which he proved that he could be short and concise, but in his Materia Medica his definitions were too long and labored, the word "Adenagio," for instance, required one hundred and eighty words to explain its meaning.

Finally, in 1851, with his family reduced to his feeble wife and two children, Tully moved to Springfield, Massachusetts, where the Materia Medica was to be published. There, in 1853, his wife died, and he followed her six years later, February 28, 1859. During those years he could often be found sitting in the big arm chair in a neigh-

boring drug store, talking by the hour to any listeners, expounding in a loud voice and with an assured manner, his theories of treatment and his experiments with drugs. It was thought that the world could not contain all the books he would have written had he had the time and strength.

Bronson said of Tully that he knew botany and chemistry better than anyone in the United States. It was because of this knowledge that he was associated with the first editions of the National Pharmacopeia. He was a member of the Boston Conference in 1817, to elect and instruct delegates to Washington, who compiled the first edition of 1820; and he was himself a delegate to the Conference in New York, ten years later, to revise the first edition "in accordance with the present advanced state of science."

From all of his honors and "chairs," therefore, as well as from his writings we may say that Tully stood far above the rank and file of his contemporaries, for, as Dr. William H. Welch has said, "He was a really remarkable man, erudite, original, an experimentalist unrivalled in his knowledge of the materia medica, and an extensive contributor to medical literature."

KATE CAMPBELL MEAD.

TURNBULL, Andrew (1718-1792), of Florida, a Scotchman, was born in 1718, graduated in medicine from a British school, lived for some time in Turkey and the Levant "among the wild Arabs" and in Barbary, became a prosperous physician in London, and finally at forty eight undertook the proprietorship and colonizing of a considerable tract on the east coast of Florida, at New Smyrna. Turnbull long survived in the hazy memory of the public as a mysterious, reprobate character of early Florida, a sort of swashbuckling buccaneer; but Carita Doggett of Jacksonville, after investigating unimpeachable documentary sources, has rehabilitated him, atoned for the decades of calumny and has presented him to posterity as one of our remarkable American pioneers.

He married Maria Gracia, daughter of a Greek merchant, of Smyrna, Asia Minor, and for her he named his celebrated colony on the Indian River, Florida, New Smyrna; their seven children grew up to take a creditable part in the history of Florida and South Carolina.

England's plan of real estate development for Florida was started in 1763. A year later Parliament added a substantial persuasion when it granted five hundred pounds yearly as a bounty for raising silk, cotton, and indigo, in East Florida, coupled with land grants. Familiar with such enterprises in the Levant, and confident of assembling and transporting a large Greek colony from Asia Minor, and with wealthy and influential friends to back him in London, Dr. Turnbull undertook the leadership of such a colony in what is now Volusia County. The first land grant was issued to Turnbull on June 18, 1766, allowing him to select his tract of twenty thousand acres of unclaimed land in East Florida, and it developed upon him to enter actively upon his possessions. He, therefore, left with his family and landed at St. Augustine in November, 1766. Here his family was settled in comfort while he sailed forth to select the spot for the colony, proceeding seventy-five miles south of St. Augustine to the first large harbor where he entered the Indian River at Mosquito Inlet, passing a circular sheet of water now known as "Turnbull's Bay." Ten years before, William Bartram, the naturalist, had visited this attractive spot and described it. In March, 1767, Turnbull was again in England with a petition for cooperation in establishing his settlement.

The Lords of Trade provided a sloop of war as a transport and forty-five hundred pounds bounty to promote the enterprise, thus assuring the aid of the English government. After forming a partnership in April 2, 1767, with Sir William Duncan and Sir Richard Temple, Commander of the Navy, who was trustee for George Grenville, Prime Minister of England—each controlling a tract of twenty thousand acres, adjacent, the total acreage later increasing to over one hundred thousand—he took his converted sloop to the Mediterranean to discover his Greek colony. The result was 200 wild Peloponnesian mountaineers, 110 Italian vagrants from Leghorn, and a horde of starving Minorcans—fourteen hundred colonists in all, conveyed in eight sloops, the largest settlement as yet to venture to the New World.

By August 10, 1768, they were all on their plantations at New Smyrna. As might have been anticipated, such a mélange of turbulent spirits was little calculated to form an ideal colony, and like similar previous attempts, the human element wrecked the idealistic effort; whether through sickness, desertions, or malignant opposition on the part of jealous rivals, among them a small-minded governor, or through the disturb-

ances reflected from the War of the Rebellion. In the end the scheme collapsed. Turnbull practiced his profession in Florida in case of need. He was forced finally to leave Florida, and arrived in Charleston, South Carolina, May 13, 1782, where he took up his practice with renewed zest, remaining by permission a loyal subject, and soon won a wide reputation in his profession and became a founder of the South Carolina Medical Society. Here he died March 13, 1792.

HOWARD A. KELLY.

TURNBULL, Lawrence (1821-1900), was born September 10, 1821, in Shotts, Lanarkshire, Scotland, and came to America when twelve years old. He studied at the Philadelphia College of Pharmacy, from which he graduated in 1842. Several years were spent in this profession, in which such able work was done as to gain him an award of merit from the Franklin Institute. He then studied medicine with Prof. John K. Mitchell (q. v.) and graduated at the Jefferson Medical College in 1845, when he relinquished his chemical work, though he remained for some time a lecturer at the Franklin Institute on chemistry applied to the arts.

He served for a term as resident physician at the Blockley Hospital in Philadelphia, and in 1857 was elected one of the physicians in the Western Clinical Infirmary (later Howard Hospital) in the department of diseases of the eye and ear, and served until 1887. In 1859 he visited Europe, travelled extensively, devoting himself to the study of diseases of the eye and ear. He served during the Civil War in Emory Hospital and at Fortress Monroe. His chief work was in ophthalmology and otology, to the literature of which branches he contributed richly. In 1878 he was elected aural surgeon of the Jefferson Hospital. Dr. Turnbull's writings are permeated with a true scientific spirit, and recorded marked advances in their day. A fairly full list is in the Surgeon-General's catalogue, Washington, D. C.

He died in Philadelphia, October 24, 1900.

HARRY FRIEDENWALD.

TURNER, Daniel (1667-1740), was the recipient of the first medical degree issued in the English colonies of North America. The title was honorary and bestowed at his request subsequent to a gift of books; he never practiced in America. Born in London in 1667, he began life as a member of the Barber-Surgeon Company. In 1695, he published his first work, "The Apologia Chyrurgica." Humiliated by his connection with the Barbers, he secured his disfranchisement in 1711 and paid a fine of fifty pounds; in three months he appeared at the Royal College of Physicians for examination and was admitted as a licentiate; the following year he was given an Imprimatur for his "De Morbis Cutaneis." He had no medical degree at home or abroad. In 1718, he wrote a book on "The Modern Quack" in which he made light of medical degrees obtained in Scotland without work. To this criticism is attributed his natural desire to secure his own diploma from some other source, which he effected at Yale, September 11, 1729, Rev. Timothy Woodbridge being rector "pro tempore." Turner was the author of "Syphilis, a practical Dissertation on the Venereal Disease" and he was widely known for his cerate, "that excellent medication which I call my Ceratum de Lapide Calamari," which was included in the U. S. Pharmacopoeia as late as 1850.

He died March 13, 1740.

Turner, Edward Kitchen (1755-——), of Kennebunk, Maine. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii, p. 461.

Turney, Daniel (1786-1827), a pioneer who founded Circleville, O. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. vol. ii. pp. 460-461.

TURNEY, Samuel Denny (1824-1878), professor in Starling Medical College, Columbus, Ohio, was the son of Dr. Daniel Turney and Janet Sterling Denny. He was born in Columbus, Ohio, on December 26, 1824. His father (1786-1827) had been one of the pioneers who had founded the town of Circleville, Ohio. Kenyon College, Gambier, Ohio, had completed his education during the time when he went to Circleville, Ohio, to be a druggist's assistant to support his mother. Shortly after this he studied medicine with Dr. P. K. Hall, and in 1851 was graduated from the University of Pennsylvania, then returned to Circleville until the Civil War began, when he was successively surgeon to the Thirteenth Ohio Volunteer Infantry; staff colonel and medical director of Van Cleve's division of the Army of the Cumberland and medical director-general of the hospitals at Murfreesboro. He was very keen

on the erection of blockhouses, but, as usual in war time, medical aid even with such assistance was inefficient. A medicine chest was furnished each house, but knowledge how to use its contents was often lacking. Turney wrote a semi-official and amusing pamphlet to go with each chest entitled "Blockhouse Surgery for Block-heads."

He returned to private practice after the war and became professor of physiology and pathology in the Starling Medical College, at Columbus. After a visit to European clinics he became professor in the same college of diseases of women and children. As an operator, at the beginning of an operation, somewhat nervous, but afterwards rapid and brilliant. He kept well up with the times both in work and reading, and his writings included: "History of the War of the Rebellion," "A New Principle in the Application of the Obstetric Forceps," "The Use of Esmarch Bandages in Chronic Ulcers," and "Solid Food in Typhoid Fever."

Turney died after an attack of inflammation of the brain on January 18, 1878.

CHARLES ANDERSON.

TURNIPSEED, Edward Berriam (1829-1883), surgeon, was born in Richland County, South Carolina, on October 29, 1829, of English and German parentage, in a house built on land granted to his family in Richland. He graduated M. D. from South Carolina Medical College, Charleston, in 1852, then studied medicine in Paris and afterwards went to St. Petersburg and entered the Russian Army as surgeon-major, doing efficient work during the siege of Sebastopol, getting knighted by the Emperor and receiving other orders. He did not return to America until 1856, when, after three years in New York, he settled in Richland, taking up his army practice again on the outbreak of the Civil War as brigade-surgeon, and afterwards resuming private practice, this time in Columbia, South Carolina. His wife was Clara M., daughter of J. T. Hendrix, of Lexington, South Carolina.

In the "Transactions of the South Carolina Medical Association" for 1875-77, Turnipseed is shown as an inventor of some useful surgical instruments, among them one for staphylorraphy, a quadrilateral urethrotome, a speculum, also a cotton chopper, and a beehive, showing he was of an inventive turn of mind. His writings include: "Gossypium Herbaceum and Viscum Album, used by Negro Women to Procure Abortion," 1852; "Superior Maxillary Section of Malar and Pterygoid Process of Sphenoid Bone," 1868; "Modification of Syme's and Pirogoff's Operation of Ankle-joint," 1868; "Facts Regarding the Anatomical Difference Between the Negro and White Races (locality of Hymen)," 1868; "Why Should We Support the Perineum During Labour at All?" 1877.

He belonged to the American Medical Society of Paris, the New York Pathological Society, and the South Carolina Medical Association.

DAVINA WATERSON.

TUTTLE, George Montgomery (1856-1912), New York gynecologist, was born in Rochester, New York, October 2, 1856. His first American ancestors on his father's side were William and Elizabeth Tuttle, who came from Gravesend to Boston on the "Planter" in 1635; they subsequently moved to New Haven. The Tuttle homestead is now a part of the campus of Yale University. Dr. Tuttle's father, James Harvey Tuttle, was a Unitarian minister, who occupied churches in Rochester, where Dr. Tuttle was born, and later in Chicago and Minneapolis. His mother was Harriet Merriman. Dr. Tuttle's early schooling was in public and private schools in Chicago and Minneapolis, and in Dresden, Germany. He prepared for college at Phillips Academy in Andover, Mass., graduated from Yale College in 1877, studied medicine at the College of Physicians and Surgeons in New York, and was graduated in 1880. After serving as interne at the New York Hospital for twenty months he became physician-in-chief at the New York State Emigrant Hospital on Ward's Island, and later went abroad, spending most of his time in Leipsig, Dresden and Prague, and chiefly in the study of gynecology and obstetrics.

In 1885 he was appointed professor of gynecology at the College of Physicians and Surgeons and retained that position until he resigned in 1903, and he was an attending gynecologist to the Roosevelt Hospital, from 1888 until his death in 1912. Previous to Dr. Tuttle's appointment as attending gynecologist to the Roosevelt Hospital, the gynecological work of the hospital was largely of a medical nature and closely associated with the medical division of the hospital. Influenced doubtless by his observations abroad, and by the trend of the times, the service under Dr. Tuttle's direction became more and more of a surgical type. From near the be-

ginning of his professional career both in hospital and private work he devoted himself to gynecology exclusively and had a large and important following.

As a teacher, Dr. Tuttle was at his best. He had a full control of language and an excellent power of description and was able to teach by didactic lectures, the important points of a subject being made so plain to the student by his descriptions that they were not forgotten. His lectures were well attended and he was one of the most popular members of the faculty.

In the practice of gynecology, his strongest points were skill as a diagnostician, his judgment and his personality. He read French and German fluently and had a wide knowledge of the literature of his specialty, which with his extensive experience made him a consultant of great value. He was a skilful and bold operator but for him operating was never easy, every operation of importance being a source of anxiety to him and an unfortunate result, a cause for depression. During the latter years of his life he mixed but very little with medical men other than his personal friends, rarely attended medical meetings, wrote little or nothing for medical literature, and as a result, none but those intimately associated with him in his work, derived the benefit of his keen mind, wide experience and delightful personality.

He was a member of the New York Academy of Medicine, the American Gynecological Society, the New York Obstetrical Society, and other medical organizations, but his activities in these societies were not as great as in his college and private work.

Dr. Tuttle was married in 1906 to Mabel Chauvenet Holden, daughter of Edward Holden, the astronomer in Florence, Italy. They had one child, Natalie Chauvenet Tuttle.

Dr. Tuttle died of acute cardiac disease, on October 29, 1912, at the age of fifty-six.

HOWARD CANNING TAYLOR.

TUTTLE, James Percival (1857-1913), proctologist of New York, was born at Fulton, Missouri, on November 11, 1857. He was the son of Warren H. Tuttle and Susan Dyer Tuttle, and was educated at Westminster College, Missouri, from which he received the degree of A. B. and in 1880 that of A. M. He was graduated in medicine in 1881, from the University of Pennsylvania, where he received a scholarship by competitive examination. Dr. Tuttle served as an interne in Blockley Hospital, Philadelphia. He became connected with the New York Polyclinic Hospital in 1893, and there established the chair of rectal and intestinal surgery, and subsequently became professor of this branch of surgery in that institution. He was one of the charter members of the American Proctologic Society and was most active in its interest, the society being much indebted to him for the high plane on which it was established. Dr. Tuttle was an earnest, painstaking and enthusiastic worker in his special branch, and took a broad view of its limitations, claiming that a worker in this field should be as thoroughly equipped in the knowledge and technique of general surgery as in that of any other branch. These characteristics are clearly and thoroughly exemplified in his text book on "Diseases of the Anus, Rectum, and Pelvic Colon," which will doubtless be a standard work of reference for years. "A Study of One hundred cases of Malignant Growths of the Rectum," which was read before the Section on Surgery of the American Medical Association, in June, 1908, and published in the "New York Medical Journal" of September, 1908, was a masterly presentation of the subject up to that date, and showed him to be a most careful and painstaking operator, his results being equal to the best surgeons of the day. His scientific attainments, his conservative views, his enthusiastic championship for the cause of rectal surgery will illumine, as a beacon, this special branch for generations to come.

Dr. Tuttle married on November 11, 1885, Laura March, and they had no children. He was an active member of the Presbyterian Church. On January 31, 1913, after having suffered for six years from diabetes and having gone to Europe several times to take the cure at Vienna, under Doctor Nordhoff, he died at his home in New York City.

S. T. EARLE.

TWITCHELL, Amos (1781-1850), of Keene, New Hampshire, who first tied the common carotid artery, was born in the town of Dublin, on the slopes of that grand old mountain, Monadnock. He was the son of Samuel and Alice Willson Twitchell, and was born April 11, 1781. His childhood was characterized by his great love of reading, and at the age of seventeen he journeyed on horseback and rapped for admittance at Harvard but was refused on account of lack of preliminary education. Nothing daunted, he turned his face to the North and came to old Dart-

mouth's door, which graciously swung open to him in 1798; so Harvard lost one whom Dr. Bowditch describes as one of "the most honest and intellectual men this country has produced." His life at college was a struggle with poverty; he took his S. B. in 1802 and at once entered on medical studies under Dr. Nathan Smith (q. v.). Both men were strong characters, singular in their strength and of similar taste, so that they were drawn together, and a life long friendship resulted that was firm and mutually helpful.

At that time material for dissection was hard to obtain, but Amos Twitchell possessed all he needed. In 1805 he was graduated, and first practiced in Norwich, Vermont, then in Marlborough, New Hampshire. He entered partnership here with his brother-in-law, Dr. Carter, intending to devote his whole attention to surgery. About the time of his removal to Marlborough he performed an operation which if then published would have given him an international reputation. October 8, 1807, he was called to Sharon, New Hampshire, over forty miles distant, to see a lad named John Saggart, whose jaw had been shattered in a skirmish at the muster of the State Militia. All the adjacent parts were severely bruised and extensive sloughing took place. On the tenth day after the injury, while dressing the wounds, Dr. Twitchell observed that one of the sloughs lay directly over the carotid. The aged mother of the lad stood near as the sole attendant, and he said to her, "If that spot goes through the coats of the vessel, your son will bleed to death in a few moments." He dressed the wound and was unhitching his horse when the old lady frantically called, "it is bleeding." The doctor went in and found the boy deluged with blood. The dressings were removed and the blood jetted forcibly in a large stream for a distance of two or three feet. With his left thumb he compressed the artery; the patient had fainted: keeping his thumb on the vessel, he cut down with a scalpel more than an inch below where the external branch was given off. The mother separated the sides of the wound with her fingers and at length they succeeded in separating the artery from its attachments, and the aged mother passed a string under the vessel and tied it while Dr. Twitchell controlled the hemorrhage and held the candle. The lad recovered.

Sir Astley Cooper's claim of priority has been generally acknowledged, but he did not tie the common carotid until June, 1808, eight months after Dr. Twitchell's case. Cooper's was the first case published, but in 1817 a case appeared in print that had occurred October 17, 1803, when Mr. Fleming, of the British Navy, tied the vessel for a servant on ship board, who had attempted suicide. Twitchell's case was not published until 1828.

In 1810 Dr. Twitchell removed to Keene, New Hampshire, where he practiced until he died. He joined the New Hampshire Medical Society in 1811 and was its president 1827-1830. Although always busy he found time to attend its meetings, and was the idol of the society. He was an indefatigable worker, with a practice so extensive that he had an arrangement of post-horses at country inns, so that he was enabled to travel at the rate of eight or ten miles an hour. In 1838 he removed successfully the arm and clavicle for malignant disease. In 1840 he had diagnosed and operated upon three cases of suppuration in the medullary canal. He frequently operated for stone in the bladder, did excisions of joints, and had performed several ovariotomies before McDowell's case was published.

Although offered professorships at Dartmouth, Vermont, and Brunswick Medical Colleges, he declined them all. He was an honorary fellow of the College of Physicians, Philadelphia, and in 1838 became an honorary member of the Massachusetts Medical Society. In addition he was one of the founders of the American Medical Association.

Dr. Twitchell was an abstainer in regard to the use of alcohol and was a vegetarian for many years.

He married Miss Elizabeth Goodhue in June, 1815, but they had no children.

He died of heart disease May 26, 1850.

IRA JOSLIN PROUTY.

TYLER, John (1763-1841). The son of Samuel and Susanna Tyler, whose people came from England and France about 1600, this ophthalmologist was born in Prince George County, Maryland, June 29, 1763, and began to study medicine under Dr. Smith, of Georgetown. He was a pupil at St. Bartholomew's Hospital, London, in 1784, where he received his diploma and studied also with John Hunter, Fordyce, Baillie and Pott. He began practice in Frederick City, Maryland, in 1786, and was, according to Quinan, the first oculist in America, acquiring great reputation in ophthalmology and being one of the first in the United States to operate for cataract. Patients came long distances, even from ad-

joining states to obtain the benefit of his skill in couching. It is recorded that he was an officer in the "Whiskey Insurrection" in Pennsylvania, and his name figures as a co-founder of the Medical and Chirurgical Faculty of Maryland, and an elector of President Jefferson. Being possessed of a competency, he retired from practice as his hearing became dull from age and disease. He died unmarried in Frederick City, October 15, 1841. Dr. Charles Frederick Wiesenthal (q. v.) mentions him in a letter to his son, Andrew, then pursuing his medical studies in London. After urging him to seek to acquire skill in surgical operations, especially in lithotomy and extraction of cataract, he says: "There is a young man returned lately, Mr. Tyler, who is settled in Frederick and has successfully couched two or three persons, which has at once made him very conspicuous, and he has made a considerable good match on the strength of it (June 5, 1787)."

EUGENE F. CORDELL.

TYSON, James (1841-1919), teacher, writer, and wise guide in the medical department of the University of Pennsylvania in her advanced educational policies, was born October 26, 1841 in Philadelphia, the son of Dr. Henry and Gertrude Haviland Tyson and the descendant of Cornelius Teissen, early settler in Germantown, Pennsylvania, whose tombstone is said to be the oldest German monument in the State.

James was a graduate of Haverford College in 1860 and took his M. D. from the University of Pennsylvania in 1863, and was immediately appointed assistant surgeon in the United States Army, serving in the army hospitals in and about Harrisburg. After the war, he entered upon a residency in the Pennsylvania Hospital. His life-long impulse was to teach, so he associated himself with his alma mater and in 1876 became professor of pathology and morbid anatomy, assisted by the bizarre quiz-master, Henry Formad who was bubbling over with pathological enthusiasm, and controlling as coroner an amazing amount of material. It was Formad who was one of the first to call the attention of the skeptical to the numerous extra-uterine pregnancies found in his public autopsies. After serving for several years as secretary and dean to the faculty of medicine, in 1889 Tyson stepped nearer the goal of his ambition, into the chair of clinical medicine, followed by the chair of medicine in 1899. He was physician to several important hospitals, and a member of a number of boards of managers; especially was he interested in the Philadelphia Hospital (Blockley). He was president of the Association of American Physicians in 1907-08 and of the College of Physicians of Philadelphia from 1907 to 1910, at the critical time of the transfer from 13th and Locust Streets to its new buildings.

Tyson was a prolific writer of articles and he edited four volumes of the "Transactions of the Philadelphia Pathological Society." Among his more important contributions are, "The Cell Doctrine, its History and Present State," 1870, "Introduction to Practical Histology," 1873, "Practical Examination of the Urine," 1875, "Bright's Disease and Diabetes," 1881, and a "Textbook of the Practice of Medicine," in which he was aided by M. Howard Fussell (q. v.).

He married Fannie Bosevea of Brussels in 1865, who died in 1900; they had two children, a son, who studied medicine, and a daughter. He died at his home, February 26, 1919.

As a teacher, Tyson was wont to summarize discordant views, setting them in an orderly array much appreciated by the students. He had an impediment in his speech and a rather explosive delivery. The regard of the students was signalized by the formation of the James Tyson Medical Society. As a consultant, he was widely sought, especially in diabetes. The full measure of his services to the University is hard to realize, as he was intimately associated with William Pepper (q. v.) and Horatio Wood (q. v.) in the stormy days of the advancement of its standards of medicine. No one toiled as hard, no one revealed more sterling qualities, nor did any one attain a more signal success; untiring industry was his outstanding characteristic; as he declined into old age, he became a veritable Nestor in the profession.

HOWARD A. KELLY.

UPSHUR, George Littleton (1822-1855), born in Northampton County, Virginia, January 14, 1822, was the oldest son of John Evans Nottingham and Elizabeth Parker Upshur, of Northampton County, a sister of Judge Abel P. Upshur, Secretary of the Navy, and Secretary of State, in President Tyler's Cabinet. Before Upshur attained his majority his maternal uncles, Judge Upshur and Capt. George P. Upshur, United States Navy, fearing that the name would become extinct, advised that he and his brother, Admiral John H. Upshur, United States Navy, should

apply to the Legislature of Virginia for permission to take their mother's maiden name, and an act of Assembly was passed accordingly.

The founder of the Upshur family in Virginia settled upon the Eastern Shore some three hundred years ago. George Upshur's early education was received in the common schools of the County, and at the age of sixteen he graduated from William and Mary College with the degree of master of arts; his medical degree was received from the University of Pennsylvania in 1843. He established himself in Norfolk, Va., and soon gained a large practice. He had the habit of making notes and then giving the results of his observation to the profession in carefully prepared papers which appeared in the medical periodicals. As brief as was his professional career, it was long enough for him to acquire a high reputation, and the absolute confidence and esteem of his fellow townsmen.

When in the summer of 1855, Norfolk and Portsmouth suffered the scourge of that terrible epidemic of yellow fever, he remained at the post of duty, striving day and night to alleviate suffering and to save life, until he himself was stricken down. He was the first physician in Norfolk to see a case of the disease, having been called to Barry's Row when it made its appearance there about the middle of July, and from that time until taken ill two months later, he was ever in the thick of the fight, calmly and indefatigably visiting the afflicted, at the same time gathering from every available source information concerning the pestilence, and making notes of his clinical observations for use in a paper to be written upon the epidemic. One by one he saw his exhausted professional comrades stricken down, but he still worked on, until about the middle of September, when he too was taken. He had proven himself a hero, and in the end he won the martyr's crown. His co-martyrs were, in the order in which they fell, R. W. Sylvester, T. F. Constable, G. I. Halson, R. J. Sylvester, F. L. Higgins, J. A. Briggs, Thos. Nash, R. B. Tunstall, and Henry Selden, of Norfolk, and J. W. H. Trugien, R. H. Parker, M. P. Lovett and L. P. Nicholson of Portsmouth; William Selden had the disease but recovered.

He was an active member of the State Medical Society and of the American Medical Association. For several years prior to death he held the position of physician to the U. S. Marine Hospital at Norfolk, and during the yellow fever epidemic in that city in 1855, was consulting physician to the Julappi Hospital for yellow fever patients.

Upshur married in 1844 Sarah Andrews, youngest daughter of Dr. Jacob G. Parker, of Northampton Co., Va., and was survived by his wife and three children, one of them being Dr. J. N. Upshur, of Richmond, Va.

He wrote on the use of iodide of potassium in the suppurative stage of pneumonia (1844-45); on miasmatic fever; the retention of urine following scarlet fever; on a dead ovum retained six months in utero without putrefaction, and on an operation for congenital occlusion of the vagina (1853).

He died September 19, 1855.

R. M. SLAUGHTER.

VALLEE, Thomas Evariste Arthur (1848-1903), professor in Laval University, Quebec, was born at St. Roch, Quebec, December 23, 1848, and died at Hôtel-Dieu, February 23, 1903, at the age of 54. A student of Laval University in 1867, he left that institution in 1873, with the degree of M.D., and was admitted to practice in 1875. After a prolonged absence in Europe, spent in study in London and Paris, he occupied successively the chairs of medical jurisprudence, clinical medicine, obstetrics, history of medicine, and mental diseases at the Hôtel-Dieu and Laval University, Quebec. As a professor, his diction was clear and erudite, and up to the end of his useful life he was an honor to his school and to the French-Canadian medical profession. His public lectures were always looked forward to with pleasure by his fellow citizens. Clearness of mental vision and a ripe judgment, together with great aptitude for work, were characteristics that especially fitted him for speculative medical science, and it was in his work as an alienist that the philosophical trend of his mind found its highest expression. In November, 1879, he was appointed one of the visiting physicians to the Quebec Lunatic Asylum at Beaufort, and in 1885 became medical superintendent of that institution.

During his too brief régime Dr. Vallée introduced many valuable reforms into the hospital, including the total abolition of mechanical restraint, and various structural changes. His position as superintendent gave him the field for prosecuting his researches into questions of mental and nervous diseases, and early in his career his competency was acknowledged. Unfailing in his loyalty, he was greatly beloved by his colleagues. He

was a brilliant conversationalist, refined in temperament, a man of taste, and above all, generous to a fault. He was visiting physician to the Lying-in Hospital and to the hospitals of the Good Shepherd, the Sisters of Charity and the Hôtel-Dieu. In 1878 he married Honorine Chauveau, daughter of the premier of the province of Quebec. Dr. Vallée was often called into court as an expert in insanity cases.

Van Buren, Peter (1801-1873), of New York City and Albany, N. Y. See Cyclopedia of American Medical Biography, H. A. Kelly, Phila. 1912, vol. ii, p. 465.

VAN BUREN, William Holme (1819-1883), of New York, was one of the earliest specialists in genito-urinary diseases. "This day (March 25, 1883) ought to be a sad one to the profession; it certainly is so to me," says S. D. Gross in his autobiography, "for one of our most distinguished men has dropped out of our ranks. Van Buren died this morning at his residence in New York after a protracted illness in which he endured much suffering, from softening of the brain, attended with paralysis and albuminuria." Born in New York April 5, 1819, of parents of Dutch descent, the great grandfather having studied medicine under Boerhave in Leyden and emigrated to New York in 1700, Van Buren entered Yale and took his A. B. as of the Class of 1838 (conferred in 1864). He attended medical lectures in the University of Pennsylvania, but before taking his M. D. there in 1840, he went to Paris and studied under Velpeau. On his return he wrote his thesis on "The Use of the Immovable Dressing in the Treatment of Fractures." His was the first attempt to introduce this practice, and the thesis made a strong impression on the profession. The first five years of his post-graduate life were spent in the army, chiefly as assistant surgeon under General Winfield Scott, but in 1845 he began practice in New York, for a time acting as prosector to his father-in-law, Valentine Mott (q. v.). Seven years later he became professor of anatomy in the University of the City of New York and held the post for fourteen years, and for sixteen years that of professor of the principles of surgery in the Bellevue Hospital Medical College, lecturing also on clinical surgery, particularly in following out the complicated affections of the genito-urinary organs, and finally becoming a specialist in these affections, when a special chair had been created for him in 1866 in Bellevue. He was visiting surgeon to St. Vincent's Hospital from its organization in 1849 and occupied a similar position at the New York Hospital from 1852 to 1868, while he was surgeon to Bellevue Hospital during his entire career.

The active part he took in the organization of the United States Sanitary Commission should be remembered, for he spared neither time nor money and the sacrifice he incurred from loss of practice must have been considerable. He did some good writing, translating Bernard and Huette's "Manual of Operative Surgery," 1855, and Morel's "Histology," 1861, and publishing "Lectures on Diseases of the Rectum," 1870. With his assistant, Dr. E. L. Keyes (q. v.), he wrote an exhaustive treatise on "Diseases of the Genito-urinary Organs, with Syphilis," 1874. This went through several editions. A valuable paper on "Aneurysms" attracted some attention and an erudite article on "Inflammation," in the "International Encyclopedia of Surgery" also came from him.

Dr. Gross says of Van Buren: "He was of lofty stature, well proportioned, gentle in his voice, bland and courtly in his manners, and scrupulously neat in his dress. As a lecturer he was clear, distinct and instructive, but at times rather prosy."

In 1842 he married the eldest daughter of Valentine Mott.

VANCE, Ap Morgan (1854-1915), of Louisville, Kentucky, surgeon and orthopedist, was born in Nashville, Tennessee, May 24, 1854, son of Morgan Brown and Susan Preston Thompson Vance. His father was a Mississippi planter and his mother was of Mercer County, Kentucky; his ancestry was Scotch-English. His childhood was spent mostly in Mercer County, but in 1868 his family moved to New Albany, Ind., where he lived until 1880.

Vance entered the medical department of the University of Louisville, in 1876. He was a pupil of Lunsford P. Yandell (q. v.), and during his student life and after graduation in 1878, he was associated with David W. Yandell (q. v.), in his office at Louisville.

On graduation he became an interne at the Hospital for Ruptured and Crippled in New York. His greatest surgical contribution was his advocacy of subcutaneous, bloodless osteotomy ("Femoral Osteotomy," 1887) with a small chisel introduced through a minute

opening in the skin. He says regarding its use: "I have broken a number of bones subcutaneously and have never had a feeling of doubt of exactly what was being done and have never had a single mishap; every case in its progress being practically a simple fracture." Vance returned to Louisville in 1881, and began to practice, and was the first in Kentucky to limit himself to surgery. Like many of the older anatomists, Vance was a resurrectionist. During the middle eighties he was doing special work with Dr. John Williams, of the Hospital College of Medicine; anatomical material was scarce, and so when a message came that a negro wench had just been buried, he went to resurrect the body. He dug a narrow hole down to the head of the coffin and broke the board, and so hauled out the body; upon reaching the college the building was found locked, so a window was forced and the body thrust through into the lecture room. The blanket in which the subject was wrapped went back to the janitor's room. Word came the next day that the subject had died of smallpox! This was the occasion and the beginning of "the great smallpox epidemic." The incident is characteristic of a number of body-snatching stories told me by the chief perpetrator.

Vance's bent was ever toward orthopedics, although he continued in the practice of general surgery. An accomplished technician he was the ardent and earliest advocate of asepsis in Kentucky. He declined several offers of a professorship of surgery in medical colleges, preferring to remain a "free lance." He was instrumental in founding, and was the chief benefactor, of the Children's Free Hospital of Louisville. He was a president of the Jefferson County Medical Society, as well as president of the Kentucky State Medical Association in 1915; he was also a member of the Southern Surgical and Gynecological Association, the American Orthopedic Association, of which he was first vice-president in 1890; and the American Association of Gynecology and Obstetrics, and fellow of the American College of Surgeons (1913). He was public spirited to self sacrifice, as is shown in the records of "The Louisville Legion," the Children's Free Hospital, which has a "Vance Memorial Ward," built by voluntary subscriptions contributed a few hours after his death, and the Louisville City Hospital which was brought to a successful completion through the giving of his time and labor. He had a rugged honesty which was coupled with a genial disposition, qualities which inspired confidence in his community.

In 1885 Dr. Vance married Mary Josephine Huntoon of Louisville, by whom he had eight children, one of whom practiced medicine.

For two years before his death Vance suffered from chronic nephritis and died December 9, 1915.

HOWARD A. KELLY.

VANCE, Reuben Aleshire (1845-1894), a physician of New York and Ohio, was born in Gallipolis, Ohio, August 18, 1845. His father, Alexander, was of Virginia extraction; his mother, Eliza Shepard, of Puritan, and this combination produced a character unique and striking. The son was educated in the schools of Gallipolis and in the Gallia Academy, and even while a lad he was precocious. At the age of nine he was an expert typesetter, and when the Civil War burst upon the land, he enlisted as a private at the age of sixteen, in the Fourth Virginia Infantry, a regiment commanded by his brother; saw much active military service, and was distinguished for a gallantry bordering upon recklessness. At the close of the war he decided to study medicine and matriculated in the Bellevue Hospital Medical College, New York and was graduated there in 1867; after the usual hospital service he settled down to private practice in New York City. In 1868 he was attending physician to the New York Central Dispensary; then assistant to the chair of the diseases of the mind and nervous system in Bellevue Hospital Medical College; assistant physician to the New York State Hospital for diseases of the nervous system; attending physician to the Bellevue Hospital Dispensary; physician-in-chief to the New York Institution for Epileptics and Paralytics. In 1870 he was called upon, as an expert witness, to testify in the famous murder case of Daniel McFarland. In 1873 he went to Europe for purposes of travel and study, and on his return, in 1875, married Anna Cooper, daughter of Dr. James Cooper, of New York. In 1879 he removed to Cincinnati, where for two years he lectured on pathological anatomy in the Cincinnati College of Medicine and Surgery. On the reorganization of the medical department of Wooster University in 1881, Dr. Vance was given the chair of clinical and operative surgery, and removed to Cleveland. He had been interested in St. Alexis Hospital, of Cleveland, almost from its inception, and at the time of his death was president of the hospital staff. He died of cerebral hemor-

rhage, following an attack of the grippe, March 19, 1894.

Dr. Vance was a member of the Ohio State Medical Society. A frequent contributor to the medical journals of his day, he was a graceful, clear and forcible writer. Of contributions it will be sufficient to notice: "The Ophthalmoscope in the Treatment of Epilepsy." ("New York Medical Journal," 1871, vol. xiii.); "Writer's Cramp or Scrivener's Palsy." ("Boston Medical and Surgical Journal," 1873, vol. lxxxix); "Trichina Spiralis," an inaugural address before the Ohio Valley Medical Society ("Cincinnati Lancet and Observer," 1877, vol. xx), and "Vesico-vaginal Fistula" ("Cleveland Medical Gazette," 1888.) He left a library of some five thousand volumes, ranging from the "Chirurgical Treatise" of Richard Wiseman and the "De Curtorum Chirurgia" of Taliacotius, to the first edition of the most obscure poet of the Elizabethan period, reflecting in its contents both the ability and eccentricity of its collector. An excellent half-tone picture of Dr. Vance will be found in the "Cleveland Medical Gazette," 1894, vol. ix.

HENRY E. HANDERSON.

VANDER POEL, Samuel Oakley (1824-1886), of Albany, N. Y., came of a family long distinguished in the affairs of New York state. His father also was a physician at Kinderhook, Columbia County, in that state, the birthplace of the son on February 22, 1824. He took a course at the University of the City of New York, of which Theodore Frelinghuysen was then chancellor, then returned home, and for a while studied medicine with his father. This prepared him for entrance to Jefferson Medical College, in Philadelphia, from which he was graduated in 1845. The ensuing two years he passed with his father, and in 1847 went to Paris. In 1850 he came home and settled in Albany, where he married. Vander Poel had acquired a large practice when, in 1857, Governor King appointed him on his staff as surgeon-general. In 1860 he became president of the Albany County Medical Society. The duties of surgeon-general had been barely more than nominal during Governor King's administration, but in 1861, when Governor Morgan selected him for that place on his staff, the requirements and responsibility of the position were great. After the war he resumed private practice and in 1867 was chosen to the chair of general pathology and clinical medicine at the Albany Medical College, and was elected president of the State Medical Society, in 1870. While still devoted chiefly to his private practice, Governor Hoffman appointed him, in 1872, health officer for New York. Quarantine matters were then in a deplorable state, and Dr. Vander Poel's powers of organization were again called into play. During his term he filled, in 1876, the chair of the theory and practice of medicine in the Albany Medical College. In 1883 he was elected to a professorship of public hygiene in the University of the City of New York, and had an LL. D. from there in 1884. Dr. Vander Poel wrote many articles for medical journals, eight of them reprinted.

He died in Washington, on March 12, 1886, while on the way South for his health.

VAN DENBURGH, John (1872-1924), distinguished herpetologist, was born August 23, 1872 in San Francisco, California, the son of Dr. Daniel Van Denburgh, a leading dentist, who was descended from the early Dutch settlers in New York State, and Elizabeth Douglas Turrill. In early childhood, John showed himself a born naturalist, particularly in his home in Santa Clara County. When scarcely sixteen he wrote "Two Large Sets of Quail Eggs" and his zeal for ornithology and oology was life long; while a student in the University of the Pacific, in 1890, he was a founder of the Cooper Club, instituted for this branch. Later at Stanford University, he organized the Stanford Zoology Club. In 1894, he received an A. B. from Stanford, the next year took his A. M. and in 1897, his Ph. D. In 1902, he received his medical degree from Johns Hopkins University and returned to San Francisco to practice.

Having had charge of the collections of fishes, reptiles, and amphibians of the California Academy of Sciences in 1894 and acting as curator of herpetology after 1895, he resumed the latter post, interrupted by his medical studies, to retain it for life and to devote himself assiduously to this department. Although he still found time to contribute to ornithological literature and to assemble the fine oological collection now deposited in the Academy, his notable writings were on herpetology. His publications number about one hundred; of especial value are the papers recording his experiments on the venom of the Gila monster, the most important contributions on this subject, and his splendid monograph in two volumes on "The Reptiles of Western North America," 1922,

beautifully illustrated with photographs of his own making.

Dr. Van Denburgh's wide experience as a field naturalist, his knowledge of comparative anatomy and physiology, his ability in interpreting taxonomic relationships, and his expert technique contributed to an undying fame in the field of herpetology.

He died in Honolulu, October 24, 1924.

HOWARD A. KELLY.

VAN DE WARKER, Ely (1841-1910), pioneer gynecologist, of Syracuse, N. Y., was born in West Troy, New York, November 27, 1841. He had his early education at a private school under Mr. Arthur, father of Chester A. Arthur, President of the United States. He attended the Troy Polytechnic, and later had medical training at the Albany Medical College. On graduation he entered the 162nd Regiment of the New York Volunteers and served as surgeon until the close of the Civil War, attaining the rank of major. He began practice in Troy, New York, in 1865, and in the same year married Louise Gardner of Hancock, Massachusetts, who died the following year. He moved to Syracuse about the year 1870 and in 1872 married Helen A. Adams of that city who lived until 1907.

Van de Warker should be reckoned among the pioneers in American Gynecology as he spent a particularly useful life in diffusing the benefits of modern surgery over a wide area of middle New York. One of the founders and most active members of the American Gynecological Society, he was also for a considerable time a prolific writer and zealous in promoting the advance of his specialty from that stage which it occupied in the 70's and 80's to its present status. His writings for the most part appear in the "Transactions of the American Gynecological Society," the "American Journal of Obstetrics" and the "New York Medical Journal". He was particularly forceful and happy as a writer, and the Gynecologists of his day well remember the great interest excited by the elaborate consideration of the "Mechanical Treatment of Versions and Flexions of the Uterus," a theoretical and practical study of the pessary, which is to be found in the "Gynecological Transactions" for 1883. The paper which excited most attention was "A Gynecological Study of the Oneida Community" ("American Journal of Obstetrics," New York, 1884). He also wrote on the "Treatment of Extrauterine Pregnancy by Electricity" a much mooted subject at that time.

His literary interests were not confined to a specialty alone, as he wrote a paper on the "Abandoned Canals of the State of New York" illustrated by seven artistic photographs which appeared in the "Popular Science Monthly," September, 1909. He also wrote a book of 225 pages entitled "Woman's Unfitness for Higher Co-education," December, 1903, written when he was Commissioner of Schools at Syracuse, New York. He really began his work a decade too early to take any active part in the working out of the larger problems of gynecologic surgery. He was the founder of the Syracuse Hospital for Women and Children where he served as surgeon-in-chief for more than twenty years. He is said to have performed over 2000 laparotomies.

In 1908 Dr. Van de Warker retired from active practice on account of failing health, and died September 5, 1910. He was survived by two daughters and three grand-children.

HOWARD A. KELLY.

VANDER WEYDE, Peter H. (1813-1895), scientist, editor, writer and physician, was born in Nymegen, Holland, in 1813, and graduated from the Royal Academy at Delft. He was a scientific writer and teacher in Holland, and professor of mathematics and natural philosophy at the Government School of Design. In 1842 he founded a journal devoted to mathematics and physics, and in 1845 received a gold medal from the Society for the Promotion of Scientific Knowledge for a text-book on natural philosophy. At the same time he was the editor of a liberal daily paper, which waged vigorous warfare against existing abuses in the government. In 1849 he came to New York, and was graduated from the New York University Medical College in 1856, and practiced medicine until he was appointed professor of physics, chemistry, and higher mathematics at the Cooper Institute. He was also professor of chemistry in the New York Medical College. In 1864 the chair of industrial science was expressly created for him at Girard College, Philadelphia. This last professorship he resigned a few years later, and returning to New York became the editor of "The Manufacturer and Builder," a scientific journal. He contributed many valuable articles of a scientific nature to "Appleton's New American Cyclopedia," of which he was an editor. He had

more than two hundred patents on inventions of his own, mostly electrical. Besides these attainments he displayed much merit as musician, composer and painter.

Van Dyck, Allen Cornelius (1818-1896), medical missionary to Syria. See Cyclopedia of American Medical Biography, H. A. Kelly Phila., 1912, vol. ii, pp. 468, 469.

VAN GIESON, Ira Thompson (1866-1913), died March 24, 1913, at the Bellevue Hospital in New York at the age of 47, his death being due to chronic nephritis and its complications. The son of Dr. Ransford E. Van Gieson, Ira Van Gieson was born on Long Island and throughout his active career was associated almost entirely with New York and the institutions of that State. He was graduated from the College of Physicians and Surgeons in 1885, and for many years thereafter served the school as one of its teachers, receiving his first appointment in 1887, and in 1894 being made instructor of pathology and histology of the nervous system. He early developed an interest in scientific problems, particularly of a pathological sort connected with the nervous system, and although during the latter years of his life he did much work on hydrophobia he will be chiefly known as a brilliant investigator and student of neuro-pathological subjects. One of his earlier services was the discovery and application of a practical and simple method of staining nerve tissues, which has since gone under his name. His point of view was always original and at times fantastic. For many years he was a dominant figure at neurological meetings and invariably advanced ideas of striking originality and significance. One of his most brilliant pieces of work was the demonstration, in the early nineties, that certain conditions of the spinal cord found post mortem and supposedly demonstrating faults of development, were in reality simply artefacts produced by imperfect and careless hardening of the tissues. This work created a profound impression in Germany, and disclosed in striking fashion the fallacy of much painstaking investigation previously made by German students.

When the central laboratory, known as the Pathological Institute of the New York State Hospitals for the Insane, was organized Dr. Van Gieson was chosen, very naturally, as its first director. He held this position for about seven years and established during that time a most elaborate system for the study and pathological investigation of mental disease, insisting upon the thesis that the nervous system although more highly differentiated, and therefore demanding special study, must, nevertheless, be regarded as under the same general laws as other organs and that an examination of the nervous system should entail an equally painstaking study of the rest of the body. Valuable in theory, such a plan of organization met certain obstacles in practice. It was felt that the practical aspects of the subject were being sacrificed to theoretical considerations, so that finally, much to his disappointment, Dr. Van Gieson was obliged to give up a work upon which he had set his whole heart. He thereafter, for a number of years, was in the service of the New York Health Department and continued to work in the Laboratory up to the time of his final illness, although for some years past he had been far less in the public eye than formerly.

Van Renssalaer, Jeremiah (1793-1871), practitioner of New York City. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, page 1177.

VASEY, George (1822-1893), botanist, was born at Scarborough, Yorkshire, England, February 28, 1822, and died at Washington, D. C., March 4, 1893. His parents brought him to America when he was only a year old, and his boyhood was spent in the vicinity of Oriskany, Oneida County, New York. His interest in botany, beginning when he was not more than thirteen years old, and fostered by his early acquaintance with P. D. Knieskern (q. v.), of Oriskany, remained strong throughout his life. Even before he studied medicine, he was in correspondence with Torrey, Gray, Dewey, Carey, and other American botanists of the time, with most of whom he afterward became personally acquainted. His medical education was secured at Berkshire Medical Institution, Pittsfield, Mass., where he received an M. D. in 1846. After a year or two of practice at Dexter, New York, he removed in 1848 to Illinois, where he spent twenty years of his professional life, mostly at Elgin and Ringwood. In 1868, as botanist, he accompanied an exploring expedition to Colorado, under the command of Major John W. Powell; the following year he was in Colorado again upon a similar mission. During 1870 he was associated with Prof. Charles V. Riley as editor of the "American Entomologist and Botanist"

and the numerous brief notes contributed to the pages of this magazine seem to have been his first printed scientific papers, although he was then nearly fifty years old. Before the end of the same year he became the curator of the museum of the State Natural History Society of Illinois at Normal.

It was in 1872 that Vasey was appointed botanist of the United States Department of Agriculture, and removed to Washington, D. C., where he spent the last twenty years of his life. These were his productive years, as far as scientific publications were concerned, but of course the high quality of his work during this period was made possible only by the years of quiet, faithful preparation which had preceded them. He devoted himself primarily to the study of the forest trees and the grasses of the United States, and nearly all of his papers treated of these two groups of plants. In addition to his position as botanist of the Department of Agriculture, he served as curator of the United States National Herbarium, and his crowning achievement was the building up of this great collection, which became under his guidance one of the finest herbaria in America, and is now one of the greatest in the world.

Besides his numerous contributions to scientific magazines, Dr. Vasey supplied lists of plants to various government reports, and his most important works were all issued as official documents. They were: "A catalogue of the forest trees of the United States" (1876); "The grasses of the United States" (1883); "The agricultural grasses of the United States" (1884; second edition, 1889); "A descriptive catalogue of the grasses of the United States, including especially the grass collections at the New Orleans Exposition" (1885); and "Illustrations of North American grasses" (2 volumes, in 4 parts, 1890-93). Many species of plants bear Vasey's name, and two genera have been named in his honor: the one called "Vaseya" by Thurber in 1863 and that named "Vaseyanthus" by Cogniaux in 1891. The former was based upon a grass from the Rocky Mountain region, now regarded merely as a species of the old genus "Muhlenbergia," but the name "Vaseyanthus" has been more fortunate; it is a genus of gourds, and three species are now known, all natives of lower California.

Dr. Vasey was a quiet, modest man, dignified yet unobtrusive. His gentle and kindly disposition, and his readiness to assist and encourage younger botanists, made many friends. He was twice married; his second wife, who, with six children, survived him, was a daughter of Dr. Isaac Barber, of New York, and widow of Dr. John W. Cameron.

JOHN H. BARNHART.

VATTIER, John Loring (1808-1881), of Cincinnati, was the son of Charles Vattier, of Le Havre, France, who emigrated to this country and came West as a member of Gen. St. Clair's Army, settling in Cincinnati and amassing a fortune in real estate. His mother was Pamela Loring, of Baltimore, Maryland, and he was born on October 31, 1808, in a little house at the corner of Front and Eastern Row, now Broadway, Cincinnati, Ohio. After going to the best schools of that day, but principally to private preceptors, he entered into the service of an apothecary, with the object of becoming a physician and in 1827 took up medicine and matriculated in the Medical College of Ohio, under professors Whitman, Slack, and Cobb; between terms he devoted his time to the steamboat traffic, reading medicine in the spare moments of long trips. He was a clerk on the "Alexander Hamilton," at the time it made the first through trip of any steamboat between Cincinnati and St. Louis. He finally graduated in 1830 and settled in Aurora, Indiana, but the field not being attractive enough he returned to Cincinnati and embarked in the wholesale drug business, the firm name being Ramsey and Vattier. The venture, of about four years' duration, became unprofitable and the firm dissolved, and in 1863 he practiced medicine in his native city, and continued to the time of his death, enjoying a successful career. At one time he was a partner of the renowned Dr. John T. Shotwell (q. v.).

At the time of the Seminole War and the trouble leading up to the Mexican War, he was appointed by Maj. Melancthon J. Wade as surgeon of the First Regiment, third brigade, first division, Ohio Militia. In 1853 Vattier was appointed postmaster at Cincinnati by President Pierce and continued in office until May, 1858, and again in 1859 he was appointed to the same office by President Buchanan and remained there until the administration of President Lincoln.

At different times he was trustee and director of many institutions. Among the public ones were the City Hospital, Longview Asylum, Cincinnati College of Medicine and Surgery and the Medical College of Ohio; with the last he was identified closely and

did much towards bringing it into prominence. He was president of the Academy of Medicine in 1867.

A curious history may be read in connection with Vattier in the "Transactions of the American Medical Association for 1881" concerning his membership in the Society of the Last Man, organized in Cincinnati during the cholera. The year 1832 was a fatal one in the history of the United States through the ravages of Asiatic cholera. The dreadful scourge had secured a footing in New Orleans, and was cutting a deadly swath northwards in the Mississippi Valley, its advance guard reaching St. Louis, where as it spread to the east and to the west, the victims fell by hundreds. The thirtieth of September of that year was a gloriously bright Sunday, and on the afternoon of that day were gathered in the studio of Joseph R. Mason, in Cincinnati, Dr. J. L. Vattier, Dr. James M. Mason, Henry L. Tatem, Fenton Lawson, William Disney, Jr., William Stanbery and a prominent young artist. Conversation naturally turned upon the plague and the havoc it was causing, the stalking and unconquerable phantom being the one topic everywhere. One of the number in a spirit of levity suggested the formation of a society to be known as the Society of the Last Man, and proposed that on each recurring anniversary of the organization a banquet should be held, at which the survivors were to attend, and when but one living representative remained he was to open a bottle of wine provided at the first meal. They came together for the first time on the night of October 6, 1832, and lots were drawn for the custody of the charge. In 1855 Henry Tatem and Dr. Vattier alone faced each other. The casket was now in the possession of the former, and two months later the fell destroyer seized him. In his delirium, he cried "Break open that casket and pour out the wine. It haunts me," The next year Dr. Vattier was alone at a banquet set for seven.

Vattier died in Cincinnati in 1881. No writings of his, with the exception of a few controversial tracts, can be traced.

OTTO JUETTNER.

VAUGHAN, Benjamin (1751-1835). So far as can be discovered, the only member of the Parliament of Great Britain and Ireland, who ever practiced medicine in Maine, was Dr. Benjamin Vaughan of Hallowell. Owing to that historical position, his career deserves our notice. Much has been written concerning his political adventures, but nothing about him as a physician. As I have just had the chance to discover items hitherto unknown concerning his medical interests, a revision of former lives of Dr. Vaughan now becomes imperative. Dr. Vaughan was born in the island of Jamaica, April 19, 1751; the son of Samuel Vaughan, a merchant of that island, and of his wife, Sarah Hallowell of Boston, Massachusetts. Judging from the medical books of Samuel Vaughan, he must have cared for medicine, at least so far as to have owned treatises on cholera, yellow fever, and smallpox inoculation. The family moved to London, and Benjamin was educated at Hackney, at Warrington under Priestly, and then at Cambridge, where, however, he could not obtain a degree, being a Unitarian. Wishing to marry Sarah Manning of London, her father refused his consent until Vaughan had obtained a degree. Under such amatory pressure, Vaughan matriculated as a medical student at Edinburgh under Monro Secundus, —the Monro of the "Foramen," and Alexander Fyfe, who drew beautiful anatomical plates, but was "horrid" as a lecturer. Obtaining his degree in 1781, Vaughan was married and is said to have gone at once into business, or according to other accounts into politics, as a private secretary to Lord Shelburne. I have discovered an "Open Letter" written to Vaughan in 1790 by Dr. John Collins of the Island of St. Vincent on "Angina Maligna," and "Capsicum in Tropical Diseases." From such publications we have the right to believe that Dr. Vaughan was interested in medicine, even if not publicly practicing that art. However this may be, Vaughan soon went whole-heartedly into politics and from his American connections came into touch with Franklin and Laurens, peace commissioners from the American Colonies, at the end of the Revolution. He was not only intimate with Franklin, but followed through the English press an edition of Franklin's works, and in later life an edition in the United States. While the commissioners were negotiating, Vaughan made several journeys on their behalf to France and lived there many months. From this time onward he went deep into European politics, became a member of Parliament, and with the outbreak of the French Revolution his sympathies and activities were all in favor of the revolutionists. He carried on a brisk correspondence with men who were plotting to set up a republic in England, modelled on that of France. Incriminating letters from

them to him as a member of Parliament were discovered and he left England for good. While in France during the following years he was imprisoned, released, again arrested as a spy, tried and acquitted, and after escaping to Switzerland and to Strassburg, he sailed for America, notwithstanding a permit from the English Government to resume his seat in Parliament.

The Hallowells of Boston owned lands in Maine, and a village was named for the family. There, then, in the town of Hallowell, about 1798, Dr. Benjamin Hallowell settled for life. With his large library about him in a spacious mansion, he devoted his time to study, wrote much on politics, gave abundant thought to the elucidation of the authorship of the "Letters of Junius," cultivated his farm and elegant garden, kept open house for the famous men of the nation, enjoyed a delightful visit from Talleyrand, came to Portland to meet once more the great La Fayette whom he had known so well in France, and formed a close friendship with Dr. Benjamin Page, Jr., of Hallowell (q. v.) and with another doctor, General Henry Dearborn (q. v.) of the Army, of Gardiner, close at hand. Amidst such surroundings, with a devoted wife and growing family, he enjoyed life, reached serene old age and died December 8, 1835, in his eighty-fifth year. After his death his books were scattered, but from many of them dealing with medicine, those which have as of yesterday fallen into my hands a chance has offered to cull the fruits of his opinions on treatment and of his adventures in medical practice and study. The first book to which the student of biography instinctively turns is a well-thumbed copy of James' "British Dispensatory," once the property in succession of two students, Sharpe and Hoare, and then descending to Vaughan. The only autobiographical item in its pages is this: "When dissecting with Monro and Fyfe in 1789-81, I found the very rare instance of muscles in the inner coat of the gall-bladder." The book is copiously annotated concerning the SIMPLES employed in that era. As an instance of this, I find an inky finger pointing to the odd fact of the plant "salvia" (Latin, salvus-safe) being found in every garden and quoted beside this, a quaint motto "Cur moriatur homo, cui crescit salvia in horto?" or as we might say in English, "Why should the man meet death, in whose garden salvia groweth?"

So far as a hundred other medical books of Vaughan are concerned, I say in brief: that each is copiously annotated for use. Where he sees something important, he underscores it in ink; where of more than transitory value, it is underscored twice, and where an item is of great value to a busy man, he calls attention to it with three inky fingers in the margin. Then, he goes over each book thoroughly, makes a good index (in addition to the one already provided) and pens it, either in the next to the front page of the book, or at the end, and then writes on the front page, just where his own index is to be found. Two of Vaughan's books are annotated in a short hand, which I regret my inability to decipher.

The first characteristic of Dr. Vaughan as elucidated from these marginal notes, is his erudition. Seeing a false quotation from Hippocrates and a misleading translation, he inserts the genuine text and translates it accurately. Reading a Latin book "On the Plague at Marseilles," he corrects false Latinities. Studying the "Life of Cornaro," an Italian who lived to be more than a hundred, he inserts Italian phrases, and thumbing a treatise in French, on the same plague at Marseilles, above noted, he argues from literary evidence concerning the anonymous author and names him as a certain Bishop of Marseilles.

Amongst the English medical friends of Dr. Vaughan, mention may be made of Adair Crawford, celebrated for his experiments on animal heat; of John Hunter, many of whose experiments Vaughan repeated at Hallowell; Dr. Thomas Percival of Manchester, an early agitator for prison sanitation; Dr. Charles White, the obstetrician, very successful in his campaigns against puerperal fever, and others long forgotten. He was also intimate with Mrs. Barbauld, the famous poetess, and his political acquaintance was nothing less than immense. Judging from copious notes on drugs, Dr. Vaughan must have been a man who treated patients according to the therapeutic resources of the day. He was outspoken on temperance, not total abstinence, bue real temperance, and mentions that the temperance of Dr. Cheyne with his quart or three pints of wine a day for thirty years was not unlike the guzzling of the Ancients who knew nothing of distilled liquors but got drunk on wine. He mentions also the death of Porson, the great scholar, a personal friend of his, from alcoholic poison due to small beer. He emphasized the opinion of John Warren that measles sometimes erupts first on the velum palati, and is vexed that

"Guides to Health" say nothing about the care of the teeth, for on their diseases other bodily diseases depend. It is recorded that Dr. Vaughan conducted a post mortem in the year 1824 upon the body of a man reputed to be 124 years of age, according to documentary evidence. He was assisted by Dr. Enoch Hale, Jr., and Dr. E. S. Tappan, both of Hallowell. All of the internal organs were found to be in a normal condition as reported to the authorities of the Maine Medical School.

Regretting that space forbids further quotations from the medical books of Vaughan, I will sum up his medical career to this effect: He was interested in medicine from the date of his student days at Edinburgh; he never forgot its attractions. In the scattered population in and around Hallowell he practiced for twenty years, importing books from London up to 1820, when he turned his attention more to literary work, although he was a physician to the end of his life, needing practice as a means for a livelihood. What a pity, to think that from his facile pen no autobiography ever appeared! What reminiscences of the past on participants in the French Revolution, on English politics, and on world-wide medicine were for that reason lost forever.

JAMES A. SPALDING.

VAUGHAN, John (1775-1807), physician and tractarian, of Wilmington, Delaware, born in Upland, Chester County, Pennsylvania, June 25, 1775, was the son of John Vaughan, a Baptist minister. He received his classical education at Old Chester, then studied medicine with William Currie (q. v.) and in 1793-1794 attended lectures at the University of Pennsylvania. In 1795 he settled in Christiana Bridge, a village in Delaware, in 1799 moving to Wilmington, Delaware, where he acquired a large practice. In the winter of 1799-1800 he gave a course of lectures on chemistry and natural philosophy delivered in the town hall of Wilmington; he was a corresponding member of the Philadelphia Academy of Medicine, honorary member of the Medical Society of Philadelphia, member of the Medical Society of Delaware and Fellow of the Philosophical Society of Delaware. Among his friends were Jefferson, James A. Bayard, John Dickerson, C. A. Rodney, and Aaron Burr; among physicians Benjamin Rush, Charles Caldwell, Edward Miller, Samuel L. Mitchill and James Tilton. Deeply religious from his youth he felt called to preach, began clerical service and continued, when free from medical duties, until his death. Vaughan was a "zealous advocate" of metallic tractors and wrote "Observations on Animal Electricity, in Explanation of the Metallic Operation of Dr. Perkins" (Wilmington, 1797); he wrote, also, "A Concise History of the Yellow Fever Which Prevailed in the Borough of Wilmington, in the Year 1802" (Wilmington, 1803). He edited Hugh Smith's "Letters to Married Women" under the title of "The Female Monitor" (Wilmington, 1801); he was a frequent contributor to the "Medical Repository."

In 1795 he married Eliza, daughter of Joel Lewis, Marshal of the "District of Delaware." Vaughan died March 25, 1807, it was said, of "Pneumonia typhoides."

VERMYNE, Jan Joseph Bastianus (1835-1898), ophthalmologist and aurist of New Bedford, Massachusetts, was born in Holland, and studied in the universities of his native land, later becoming a surgeon in the Dutch Navy. For a time he served in Surinam, then practiced in Holland. With his wife, who was Miss Frances Bixby, an American, he joined the Red Cross Society, and served during the Franco-Prussian War, for which he received the Order of the Legion of Honor from the French Government. He then settled in New Bedford, Massachusetts, the home of his wife, and devoted himself for a short time to general practice, afterwards more exclusively as an ophthalmologist and aurist. In 1873 he was elected a member of the American Ophthalmological Society, and in 1875 of the American Otological Society. He displayed great ability in his special lines of work. He was one of the founders of St. Luke's Hospital, New Bedford. He was a man of culture, especially in art and music.

He died, August 16, 1898, at the age of sixty-three at Francestown, New Hampshire. Dr. Vermyne had a most interesting personality, which made him welcome in every social or professional circle of which he was a part. During the twenty-five years he was a member of the American Ophthalmological Society he was absent from its meetings only twice and as secretary of the American Otological Society (19 years) he was most punctual and accurate in the performance of his duties. Orderliness was a hobby with him and his handwriting a marvel of legibility.

HARRY FRIEDENWALD.

VON EZDORF, Rudolph H. (1873-1916), sanitarian, was born in Pennsylvania. He was graduated in medicine at Columbian (now George Washington) University in 1894. In 1898 he entered the United States Public Health Service as assistant surgeon, was promoted to be passed assistant surgeon in 1903 and surgeon in 1912. He served as quarantine officer in Santiago during the United States intervention in Cuba and later was quarantine officer of the Isthmian Canal Commission at Cristobal and Colon. He was with the United States forces at Vera Cruz, Mexico, in 1914. From 1907 to 1910 he was in charge of the Quarantine Station at New Orleans, and when this country was threatened with the invasion of cholera, in 1911, he was quarantine officer of the port of New York. The "Journal of the American Medical Association" (September 16, 1916) says: "By reason of his long residence in summer climates and his special study and research regarding yellow fever and malaria he was esteemed an expert in these diseases, and his death is a distinct loss to the Public Health Service and to sanitary science."

He was ordered to special duty at Lincolnton, North Carolina, and died there September 8, 1916, it is thought of heart disease.

OSCAR DOWLING.

VON RUCK, Karl (1849-1922), specialist in tuberculosis, of Asheville, North Carolina, was born at Stuttgart, Germany, July 10, 1849, the son of George and Clara von Ruck. He took a B. S. from the Stuttgart school in 1867 and an M. D. from the University of Tübingen in 1877; coming to America he was graduated M. D. from the University of Michigan in 1879 and settled in Ohio where he practiced for several years. In the year 1882 he studied in Berlin, Germany and returning took up his residence in Asheville, N. C. and founded the Winyah Sanitorium for the treatment of tuberculosis, being medical director of the institution from 1888, the year it was founded, to 1910, and after that date, consulting physician. In 1895 he founded the Von Ruck Research Laboratory for Tuberculosis, at Asheville, for original investigations only, he being in charge. Von Ruck discovered a vaccine which he thought prevented and cured tuberculosis; contributed to American and European journals and reviews on the subject of tuberculosis and was the author of "Studies in Prophylactic and Therapeutic Immunization against Tuberculosis" (with his son), Asheville, 1916.

On December 25, 1872 Dr. Von Ruck married Miss Delia Moore, of Ottawa County, Ohio. He died at his home in Asheville, July 10, 1922, on his seventy-third birthday.

WADDELL, John (1810-1878), the second medical superintendent of the New Brunswick Hospital for the Insane, was the son of Rev. John Waddell, a Scotch Presbyterian minister, and was born at Truro, N. S., March 17, 1810. Having received a good primary education there and at Pictou Academy, N. S., he, in 1834, began his medical studies under Dr. Lynds of Truro. These were continued at Glasgow, Scotland, and in 1839 he received his diploma as member of the Royal College of Surgeons, London. During the winter of 1839-40 he attended medical lectures at Paris, and in the summer of 1840 returned to his native town and entered on a practice which was continued up to the date of his appointment to the superintendency of the New Brunswick Asylum, December 1, 1849, entering on the discharge of his duties on the sixth of that month. On resigning his position, May 1, 1876, he returned to Truro, his birthplace, where he died August 29, 1878.

In 1840 he married the only daughter of his first medical teacher, Dr. Lynds. The following year she died. Five years afterwards he married Jane Walker Blanchard, of Truro. One daughter by this marriage survived her father.

More than once during his 26 years' tenure of office the various commissioners expressed their unqualified appreciation of Dr. Waddell's able management of the asylum, and on his retirement reiterated these encomiums. Throughout his alienistic career Dr. Waddell showed himself a broad-minded, liberal and energetic administrator, one ever keenly observant of the best interests of his patients and the advancement of his institution.

WADSWORTH, Oliver Fairfield (1838-1911), Boston ophthalmologist, son of Alexander and Mary Hubbard Fairfield Wadsworth, was born in that city, April 26, 1838. His father, a civil engineer and surveyor, came to Boston from Hiram, Me., and was a descendant of Christopher W. Wadsworth who settled in Boston in 1632. Oliver was educated at the Boston Latin School and at Harvard College, where he received his A. B. in 1860, and an A. M. in 1863. Immediately after graduation he went to Colorado and engaged in farming

for a year and a half, acquiring a love of outdoor life that he was able to gratify later in many summers spent in camp in the Adirondacks. In March, 1862, he returned to Boston and entered Harvard Medical School, completing his course there and an internship in the Massachusetts General Hospital in 1865, but before his degree was given him he had served as assistant surgeon of the Fifth Massachusetts Cavalry in Virginia and Texas, being mustered out of the service with the brevet rank of captain. He began the practice of medicine in his native city in November, 1865; he married Miss Mary Chapman Goodwin, of Boston, April 16, 1867, and in the course of time they had six children; in February, 1869, with his wife and infant son, he went to Germany to study ophthalmology, having previously, in the fall of 1865, spent some time in the same study with Professor Horner in Zurich, Switzerland. He returned to Boston in November, 1870, and practiced ophthalmology there for the rest of his life. Appointments to ophthalmological positions were conferred on him soon, the first being ophthalmic surgeon at the Boston City Hospital, 1870, followed by opthalmic surgeon to out-patients at the Massachusetts General Hospital, 1874, instructor in ophthaloscopy in Harvard Medical School, 1881, professor of ophthalmology, 1891, and Williams professor, in the same, 1899-1903. He was appointed ophthalmic surgeon to the Massachusetts Charitable Eye and Ear Infirmary in 1892 and held the position until his retirement in 1903. Thus for many years he was visiting ophthalmologist to all the hospitals of the city, in which there was a service for diseases of the eye.

Dr. Wadworth's skill in the use of the ophthalmoscope and the accuracy of his ophthalmoscopic diagnosis were known to all his colleagues. As an operator he was cool, confident and skilful, following the safe and well-known methods. As the head of the department of the Harvard Medical School he was conservative and efficient. Under his administration required clinical as well as written examinations were introduced, being the first department of the school to adopt this system, Dr. Wadsworth giving conscientious individual consideration to the marks awarded to each student and spending a great deal of time in teaching the advanced students. In his active years he was a frequent writer, publishing between forty and fifty original articles, many of them appearing in the transactions of the American Ophthalmological Society, of which he was president for five years, his best known paper being a description of the "fovea centralis retinae."

One of Dr. Wadsworth's life interests was the Boston Medical Library which he helped organize under the stimulation of Dr. J. R. Chadwick (q.v.) in 1875. Dr. Wadsworth was the original "clerk" of the corporation, the title becoming "secretary" in 1904 after the reorganization made necessary by moving into the new building on the Fenway. For thirty-six years he saw the library grow in size and influence and resigned in 1911 only when forced to do so by a lingering illness due to carcinoma of the bladder.

In Dr. Wadsworth there was a blending of unusual vigor of mind and body combined with an affectionate and lovable disposition. He had a wiry frame and a military bearing and possessed great power of work. He was fond of music and had a knowledge of it. Disputation was to him a diversion, but though disputatious, "tenax propisiti," there was no bitterness and no ill feeling. He took what came to him cheerfully and without complaint, and this was exemplified most markedly in the manner in which he departed this life, for during many months of suffering he refused to talk about himself even with his intimate friends. He died November 29, 1911, leaving to the Medical Library ten thousand dollars for a book fund. One of his sons, Richard Goodwin Wadsworth, became a physician in Boston.

GEORGE B. SHATTUCK.

WAGNER, Clinton (1837-1914), New York pioneer laryngologist, a scion of early settlers of Maryland, was born in Baltimore on October 28, 1837. He received his early education at St. James College (Hagerstown), and after attendance upon the regular courses at the School of Medicine, University of Maryland, received his M. D. in 1858. Following a service as interne at the University Hospital, he entered the Medical Corps, United States Army, his commission as lieutenant and assistant surgeon dating from October 11, 1860. His first assignment was in the Department of Texas, where he was on duty with the troops surrendered by General David E. Twiggs; he subsequently participated in the engagements at Chancellorsville, Gettysburg, Mine Run, and Brandy Station. Marked ability as surgeon and administrator won him appointment as surgeon-in-chief and medical inspector of the second division, fifth corps, Army of the Potomac, with the rank of colonel. On March 13, 1865, he was made brevet

major and lieutenant-colonel for faithful and meritorious service in the war, and was promoted to major and surgeon on July 28, 1866, and this commission he resigned on March 25, 1869. Two years of special study in London, Paris, Berlin and Vienna followed, after which Doctor Wagner returned to engage in the practice of laryngology. He settled in New York, where in 1873, with G. M. Lefferts, (q. v) F. H. Bosworth (q. v.) and others, he founded the New York Laryngological Society, which stimulated the organization of the American Laryngological Association (1878). These societies were the earliest devoted to this specialty, and were followed many years later by the British Larynogological Association (1888) and similar societies in Belgium and France (1890), Italy (1892), and Holland (1893). Doctor Wagner was instrumental in the founding of several hospitals, including the first floating hospital on the Mississippi River, the Metropolitan Throat Hospital and Dispensary, and the New York Post Graduate Medical School and Hospital. He was the first professor of laryngology and rhinology at the last mentioned institution, and by his teachings and writings contributed greatly to the advancement of his specialty.

An early military training and extensive special study qualified him as a resourceful surgeon, capable of dealing with many difficult operations upon the larynx and throat, and his method of thyrotomy was said to have been unsurpassed. The invention of numerous surgical instruments bear testimony to his mechanical skill. In addition to a pioneer treatise on "Habitual Mouth Breathing" (New York, 1881, 2d ed., Albany, 1884) Dr. Wagner wrote a manual on "Diseases of the Nose" (New York, 1884), the chapter in Charles H. Burnett's "System" (Philadelphia, 1893) on "Local Therapeutics in Diseases of the Nares, Nasopharynx, and Larynx," and numerous articles in medical periodicals on general and special surgery.

After retirement from practice, Dr. Wagner lived in western states, and later in Europe. His last visit to his native country was as guest of honor at the commemoration of the fortieth anniversary of the founding of the New York Laryngological Society on November 25, 1913, when he made an address. He died exactly one year later, at Geneva, Switzerland. In 1882 he had married Elizabeth Vaughan, of London, England, who survived him.

FRANK J. STOCKMAN.

WAGNER, John (1791-1841), professor of pathological and surgical anatomy in the Medical College of South Carolina, was born in Charleston, South Carolina, July 7, 1791, graduated A. B. at Yale in 1812 and then studied medicine under Dr. Wright Post (q. v.) of New York. When the latter went to Europe for his health, Wagner, dissatisfied with his opportunities, resolved to visit the schools of London and Paris, and unexpectedly met his preceptor in Liverpool, who gave him a letter to Sir Astley Cooper. Three years as "dresser" in Guy's Hospital followed and attendance at Sir Astley's lectures; two large folio volumes in manuscript testifying to his interest. "America," wrote Sir Astley in his testimonial, "which is making rapid progress in professional science, will be proud to rank among its citizens a man so clear in his intellect, highly informed in his profession, and so kind and gentle in his manners." Wagner received a degree from the Royal College of Surgeons and also studied in Paris under Dupuytren.

He settled down and married a Miss Bract in New York, but after a few years went to Charleston, South Carolina. With his advent a new era in surgery began. Many of his confrères remember the exhibition of surgical ability in a case of osteosarcoma of the lower jaw in which nearly half that bone was removed, the third operation of the kind in the United States, two of them by Charleston surgeons. Other major operations were undertaken—the amputation of the arm at the shoulder joint, the tying of the artery in popliteal aneurysm with many others which showed his masterly skill in using the knife and his intimate acquaintance with the human structure. Practice rapidly increased and in the winter of 1826 he began a course of dissections and demonstrations in practical anatomy including the art of preserving specimens, a branch in which he had great skill. In 1829 he was appointed professor of pathological and surgical anatomy in the Medical College of South Carolina. Such a professorship was new, and treated of topics necessitating much research and practical information. The syllabus published by Wagner showed his large views and personal resources. Elected to the chair of surgery in 1832, succeeding Dr. James Ramsey, he continued as professor until his death on May 22, 1841, often doing his work in great bodily pain, for he suffered from rheumatism.

WALDO, Albigence (1750-1794), army surgeon, was born February 27, 1750, at Pomfret, Conn. He studied at the district school and was a pupil, also, of the Rev. Aaron Putnam, a minister of Pomfret, then was apprenticed to John Spalding, a surgeon of Canterbury. He was surgeon during the Revolutionary War and served in New Jersey in the campaign of 1776, and afterwards in the Continental Army. At the Battle of Monmouth and while the army was in winter quarters at Valley Forge and general inoculation for smallpox was being practiced, Waldo gained great reputation for professional skill. He was a connection by marriage, a neighbor and friend of Israel Putnam; he pronounced a eulogy over his grave; also aided David Humphreys in his "Life of General Putnam."

After the war Waldo settled in Windham County, Connecticut, and was a founder of the Medical Society of Windham County. He left many manuscripts, medical, surgical, historical and poetical, some of which were illustrated with excellent drawings by his own hand. His dairy kept at Valley Forge, 1777-1778, was published in the "Historical Magizine" in 1861.

He was twice married, first to Lydia Hurlbut by whom he had four sons and a daughter; second to Lucy Cargill.

He died in Windham County; January 29, 1794.

WALES, Philip Skinner (1837-1906), Surgeon-General of the United States Navy, was born at Annapolis, Maryland, February 27, 1837, and graduated from the University School of Medicine, Baltimore, in 1856. He also received an M. D. from the University of Pennsylvania in 1861. He entered the Navy as assistant surgeon in 1856, was promoted to surgeon in 1861, and served during the Civil War at the Naval Hospital at Norfolk and on the steamer "Fort Jackson." He became a member of the Board of Examiners in 1873, and later occupied the posts of medical inspector, chief of the Bureau of Medicine and Surgery, and medical director, he served also as surgeon-general of the Navy from 1879 to 1884. He retired from active service on account of age February 27, 1896, and spent most of his time in Washington. He died sudddenly from cancer of the intestine in a hospital in Paris, September 15, 1906.

He wrote "Mechanical Therapeutics," 1867, and several valuable articles for the medical journals, notably for the "American Journal of Medical Sciences" and the Philadelphia "Medical and Surgical Reporter."

CHARLES A. PFENDER.

Walk, James Wilson (1853-1918), of Philadelphia, organizer of charitable societies. See American Medical Biographies. H. A. Kelly and W. L. Burrage, Balto. 1920, page 1184.

WALKER, Clement Adams (1820-1883), Boston alienist, was born in Fryeburg, Me., July 3, 1820. His boyhood was passed near the White Mountains of New Hampshire. He received his preparatory education at the Fryeburg Academy, and graduated at Dartmouth College with the degree of A. B. in 1842. During his college career his health gave way and he travelled in the south, teaching school for a time in Virginia. He had suffered from hemorrhage from the lungs, which led his friends to fear a fatal result, but he afterwards acquired an apparently vigorous physique, which was severely tested by his 30 years of active hospital life. He took his M. D. at Harvard University in 1850, and began practice in South Boston under Dr. Charles H. Stedman, who was then physician to all the city institutions situated there, including the Boston Lunatic Hospital. In 1847-49, when cholera and ship-fever were prevalent among the immigrants at the quarantine station at Deer Island, he volunteered his assistance, and entered on the work of managing these unfamiliar and dreaded diseases with characteristic promptness, courage and skill. On July 1, 1851, he was appointed superintendent of the Boston Lunatic Hospital, a position he held until his resignation on account of ill health, January 1, 1881, a period of nearly 30 years. This hospital, built in 1839, had been in charge of Dr. Butler (q. v.) and Dr. Stedman, whom Dr. Walker succeeded, for a period of 12 years. In its rear was a semi-detached building known as the "Cottage," fitted up with cells like those of a police station for the violent insane. Such cells were supposed to be a necessary adjunct to a hospital for the insane in those days. Dr. Walker however, immediately advised their disuse, and in a short time succeeded in having them abandoned by gradually placing their occupants in the wards of the main building, and thus he became one of the pioneers in the discontinuance of cells in the treatment of the insane.

In appearance Dr. Walker was a little above medium height, becoming stout in mid-

dle life. His eyes were dark and piercing, his mouth expressive of firmness. His hair, jet black in youth, turned white at 35, and with his snowy beard gave him the appearance in early manhood of a vigorous old age.

He early recognized the necessity of better accommodations for the city's insane, and for years labored earnestly with this object in view, until success nearly crowned his efforts. A site for the new hospital was purchased, plans made and adopted, and an appropriation passed, only to be vetoed by the mayor, who opposed the project. This veto was a severe blow to Walker's hopes, and he had only the satisfaction of seeing the city's plan of construction adopted at Danvers, and of exercising medical supervision of the work on behalf of the commission who had it in charge.

He was an active member of the Medico-Psychological Association from 1851 until a short time before his death, and was president for three years. He was also a member of numerous medical societies. During the Civil War he was appointed inspector of hospitals and made a tour of service in the west. In 1872 he made a brief visit to Europe. Through the influence of the German consul he was presented with the decoration of an order of nobility for his humane treatment of an insane German citizen in Boston.

He died in Boston, April 26, 1883.

WALKER, Henry O (1843-1912), surgeon of Detroit, Michigan, was born at Leesville, Michigan, December 18, 1843. He was the son of Robert Eshelby Walker and Elizabeth Lee Walker, both of whom were natives of Yorkshire, England. He received his academic education at the Detroit High School and Albion College. In 1864 he matriculated in the Medical Department of the University of Michigan and after two years of study entered Bellevue Hospital Medical College, New York, graduating from that institution in February, 1867. After graduation Dr. Walker returned to Detroit and entered the active practice of medicine, giving his chief attention to surgery. In 1868 he was appointed demonstrator of anatomy in the newly organized Detroit Medical College and successively held several teaching positions. He was lecturer on genito-urinary diseases in 1872, professor of orthopedic surgery and clinical surgery in 1881 and professor of surgery and clinical surgery from 1881 to the time of his death. In 1881 he was elected secretary of the faculty and in this position, which he held at the time of his death, he was a leading personality in medical education in Michigan. As a medical educator Dr. Walker was an earnest advocate of higher standards in medical education. Under his guidance the Detroit College of Medicine kept well in the van in the improvements in the curriculum which have marked the trend of medical education throughout the country during the last twenty-five years. He was an active and earnest member of the local, state and national medical societies, a member of the American Medical Editors Association and the Mississippi Valley Medical Association. He served as president of the Detroit Academy of Medicine, the Detroit Medical and Library Association, and the Michigan State Medical Society. He was Vice-President of the American Medical Association, chairman of the section on surgery and was a member of the board of councillors for several years. At the time of his death he was president of the Wayne County Medical Society.

Dr. Walker was surgeon to the Michigan Central Railroad for two years and surgeon to the Wabash Railway for several years. He was surgeon to St. Luke's, St. Mary's and Harper Hospital. He was chief of staff of Harper Hospital at the time of his death. He served one term as member of the Board of Health of Detroit. Although not a prolific writer, he contributed many articles of sterling quality to the current surgical literature of the last twenty-five years, mainly on the topics of orthopedics and genito-urinary surgery. It may be said that he was the first of the surgeons of prominence in Michigan thoroughly to grasp the spirit of antiseptic surgery. Under this stimulus and the advantage which it gave him he soon became one of the leading surgeons of the state. In 1869 he was editor of the "Detroit Review of Medicine" and in 1882 editor of the "Detroit Clinic."

Dr. Walker was a man of genial personality, a devoted friend and agreeable companion, an ardent sportsman and was a supporter and a member of a number of shooting clubs.

Dr. Walker married Sarah Gertrude Esselstyn, of Detroit, November 13, 1872. They had one son, born December 14, 1894, Elton Willard Walker, a prominent mining engineer of Northern Michigan.

He died of pneumonia, after a few days' illness, at his home in Detroit, April 5, 1912.

Dr. Walker had no middle name, having adopted the letter O to replace a name that was not agreeable to him.

C. G. JENNINGS.

WALKER, Mary E. (1832-1919), eccentric early advocate of women's rights, was born November 26, 1832, in Oswego, New York, daughter of Alvah and Vesta Whitcomb Walker, both of whom were teachers. She was a graduate of Syracuse Medical College in 1855 and began to practice in Columbus, Ohio. Later she moved to Rome, New York, where she assumed male attire. During the Civil War, she was commissioned as lieutenant and assistant surgeon, the first woman to serve on the surgical staff of any army in time of war. When taken prisoner she was exchanged for a man of equal rank. She received from congress a medal of honor for "bravery and valuable services in the field" and was permitted to don male attire. After the war, she went to Great Britain to lecture on women's rights. For some years she conducted a sanatorium for tuberculosis near Oswego.

An unhappy marriage contracted early in life was annulled.

Dr. Walker was the author of "Unmasked or the Science of Immortality. To Gentlemen by a Woman Physician and Surgeon," 1878.

In the city of Washington, she was long a familiar figure. Petite, with a pale characterless face, wearing breeches and a high hat, she strolled through the streets and attended conventions, apparently detached from the more active interests of life.

She died February 21, 1919.

WALKER, Thomas (1715-1794), early practitioner of Virginia, was born in Gloucester County, Virginia, January 25, 1715, a grandson of Maj. Thomas Walker, a burgess from Gloucester, Eng., and a member of the Provincial Council in 1662. He was educated at William and Mary College and settled in Fredericksburg, Va. While it is not known whether or not he was a graduate in medicine, he was certainly a practitioner of note. He is, for instance, credited by Ashhurst ("Principles and Practice of Surgery") with having trephined bone for suppurative osteomyelitis in 1757, making him one of the first known to have done that operation. He lived at Castle Hill in Albemarle County, which he acquired by his marriage with the widow of Nicholas Merriweather, and during his life filled many important positions of trust, and was the guardian of Thomas Jefferson, besides being the intimate friend of General Washington to whom he was related by marriage. It is believed that he was the first to explore Kentucky, which he visited in 1745 and again in 1750. He was commissary general of the Virginia troops in the French and Indian War; a member of the house of Burgesses, of the Virginia Convention of 1775; commissioner to treat with the Indians after their defeat by Andrew Lewis; and also a commissioner to run the boundary line between North Carolina and Virginia, which was known as Walker's line.

Dr. Walker wrote: "Journal of an Exploration in the Spring of the Year 1750," with a preface by William Cabell Rives. Boston.

He died at Castle Hill, Va., on the ninth of November, 1794, in the eightieth year of his age. His son John was an aide to General Washington and a United States Senator.

WALL, Otto Augustus (1846-1922), pharmacist, writer, born September 27, 1846 in St. Louis County, Missouri, was graduated from the St. Louis College of Pharmacy in 1869, from the Missouri Medical College in 1870, and from Bellevue Hospital Medical College, New York, in 1871, and practiced in St. Louis until 1883. A bent for teaching had determined his acceptance of the chair of botany and materia medica, 1873, in the St. Louis College of Pharmacy, a talent for art proving a great asset in the preparation of his lectures. About the same time, he was also elected professor of materia medica and therapeutics at the Missouri Medical College, resigning in 1876 to become professor of chemistry and pharmacy until 1882 when he turned his full attention to the manufacture of pharmaceuticals at the Oldberg-Wall Laboratory of which he was a founder.

Wall was the author of "The Prescription, Historically, Medically, and Pharmaceutically Considered"; "The Companion to the U. S. Pharmacopoeia" (with Oscar Oldberg); "Notes on Pharmacognosy" revised as "A Handbook of Pharmacognosy"; "Lessons in Latin," intended as an introduction to the Latin of the pharmacopoeias and prescriptions; "Sex and Sex Worship," dealing with religious symbolism, and a number of papers in the medical journals. His eager interest in the history of medicine inspired several articles, "The Development of the Mortar and Mill," "The Evolution of the Drugstore," and "On the Basle Dance of Death." He was twice president of the Missouri Pharmaceutical Association and long served on the revision committee of the U. S. Pharmacopoeia. During 1872-76, he was on the St. Louis Board of Directors of Public Schools and for several

years was chairman on the course of studies, textbooks, and apparatus, and a manager of the public school library.

He died of heart disease at his home, February 13, 1922.

WALLACE, David Richard (1825-1911), Texas alienist, was born in Pitt County, North Carolina, in 1825. He spent his early boyhood on his father's farm, and went to school when opportunity permitted. Later he entered Wake Forest College near Raleigh, North Carolina, and was graduated with honor. In 1853 he began the study of medicine and took an M. D. at the University of the City of New York Medical Department, 1855, and afterwards served in a hospital in New York. His ability attracted the attention of Dr. John W. Draper (q. v), who offered Dr. Wallace a teaching position, which he declined on account of his health, and removed to Texas, where he resided until his death. His life of 56 years in Texas covers a long and eventful period in the affairs of his adopted state, during which he took a keen interest and an active part, not only in progressive medicine, but also in national and state politics. He was active in educational and literary fields, and was professor of Greek, Latin and French in Baylor University, and continuing the practice of medicine at the same time until 1862. Without solicitation, he received from the surgeon-general of the Confederate States an appointment as surgeon, and served until the close of the war, when he returned home penniless and resumed the practice of medicine in Waco. In 1874 he was appointed superintendent of the State Lunatic Asylum at Austin, Texas, and served until 1879, when he returned to Waco. In 1883 he was appointed superintendent of the North Texas Asylum at Terrell, a position he filled until 1891, when he again returned to his home in Waco.

During his long and efficient service in the two asylums of Texas he modernized and simplified the treatment, nursing and care of the insane along scientific and practical lines. He was one of the organizers of the Texas State Medical Association, and once its president. He was for many years an active member of the American Medico-Psychological Association, and for several years was an honorary member.

He died November 21, 1911, at his home in Waco, Texas, surrounded by his wife and descendants to the fourth generation.

WALLACE, Ellerslie (1819-1885), for twenty years professor of obstetrics at the Jefferson Medical College in Philadelphia, was born in that city June 15, 1819. He was of English and Scotch ancestry, claiming direct descent from Robert Bruce. His education was obtained at Bristol College and surveying occupied his attention at first, but becoming interested in medicine he studied with his brother, Joshua Wallace, then demonstrator of anatomy at Jefferson, attended the lectures there and took his M. D. in 1843 at the age of twenty-four. Then followed three years of internship at the Pennsylvania Hospital before beginning practice in his native city. In 1846 he became demonstrator of anatomy at Jefferson, in his brother's place, holding the position until 1863, when he succeeded Charles Delucena Meigs (q. v.) in the chair of obstetrics.

Dr. Wallace had a strong physique, was an earnest and positive teacher and gave special attention in his instruction to the physical structures of the pelvis and the child's head. He devised a cephalotribe and forceps, the latter being considered a valuable instrument. He wrote a moderate amount for the medical literature of the time but his chief contribution to medical progress was his twenty years of teaching.

During the war he was an active member of the Union League of Philadelphia.

In 1847 he married Miss Wistar, daughter of Bartholomew Wistar. One son followed his father and graduated from the Jefferson Medical College in 1879.

Wallace, William B. (1835-1897), an Irishman, graduate of the University of Edinburgh and practitioner of Brooklyn, N. Y. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1187.

WALTER, Albert G. (1811-1876), of Pittsburg, Pa., pioneer surgeon and one of the first to open the abdomen deliberately for traumatism, was one of the earliest American orthopedic surgeons, having up to the time of his death cut more tendons in one patient than any other surgeon; added to all this he gained distinction as a skilful lithotomist and operating oculist. He was born in Germany in 1811, studied medicine in Koenigsberg, where he received his degree, then took a post-operative course of one year at Berlin. He was pupil and assistant of the celebrated Dieffenbach, by whom he was advised to emigrate to America. On the way he was ship-

wrecked upon the coast of Norway and lost all his effects. He was brought with the other passengers and landed in London, without friends or means, but procured a situation as clerk in a law office, where he remained one year to secure means to continue his journey, during which time he attended medical lectures and especially those of Sir Astley Cooper, who afterwards remained his friend. He crossed to America and began practice in Nashville, Tennessee, remaining there two years, when he went to Pittsburgh and practiced there until his death in 1876. In 1867 he published a work entitled "Conservative Surgery," advocating the thorough drainage of crushed limbs by very long and deep incisions to release the imprisoned products, demonstrating that in this way only could crushed limbs be saved when the presence of imprisoned fluids under high tension would result in infection or interference with blood supply. On January 12, 1859, he was called to attend a patient who had been kicked in the suprapubic region and sustained an intraperitoneal rupture of the bladder. He made the correct diagnosis and, with a courage peculiar to the man, opened the peritoneal cavity widely, sponged away the effused urine, drained the bladder and his patient recovered. This was not only the first case in which the abdomen had been opened for rupture of the bladder, but was also the first case of deliberate laparotomy for injury which has been recorded. Although this case was published by Dr. Walter in the "Medical and Surgical Reporter," of November 16, 1861, it received scant notice till the publication of a similar successful case by Dr. R. F. Weir, of New York, in 1884.

Dr. Walter was a man of wonderful industry, taking the most minute notes of his cases, making plaster casts of his orthopedic cases and sketches of his operative work. He enjoyed good health until his death from pneumonia, in 1876.

JOHN J. BUCHANAN.

WANLESS, John (1813-1901), an ardent homeopathist of Montreal, son of James and Agnes Sim Wanless, was born at Dundee, Scotland, on May 26, 1813, and died at Toronto, Canada, April 14, 1901. He received his medical education at Edinburgh and the University of Glasgow, where he obtained his license in 1835. During his student days he spent considerable time as ship surgeon and in hospital work. Some of his experiences while acting in the former capacity are well worth relating, notably those of one voyage which like Sir A. Conan Doyle, he made as surgeon on a large whaler in 1832 that was full of "hair breadth escapes." Later, the young man, led by the adventuresome spirit no doubt, decided to try the hazard of a life in Canada, and came to London, Ontario, to practice at the age of about 27. Soon after he was established there, he met a homeopathist, and being a sturdy allopath himself, he undertook to denounce by his pen the new system of medicine and all its works; curiously enough, in his studies which were to enable him to shatter the opposite school to his own satisfaction, he found much to interest and finally attract him, and ere long he became a full-fledged homeopathist himself—in Goldsmith's words, "who came to scoff, remain'd to pray." In the spring of 1835 Dr. Wanless returned to Dundee and married Margaret McDonald, the only daughter of Duncan McDonald, a manufacturer of that town. A son of this marriage, Dr. John R. Wanless, practiced in Dunedin, New Zealand.

In 1861, Dr. Wanless, now as trenchant a homeopathist as the best, was asked by a number of the leading practitioners of that school in the city of Montreal to come there and begin practice, aiding this medical system by his efforts. This he did, soon establishing an excellent practice, and he was chiefly instrumental in causing legislation to be passed giving the school of homeopathy recognition and rights in Canada. He obtained the degree of Bachelor of Medicine from the University of Toronto in 1861 and the M. D. degree the following year from the same university.

An ardent Scotchman, he was prominent in the affairs of St. Andrew's Society; he was the first honorary secretary of the Protestant Hospital for Insane at Verdun near Montreal, being elected December 20, 1886, and resigning in 1892; he was also a member of the first, or provisional, directorate of the hospital formed in 1885. He was of vast assistance to the institution during its formative period.

His last few years were spent in Toronto, and there death called him at the advanced age of 87.

WARD, Richard Halsted (1837-1917), early microscopist of Troy, New York, was born in Bloomfield, New Jersey, June 17, 1837. He was the son of Israel C. and Almeda Hanks Ward. After graduating from the Bloomfield

Academy he entered Williams College from which he received the degree of A. B. in 1858 and A. M. in 1861. While in college he was president of the college literary society, editor of the "Williams Quarterly," and a leading member of the Florida expedition sent out in 1857. After Williams Dr. Ward studied four years in the medical schools of Philadelphia and New York, in 1862 receiving his degree from the College of Physicians and Surgeons, New York City. He served as surgeon in the U. S. Military Hospital at Nashville, Tennessee, but was invalided north and in 1863 settled in Troy, N. Y., where he was first associated with Thomas W. Blatchford (q.v.), and where he practiced medicine until retiring a few years before his death. Dr. Ward was a leader in the development of microscopy and its application to medicine. He was president of the National Microscopic Congress (1878), first president of the American Microscopical Society, fellow and vice-president of the American Association for the Advancement of Science, fellow of the Royal Microscopical Society of London, England, one of the four foreign fellows of the Belgian Microscopical Society, a corresponding member of the Albany Institute, Boston Society of Natural History, and of other microscopical and scientific societies. He was twice president of the Rensselaer County Medical Society. He had been an attending physician at the Marshall Sanitarium since 1868 and at the time of his death was one of its governors and chairman of the Medical Board. In 1890 he attended the International Medical Congress at Berlin as a delegate, and in 1891 he represented the United States as a member of the Committee of Honor at the International Exposition of Microscopy, held at Antwerp, Belgium.

Dr. Ward was professor of botany at the Rensselaer Polytechnic Institute in 1867 and taught there until he resigned his professorship in 1892. Despite the demands of a large practice he devoted much time to the pursuit of his favorite studies with the microscope, carried out extensive experiments on the construction of the instrument and on the methods of its use. He was particularly interested in the practical applications of microscopy to the detection of forgeries, to the identification of blood, to the demonstration of adulterants, and to the investigation and prevention of disease. In many of these directions his work was that of a pioneer and determined the lines followed by later investigators. He was always keenly interested in making scientific work clear and attractive to those not technically trained, and devoted much time and energy to local scientific organizations in which his addresses, demonstrations, and discussions were eagerly welcomed by all. For twelve years Dr. Ward was on the editorial staff of the "American Naturalist" in charge of the department of microscopy. This was the period in which the great individual American inventors and builders of the microscope, R. B. Tolles and the two Spencers, were at work, and his monthly critical notes on the progress of this branch of science played an important part in developing the American microscope of today. He published many scientific papers both here and abroad, among the most important being "Practical Uses of the Microscope," "Medical Microscopy," "The Study of Blood and Handwriting," "Micrometry Illumination," "The Powers, Aperture, and Nomenclature of Objectives and Oculars." He devised numerous improvements in the microscope and several useful accessories, and printed a much used "Slide Catalog." He conducted an extensive correspondence with the leading English and continental workers with the microscope, and contributed much to their publications as recognized in many cases by the authors.

Dr. Ward was married in 1862 to Charlotte Allen Baldwin, daughter of Caleb D. and Susan Moore Baldwin of Bloomfield, New Jersey, and a direct descendant through her mother of John and Priscilla Alden of the "Mayflower". One of their children was Henry Baldwin Ward, Professor of Zoology at the University of Illinois, Urbana.

Dr. Ward died October 28, 1917.

HENRY BALDWIN WARD.

WARD, Thomas (1807-1873), patron of art and philanthropist of New York, was born in Newark, New Jersey, June 8, 1807, and died in New York City, April 13, 1873. He was the son of Gen. Thomas Ward, of Newark, New Jersey, of Revolutionary fame, who represented his district in the First Congress of the United States. Dr. Ward was educated at Princeton College and spent two years in Paris, studying in the medical colleges. He returned to this country in 1828, and continued at Rutgers Medical College, taking his M. D. there in 1829. Dr. Ward about this time married the second daughter of Jacob Lorillard. Though distinguished as a physician and a man of literary culture and attainment, he was best known as a patron of art and a warm-hearted philanthropist. Ward devoted

himself to music, poetry and the fine arts, and had a finely cultured musical taste, ranking among the first amateurs of the day. He composed many ballads and comic operas, which were familiar to old New Yorkers. His pastoral opera, "Flora or the Gypsy's Frolic," had several presentations and yielded $40,000 for charitable objects. As a lover of fine arts and tntiquities he was widely known, and his library and music room in Forty-seventh Street were richly stored with valuable objects of rarity and beauty. Dr. Ward has a place among the "American Poets." He published a volume in 1842, entitled "Passaic and Other Poems, by Flaccus," the signature so familiar to the old readers of the "New York American." During the war Dr. Ward's muse was active in writing "war lyrics," which won much admiration when written, but are difficult to come across now.

DAVINA WATERSON.

WARDER, John Aston (1812-1883), was born near Philadelphia, January 19, 1812. When a boy he absorbed a deep love for nature in his father's house, where Audubon and other famous naturalists were daily visitors, and at the time of his death he had risen to national prominence as a naturalist. His family moved to Springfield, Ohio, in 1830, and in 1834 young Warder returned to Philadelphia to attend Jefferson Medical College, graduating in 1836. The following year he settled in Cincinnati and entered enthusiastically and successfully on medical practice. He was a public-spirited and energetic citizen, and gave much time to the study of school construction and educational systems. He was an active member of most scientific societies in his part of the country, especially the Cincinnati Natural History Society, and served as a member of the Ohio State Board of Agriculture. He was particularly interested in forestry and landscape gardening, and in 1853 enriched botanical science by his description of the "Catalpa Speciosa," as a separate species, one of the most beautiful and valuable forest trees. In 1857 he moved to North Bend, Ohio, where he established a home surrounded by a model garden and farm. In 1873, as United States Commissioner to the Vienna Exposition, he submitted an official report on forests and forestry that gave a tremendous impetus to the forest movement in this country. He translated Trousseau and Belloc on "Laryngeal Phthisis" (1839), and published "Hedge Manual" (1858); "American Pomology: Part I. Apples" (1867); and an edition of Alphonse Du Breuil's "Vineyard Culture" (1867).

In him the Medical College of Ohio had a loyal friend at the time it most needed help and support. He held the chair of chemistry and toxicology for three terms (1854-1857). His active and useful life ended at North Bend, Ohio, July 14, 1883.

OTTO JUETTNER.

WARE, John (1795-1864), of Boston, teacher of medicine, writer, editor, was born in Hingham, Massachusetts, December 19, 1795, the son of the Rev. Henry Ware, who was minister in that town for eighteen years, and later Hollis Professor of Theology in Harvard College from 1805 to 1840, serving also as acting president of the college in 1810 and in 1828-29. The immigrant ancestor of the family was Robert Ware, who "came from his English home to the colony of Massachusetts Bay sometime before the autumn of 1642," and settled in Dedham, where he married and brought up his family, and was "the progenitor of a long line of moral teachers." John Ware's mother was the daughter of the Rev. Jonas Clark, "the patriot parson of Lexington," and the granddaughter of the Rev. John Hancock of that town.

Graduating from Harvard College in 1813, John Ware entered the Harvard Medical School and received his M. D. in 1816. He began his medical career in Duxbury, Massachusetts, but in 1817 returned to Boston, where he acquired an extensive practice. In his diary he says: "I had always a great many patients, but for many years a very small income, and was obliged to have recourse to other means besides my profession for the support of my family. Some of my receipts were from dentistry, which I practiced about ten years." From his diary it is learned that he also eked out his income by keeping school and by taking private "scholars." In 1820 he records the receipt of the "Boylston Premium of fifty dollars." In 1823-25 he was physician at the Boston Almshouse, which paid a small stipend. He also gave two courses of lectures and wrote for the "North American Review." With Dr. Walter Channing (q. v.) he was editor of the "New England Journal of Medicine and Surgery," from 1824 to 1827, and on the establishment of the "Boston Medical and Surgical Journal" in 1828, he served for a year as its first editor. From 1823 to 1825 he was editor of the "Journal of Philosophy and the Arts." This literary work was a valuable training, it gave him a good

literary style and put him in touch with medical progress with which he was so closely identified in the succeeding years. After twenty years of unremitting effort he wrote, "My success in life, professionally, is, as often I reflect upon it, a matter of surprise to me. I came to Boston with no advantages of friends, or relations, or purse."

From 1848 to 1852 he served as president of the Massachusetts Medical Society and in the latter year he was appointed adjunct professor to Dr. James Jackson (q.v.), Hersey professor of the theory and practice of physic in the Harvard Medical School. Four years later he succeeded Dr. Jackson in the professorship, which he held until 1858. In 1839, with Dr. Jacob Bigelow (q. v.) and Dr. Enoch Hale (q. v.), he founded the Boston Society for Medical Improvement, a medical organization with a most honorable history. In 1842 Dr. Ware published a "Contribution to the History and Diagnosis of Croup." He pointed out that "the only form of croup attended with any considerable danger to life is that distinguished by the presence of a false membrane in the air passages." This may be regarded as one of the earliest recognitions of the characteristics of diphtheria. He also published essays on delirium tremens and on hemoptysis. He was much interested in natural science, and he enlarged with original matter and re-published Smellie's "Natural History" under the title of "Philosophy of Natural History," by Ware and Smellie. He also wrote a memoir of his brother, the Rev. Henry Ware, Jr. Dr. Ware was a member of the American Academy of Arts and Sciences. For a short time he was visiting physician to the Massachusetts General Hospital, and on the organization of the Boston City Hospital in 1864, was appointed to the consulting staff. For the last twenty years of his life his health was somewhat impaired, and he spent his summers and leisure moments on his country place in Weston, although continuing in practice as a consultant. He died of apoplexy in Boston, April 29, 1864.

Dr. Jacob Bigelow said of him: "A favorite term used by Dr. Ware in enumerating the various causes of mortality was 'hyper-practice.' He had an instinctive aversion to over-drugging. His prescriptions were simple, seldom containing more than one, two or three articles."

Dr. Ware married April 22, 1822, Helen Lincoln, daughter of Desire Thaxter and Dr. Levi Lincoln, of Hingham, and had eight children. One of his sons was Maj. Robert Ware, A. B. (Harvard), 1852, M. D. 1856, surgeon of the forty-fourth Massachusetts Infantry, who lost his life in the War of the Rebellion. Mrs. Ware died in 1858, and in 1862, Dr. Ware married Mary Green Chandler, of Lancaster, Massachusetts, who survived him.

Dr. Ware's portrait and bust may be seen in the Boston Medical Library in John Ware Hall, which was dedicated to his memory by his son-in-law and daughter, Dr. and Mrs. Charles M. Green. Dr. Ware's memory is perpetuated in the Harvard Medical School by the endowment, in 1891, by William Story Bullard, of the John Ware Memorial Fellowship. At the same time Mr. Bullard established similar fellowships in memory of Dr. George Cheyne Shattuck (q. v.) and of Dr. Charles Eliot Ware (half-brother of John Ware).

At a meeting of the Massachusetts Medical Society held May 25, 1864, shortly after Dr. Ware's death, Dr. Oliver Wendell Holmes read a poem in memory of John and Robert Ware, father and son. One stanza referring to John Ware, but applicable alike to his son, runs:

"A whiter soul, a fairer mind,
A life with purer course and aim,
A gentler eye, a voice more kind,
We may not look on earth to find.
The love that lingers o'er his name
Is more than fame."

WALTER L. BURRAGE.

WARFIELD, Charles Alexander (1751-1813), president of the College of Medicine of Maryland, was the son of Azel Warfield, and was born in Anne Arundel County, Maryland, December 3, 1751. He is credited with having been a graduate (M. B. ?) of the College of Medicine of Philadelphia, but his name does not occur in the catalogue, and he signs a diploma of the College of Medicine of Maryland as "Praêses" in 1812, without degree. He early took sides against England in the disputes with the American colonies. In 1774 we find him major of a battalion in his county and wearing a label bearing the dangerous inscription: "Liberty and Independence or Death in Pursuit of It." In October of the same year, hearing of the arrival of the Brig "Peggy Stewart," in the harbor of Annapolis, loaded with forbidden tea, on the nineteenth of the month he placed himself at the head of the "Whig Club," of which he was a prominent member, and marched to the capital with the determination to burn vessel and cargo. When the party arrived opposite the

State House, they were met by Judge Samuel Chase, who had been employed as a lawyer by the owner of the vessel, a Scotch merchant. This gentleman proceeded to harangue them in the interest of his client, and was making some impression, when Warfield interrupted him, upbraiding him for inconsistency, for he had previously inflamed the whole country with patriotic speeches, and declaring it submission or cowardice in any member of the club to stop short of their object. As the party marched on, they met Stewart who put on a bold front and threatened them with the vengeance of his king and government. They erected a gallows in front of his house and gave him his choice, either to swing by the halter or go with them on board and set fire to the vessel. He chose the latter and the doctor accompanied him with a chunk of fire. In a few moments the whole cargo and vessel were in flames, and were soon entirely destroyed.

In 1812 he was president of the College of Medicine of Maryland at Baltimore (University of Maryland), a position which he held till his death, which occurred at his place "Bushy Park," on January 29, 1813. At the meeting held in June following a committee of five members of the state faculty were appointed to prepare a testimonial to his life. Dr. Warfield was a founder of the Medical and Chirurgical Faculty of Maryland in 1799 and from 1803 to 1813 was also on its Board of State Examiners. He had a wide reputation as a physician and an extensive practice and taught many medical students in his office.

He married Miss Eliza Ridgely, a daughter of Maj. Henry Ridgely. He has left many descendants in Maryland. There is an oil portrait of him extant which has been reproduced with sketches in Cordell's "Medical Annals of Maryland," 1903, and Cordell's "History of the University of Maryland," 1907, vol. i; see also appendix to latter. The portrait represents a short person of perhaps forty-five with a head of gray hair, a full face and regular features and a most determined expression.

EUGENE F. CORDELL.

WARREN, Edward (1828-1893), made Bey by the Firman of the Khedive, Ismail Pasha, is one of the most bizarre and picturesque figures in the annals of American medicine, having passed through the successive transformations of country doctor, professor, surgeon-general and chevalier of the Legion of Honor, as he journeyed from the swamps of Carolina and the shores of the Chesapeake to the Nile and the Seine, practicing on three continents and received everywhere with acclaim.

Born in Tyrrell County, North Carolina, in 1828, descended from good old Virginia families, he was educated at the University of Virginia. In 1851 he received his M. D. from Jefferson Medical College and began to practice in Edenton, North Carolina. He went to Paris in 1854-55. In 1856 he received the Fiske Fund prize for the essay, "The Influence of Pregnancy on the Development of Tuberculosis;" in 1861 he was editor of the "Baltimore Journal of Medicine;" from 1860-61, professor of materia medica, University of Maryland; in 1867 he reorganized Washington University Medical School, Baltimore, and was professor of surgery 1867-71; in 1872 one of the founders of the College of Physicians and Surgeons, Baltimore, and professor there, 1872-73. Governor Vance of North Carolina appointed him surgeon-general of the state and medical inspector of the Confederate States, 1861-65.

Warren was restless and given to travel. In 1873 he set sail for Liverpool and traversed Europe to arrive at Cairo in the service of Ismail Pasha as chief surgeon of the general staff. Here he made a reputation by his dependableness, decision of character and common sense methods, with an infusion of modern medicine; he was soon fortunate enough to save Kassim Pasha, the minister of war, abandoned by his regular attendants and dying from a strangulated hernia; this stroke at once brought Warren repute and practice. Badly afflicted with ophthalmia, he escaped a ruse of his enemies to send him south into the hostile desert, and went for the hot season to Paris on a furlough, where the distinguished Landolt forbade his return to Egypt under penalty of total blindness of one eye. Through Charcot he was made a "licentiate of the University of Paris" and practiced there with signal success. As a reward for his skill in ferreting out a case of arsenical poisoning in a prominent Spanish lady, the King of Spain made him a "Knight of the Order of Isabella the Catholic."

Warren invented a splint for treatment of fracture of the clavicle, and "claimed the discovery of hypodermic medication." He wrote "An Epitome of Practical Surgery for Field and Hospital," Richmond, 1863; "A Doctor's Experience in Three Continents" (1885), a

series of letters addressed to Dr. John Morris, of Baltimore, full of charming personal and precious professional reminiscences. Warren, like Marion Sims, had an excellent opinion of himself, but not with such good reason. The University of North Carolina gave him an LL.D. and he was made a chevalier of the Legion of Honor of France.

In 1857 Dr. Warren married Elizabeth Cotton, daughter of Samuel Iredell Johnstone, rector of St. Paul's Church (Episcopal) at Edenton.

In 1875 he settled in Paris and died there September 16, 1893.

HOWARD A. KELLY.

WARREN, John (1753-1815), of Boston, surgeon of the Revolution, founder of Harvard Medical School, was born in Roxbury, Massachusetts, July 27, 1753, and died in Boston, April 4, 1815. His ancestor, John Warren, came fellow passenger with Governor Winthrop in the "Arabella" and arrived in Salem, June 12, 1630.* John (so far as the records show), was the father of Peter Warren, "Mariner," whose son Joseph built the family house in Roxbury, in which his grandson, Dr. John Warren, was born. Dr. Warren's father was a highly respected citizen of the town of Roxbury and added to and improved the homestead farm by the cultivation of many varieties of fruit trees. He was killed by a fall from an apple tree in October, 1755. His mother, Mary Warren, the daughter of Dr. Samuel Stevens of Roxbury, was a woman of great intelligence and piety, who survived her husband forty-five years and died in the paternal mansion in 1800. John was the younger brother of Dr. Joseph Warren (q.v.), killed at Bunker Hill. He was not much given to studious habits and was ten years old before he began to read, but under the favoring influence of the Grammar School in Roxbury, he applied himself to study with much zeal and acquired sufficient learning to enable him to enter Harvard College at the age of fourteen in July 1767. Of his life at Cambridge but little is known except that he became a good classical scholar and acquired a facility in speaking the Latin language which was of essential use to him later in communicating with many foreigners, both lay and professional, who had no other common tongue and with whom the political conditions of the times brought him much in contact. This industry and a tenacious memory enabled him to stand well in his class during his whole college course. After graduating from Harvard in 1771 he immediately began the study of medicine with his brother Joseph, some twelve years his senior, having already while in college developed a strong taste for anatomy. His brother Joseph had been the pupil of Dr. James Lloyd, (q. v.) who received his medical education in England, and was in the full tide of a successful practice. It appears that Dr. Warren at one time entertained the intention of going to Surinam and for this purpose had made himself thoroughly acquainted with the Dutch language. Boston had at the time of the Revolution a population of less than 20,000, and the field of practice was doubtless well filled by such men as Dr. Lloyd, Dr. Jeffries, Dr. Rand and Dr. Bulfinch, and many of the highly educated surgeons of the army then stationed in the city and its neighborhood. Fortunately an opening was discovered in the neighboring town of Salem under the patronage of Dr. Holyoke (q. v.), who had many pupils in medicine during his long life. The course of study, at that time required, was two years in length and Warren accordingly established himself in Salem as a practitioner in 1773. The first body in Massachusetts to issue a license to practice was the Massachusetts Medical Society and this organization was not incorporated until 1781. John Warren, received an honorary M. D. from Harvard in 1786. While he was endeavoring to establish himself in practice political events were developing rapidly. On December 18, 1773, the tea was thrown overboard in Boston harbor and tradition has it that Warren took an active part in this demonstration. About this time he joined a militia regiment in Salem, commanded by Colonel Pickering, and became its surgeon. The following year we find him addressing the mechanics of New York in his capacity as chairman of a committee of Boston mechanics, urging them to take no part in the construction of the fortification of Boston. Towards the close of the battle of Lexington on June 19, 1775, Col. Pickering's regiment arrived at Winter Hill, Somerville, but took no active part in the engagement. Warren was present on that occasion. Encamping for the night his regiment returned to Salem the next day. After the battle of Bunker Hill he left Salem at two o'clock the following morning and at Medford received the news of his brother Joseph's death. While seeking on the battlefield for his brother's body, he received a

*See "Genealogy of Warren" by John C. Warren, 1854.

thrust from the bayonet of a sentinel, the scar of which he bore through life. After learning the fate of his brother he volunteered as a private in the ranks of the American Army. He was, however, assigned to the care of the wounded. On July 3 Washington arrived at Cambridge and the organization of the army was begun. After passing an examination before a medical board, Warren received the appointment of senior surgeon to the hospital established at Cambridge. Here he remained during the siege of Boston. After the evacuation he was one of the first surgeons to enter the city and made a report on the discovery of arsenic mixed with medicines left by the enemy. When the army left Cambridge the general hospital was transferred to New York, for which city he departed on May 11, 1776, when he was appointed senior surgeon of the hospital established at Long Island. He remained in the army until July, 1777, and during this year gained much experience in dealing with dysentery and what was probably typhoid fever. He was with the army at Trenton and narrowly escaped capture after the battle of Princeton.

Many changes having taken place in the meantime in the organization of the medical staff of the army and Warren having suffered from illness brought on by the hardships of the campaign, he applied for and received permission to return to Boston in April, 1777. At the time extensive military preparations were going on in Massachusetts. A hospital was therefore needed in the city itself and one was accordingly established at the corner of Milton and Spring Streets near the site of the present Massachusetts General Hospital, and on July 1, 1777, Warren was established as senior surgeon of the General Hospital in Boston, a position he held until the close of the war. This was the turning point in Warren's career. Many of the older generation of practitioners had left the city and the field was open to a younger man representing the patriotic element in the community.

On November 4, 1777, he married Abigail Collins, daughter of John Collins, afterwards governor of Rhode Island. He first met his future wife in the family of Colonel Mifflin, Washington's aide-de-camp, at Cambridge, and later in Philadelphia while the army was stationed there. His first residence in Boston was in a house at the corner of Avon Place and Central Court, and here he once more began to practice his profession in civil life. About this time we find him entering into a partnership with Isaac Rand (q. v.) and Lemuel Hayward for the formation of a hospital at Sewall's Point, Brookline, for the inoculation for smallpox and the treatment of patients attacked with that disease. He also volunteered for the Rhode Island expedition and after that campaign returned to his hospital duties and family in Boston.

As we have seen, Warren had, while in college, developed a strong taste for the study of anatomy. He now appreciated the importance of this branch of medical science both for the practice of medicine and for surgery, and accordingly in the winter of 1770 he undertook to give a course of anatomical lectures at the hospital. His audience was composed of persons attached to the army in a medical capacity, a few medical students (probably serving apprenticeships to other practitioners), physicians of Boston and some scientific gentlemen. It was necessary to conduct these demonstrations, which were performed on the cadaver, with much privacy on account of the popular prejudice against dissection. These lectures were so successful that the members of the Boston Medical Society, an organization formed the same year (May 14, 1770), passed a vote: "That Dr. John Warren be desired to demonstrate a course of anatomical lectures the ensuing winter." This course was given publicity at the hospital and was attended by many literary and scientific men, including President Willard and members of the Harvard Corporation, as well as students from the college. A third course of demonstrations was given in 1782 at the "Molineux House" on Beacon Street near Bowdoin Street. This course was attended by the senior class at Harvard. In addition to the school in Philadelphia at this time, Warren says: "The military hospitals of the United States furnish a large field for observation and experience in the various branches of the healing art as well as an opportunity for anatomical investigation." Warren's efforts at teaching had brought home to the Corporation of Harvard College the need of a medical school and accordingly at a meeting of that body held on May 16, 1782, a committee was appointed to consider the establishment of a medical professorship. Following a report of this committee on September 19, Warren was requested to draw up plans for a course of medical instruction. He was assisted in this work by the advice of Shippen and Rush (q. v.), of Philadelphia, and on November 22 of the same year the corporation voted to establish three professorships: One of anatomy and surgery, one of

theory and practice of physic and one of chemistry and materia medica—and Warren was appointed professor of anatomy and surgery. On December 14 Benjamin Waterhouse (q. v.) was chosen professor of theory and practice of physic. Dr. Aaron Dexter's (q. v.) appointment as professor of chemistry and materia medica followed on May 22, 1783. On October 7, 1783, Warren and Waterhouse were inducted into office at the meeting house in Cambridge and Dexter's induction (owing to his absence) followed a few weeks later. The first course of lectures was prepared and delivered during the winter of 1783-4. The lectures were first given in temporary quarters, probably in the basement of Harvard Hall, and in 1800 Holden Chapel was fitted up for the reception of the Medical Department. Owing to the difficulty of access to Cambridge at that time and the absence of clinical facilities, the school was transferred to Boston. Warren was successful as a lecturer and was able to hold the attention of the class through lectures which, at that day, often lasted two or three hours. His "gentlemen, remember this" was a phrase often recalled by pupils in later years.

Dr. Warren had a large private practice and soon became one of the leading surgeons of New England. He had begun his career with a considerable experience as an army surgeon and early in his professional life performed one of the first abdominal sections recorded in this country. This operation consisted in the opening and evacuation of a dermoid cyst in the left hypochondrium with recovery of the patient.* A successful amputation of the shoulder joint, then also a novelty, performed at the Military Hospital, helped to establish his reputation as a surgeon. According to James Jackson (q. v.), his pupil, "he enjoyed the highest confidence of those around him in all branches of his profession; but it was in the practice of surgery he attained the most extensive reputation." He was cool in operating, did not hurry, and made a point of never omitting any details. He was among the first to recognize and practice the principle of the healing of wounds by first intention. His medical practice brought him in contact with the extensive epidemics which prevailed in those days. He took a prominent part in the management of an epidemic of yellow fever which visited Boston in 1798, of which he wrote a report. In 1802 he was one of a commission to render a favorable report on the use of vaccine, which had recently been brought from Europe, "as a complete security against smallpox." Dr. Warren's most notable contribution to literature was entitled "A View of the Mercurial Practice in Febrile Diseases," 1813 (pp. 187), in which he refers to the treatment of many of the prevailing diseases of that period, such as measles, throat-distemper, consumption, dysentery, spotted fever and spinal meningitis.

He was also the author of many contributions to the American Academy of Arts and Sciences, the Communications of the Massachusetts Medical Society and to the "New England Journal of Medicine and Surgery." He delivered the first Boston Fourth of July oration in 1783. In 1808, at the request of Dr. Warren, an adjunct professorship was created to aid him in the course of lectures which were at that time delivered in Cambridge, access to which consumed much time of a busy practitioner. His eldest son, John Collins Warren (q. v.), was elected to fill this position. For this reason, and the difficulty in giving clinical instruction, the school was moved to Boston in 1810, where he continued to teach to the time of his death.

Dr. Warren was a member of and participated in the formation of numerous societies which sprang into being after the Revolution. The American Academy of Arts and Sciences received its charter on the 5th of May, 1780, and Warren became a member the subsequent year. He was one of the founders of the Massachusetts Medical Society in 1781 and its president from 1804 until his death. He was also one of the founders of the Boston Medical Society in 1780, which established a fee table. In 1782 he was chosen grand master of all the Massachusetts Lodges of Free Masons. He was corresponding member of the London Medical Society. The Humane Society of the Commonwealth of Massachusetts was instituted in 1785 and Warren was its second president. This society was the forerunner of many other charitable organizations. He was also at one time president of the Agricultural Society.

He was the father of seventeen children, the eldest of whom was John Collins Warren (q. v.) and the youngest Dr. Edward Warren, his biographer. Dr. Warren was a devout student of the scriptures and a regular attendant at the Brattle Street Church—a society at that time in a transition state from Trinitarian to Unitarian doctrine. He was a man of ardent temperament and agreeable social qualities. His frankness, candor and

*Memoirs American Academy, Arts and Sciences, 1785.

hospitality were conspicuous traits. His voice was harmonious and utterance distinct and full, and his language as a lecturer was well chosen. For some years before his death he had suffered from attacks of angina and in 1811 a slight paralytic affection of the right side came on, which never entirely disappeared. He died April 4, 1815, in the full tide of his professional activities after a short illness from inflammation of the lungs in the sixty-second year of his age. The funeral services were held at King's Chapel during which "an Eulogy" was delivered by Dr. James Jackson before the governing body and the students of the university. Later a sermon was preached at the Brattle Street Church by the Rev. Joseph McKean and an oration was delivered by Josiah Bartlett (q. v.) before the Grand Lodge of Masons. His wife, Abigail, died in 1832.

J. Collins Warren.

WARREN, John Collins (1778-1856). Among the men of past generations few led more steadily laborious and useful lives than John Collins Warren. He was born in Boston in 1778, on the first of August, the eldest son of that interesting John Warren (q. v.) who served in the Revolution and founded the Harvard Medical School. Warren was intended by his father for a mercantile life, but passed a couple of years at French and the pretended study of medicine, as he himself says. Then he went to Europe and settled down to serious work in 1799. London claimed him first, where he became a pupil of William Cooper, and later of William Cooper's nephew, Astley Cooper. Warren secured a dresser's position at Guy's Hospital—it was merely a matter of money down—and served at such work and dissecting for something more than a year, then went to Edinburg for a year, where he received his medical degree, and for a final year to Paris. In the two latter places he studied hard, going in for chemistry, general medicine and midwifery, as well as anatomy and surgery. He lived in Paris with Dubois, Napoleon's distinguished surgeon, and studied anatomy with Ribes, Sabatier, Chaussier, Cuvier and Dupuytren; medicine with Corvisart, and botany with Desfontaines. That was a brilliant gathering for the edifying of a young gentleman from Boston. In 1802 Warren came home, and found his father in very poor health. In order to relieve him he immediately assumed a great part of his practice.

The years between 1802 and 1810 were important years to Warren. To begin with, he married, in 1803, a daughter of Jonathan Mason, and began the rearing of his many children. With Jackson, Dixwell, Coffin, Bullard and Howard, he formed a Society for Medical Improvement. In 1806 he was made adjunct to his father in the chair of anatomy and surgery at Harvard, and succeeded to the full professorship, upon his father's death, in 1815.

Warren's name will always be associated with two important facts: the founding of the Massachusets General Hospital and the introduction of ether anesthesia. These two events were separated by an interval of twenty-five years, but around them both are grouped nearly all that is conspicuous in Boston medicine during the first fifty years of the last century. In 1809, while still comparatively fresh from European teachers, he published a valuable paper on organic diseases of the heart, a subject which until then was little understood in this country; and in 1811, together with Jackson, Gorham, Jacob Bigelow and Channing, he assisted in founding the "New England Journal of Medicine and Surgery." This publication was ably edited and in 1828 was united with another, under the title, "The Boston Medical and Surgical Journal." As a writer, Warren was lucid and strong. He had a great many things to say and he said them well.

He was a very able surgeon of the painstaking type. In those days all operations, even the most inconsiderable from our point of view, were serious matters. With all care and method, Warren was not a timid operator. His amputations were bold and brilliant; he removed cataracts with great success; taught and practiced the operation for strangulated hernia—the first surgeon in this country to do so, and against strong professional opinion here; introduced the operation for aneurysm according to Hunter's method. His excisions of bones for tumor, especially of the jaw, became famous and are classics—for are they not recorded in volumes of the "Boston Medical and Surgical Journal?" In 1837, when fifty-nine years old, he published his magnum opus, "Surgical Observations on Tumors," a thick octavo with plates—a great collection of cases and remarks, interesting and instructive today. But all this gives only a very faint idea of his ceaseless literary activity. He was always writing; reports, memoirs, essays, lectures poured from his pen. It was a fluent pen, and had behind it a brain

stored with keen thoughts and abundant information.

Always greatly interested in comparative anatomy and paleontology, he was able to secure, among other trophies, the most perfect skeleton of the mastodon which exists—the monster still preserved in the old building on Chestnut Street which has been known for sixty years as the Warren Museum. All through his life he devoted himself, like Hunter and Cooper before him, to the collection of anatomical specimens. This collection, together with the treasures of the Medical Improvement Society, passed years ago to the Harvard Medical School and formed the nucleus of the fine "Warren Museum" of that institution.

He was prominent also in the establishment of the American Medical Association, and there was that other great event with which his name is most conspicuously connected; the first public use in surgery of ether anesthesia. This was in October, 1846, when he was approaching his seventieth year. It is needless here to enter upon that most interesting and confused chapter of American surgery. Suffice it to admit, as Jacob Bigelow admitted years afterwards, that to Warren belongs the credit, in his old age, of allowing his name and position to stand sponsor for this courageous and revolutionary experiment. (See biography of W. T. G. Morton.)

The old man lived on until 1856. Fifteen years before his death his wife died, leaving him with six grown children, and two years later he married a daughter of Gov. Thomas Lindall Winthrop, who also died before him. He kept busy almost to the end of his life, especially with his writing. His last surgical paper was published in May, 1855, just a year before his death, which closed a brief and painful illness.

Among his writings are: "Cases of Organic Diseases of the Heart," Boston, 1809; "A Comparative View of the Sensorial and Nervous Systems in Man and Animals," Boston, 1822; "Surgical Observations on Tumors," Boston, 1837; "Inhalation of Ethereal Vapor for the Prevention of Pain in Surgical Operations," Boston, 1846; "The Mastodon Giganteus of North America."

JAMES GREGORY MUMFORD.

WARREN, Jonathan Mason (1811-1867), Boston surgeon, was born in that town on February 5, 1811, in the house No. 2 Park Street, then occupied by his parents, and died there on August 19, 1867. He was the second son of Dr. John Collins Warren (q. v.) and grandson of Dr. John Warren (q. v.) In 1820 he entered the Boston Latin School and remaining there throughout the full term graduated with his class in 1825. After studying two years with a private tutor he entered and was admitted to the sophomore class of Harvard in 1827. At the end of three months, owing to ill health, he was obliged to leave college. He retained, however, his associations with the class of 1830 and in 1844 received the degree of A. M. from Harvard and in 1849 became a member of the Phi Beta Kappa Society. Invalidism due to dyspepsia, brought on probably by too close an adherence to the system of the day of much and exacting attendance at school exercises which left but little time for hygienic recreation, prevented him from continuing his studies at Harvard. After a trip to Cuba in search of health in the spring of 1828 he returned to begin his medical studies under the tutelage of his father. The old homestead had been the resort of medical students who served an apprenticeship, after the custom of the time. The class occupied a room with sanded floor near the entrance, for the purpose of study, and took their meals under the same roof; a custom dating from the period when the Medical School was still at Cambridge and probably at the time in question gradually yielding to a more modern system. In the fall of 1830 he entered his name as a student at the Harvard Medical School on Mason Street from which he received an M. D. in 1832 at the age of 21.

In March, 1832, Dr. Warren sailed from Boston for Europe, the ship "Dover" shaping its course first to Charleston, South Carolina and reached Liverpool at the end of May where he found an epidemic of cholera in progress. After visiting the clinics of Astley Cooper and Charles Bell in London and Syme, and Liston in Edinburgh, he arrived in Paris in the fall of that year. Here he studied surgery under Dupuytren, Lisfranc and Roux and medicine under Louis. Among his fellow students may be mentioned the names of Jackson, Bowditch, Holmes, Bethune, Hooper and Inches of Boston and Gerhard, Peace and Pepper of Philadelphia, forming a group of prominent Americans afterwards known as the "pupils of Louis." After two winters of study in Paris he visited, in the spring of 1834, Dublin, where Kennedy was master of the Lying-in Hospital and Macartney was presiding over his interesting museum at Trinity College. The winter of '34-35 was passed in

Paris where he saw Dieffenbach, on a visit from Vienna, perform his rhinoplastic operation. He also learned from Roux his method of operating for cleft palate, an ailment with which his own name was destined later to be intimately associated. He returned home in June, 1835, prepared to begin his professional career.

On the departure of his father for a visit to Europe in 1837 a large practice was entrusted to his care. In this he was eminently successful and became prominent, both as a medical and later, as a surgical practitioner. He was well qualified for these duties not only by personal traits but by sound education backed by good judgment.

In 1843 he published his first article on staphylorraphy ("New England Quarterly Journal of Medicine and Surgery," April, 1843), an operation in which he was the pioneer in this country, the method which he devised being substantially that which is employed today. A full account of this operation is given in his book "Surgical Observations and Cases," published in 1867, in which he refers to one hundred operations for fissure of the soft and hard palate performed by him.

On April 30, 1839, he married Anna Casper, daughter of Benjamin Williams Crowninshield, congressman and at one time secretary of the navy under Madison.

In February, 1846, he was elected one of the visiting surgeons of the Massachusetts General Hospital and on October 16 of the same year he assisted his father in the operation at this hospital, which was destined to be known as the first public demonstration of surgical anesthesia. A few weeks later he substituted for Morton's apparatus the cone-shaped sponge which was used for the purpose of administering ether at the hospital for twenty years. On the sixth of May, 1853, while returning from a meeting of the American Medical Association in New York, he was a passenger on the train which met with the so-called "Norwalk accident" in which the cars went at full speed through an open draw into the river. Several members of the Association were on the same train and Dr. Pierson (q. v.) of Salem was killed. Dr. Warren superintended the resuscitation of one of the first victims removed from the water, artificial respiration being kept up for two hours. Dr. Warren's health, never robust, seems to have permanently suffered from the shock of this experience and necessitated two visits to Europe in the following years. In 1864 he delivered the annual address before the Massachusetts Medical Society on "Recent Progress in Surgery," which summarizes well the status of surgery immediately preceding the antiseptic era. He was senior surgeon of the hospital for several years preceding his death in 1867. He was survived by his wife, four daughters and a son, Dr. John Collins Warren.

Dr. Warren was a man of delicate frame and of refined and distinguished bearing. He combined a cheerful disposition with qualities of mind and heart which made him poplar with patients and friends alike who flocked in large numbers to pay him a final tribute.

J. Collins Warren.

WARREN, Joseph (1741-1775), who fell at Bunker Hill, son of Joseph Warren, farmer, and Mary Stevens, was born at Roxbury, June 11, 1741, and after graduating at Harvard, in 1759, was appointed master of the Roxbury grammar school. He studied medicine under Dr. James Lloyd (q. v.), and at the age of twenty-three established himself permanently as a physician in Boston. By his successful treatment of smallpox patients, during the epidemic that scourged the New England cities at that period, he acquired a high reputation among the faculty. One of his most illustrious patients was John Adams, afterwards president of the United States, who was so favorably impressed with the young doctor that he retained him as his family physician.

In 1764 he married Elizabeth Hooton, a young lady who inherited an ample fortune.

His zeal in the cause of patriotism rendered him indifferent to bright prospects of professional advancement, and he soon gave himself, heart and soul, to American freedom. At every town meeting held in Boston, from the arrival of the British troops in October, 1768, to their removal in March, 1770, his voice was heard and his influence felt. In March, 1772, he delivered the anniversary oration upon the "Massacre," and again, March 5, 1775, he gave the oration in the Old South Church in spite of threats from the British that his life was in danger. At the meeting of the Provincial Congress at Watertown, May 31, 1775, Dr. Warren was unanimously chosen its president and on June 14 he was chosen second major-general of the Massachusetts forces. On the morning of June 17, 1775, he met the committee of Safety at Gen. Ward's headquarters on Cambridge Common. Hearing the British had landed at Charlestown he mounted his horse and rode over to Bunker Hill. He asked for

the place of greatest need and danger, and near the end of the battle when the Americans were retreating and he was trying to rally the militia he was struck by a ball in the head and instantly killed. A monument was erected by his brother masons twenty years after, but the Bunker Hill Monument now stands in its place.

GEORGE F. BUTLER.

WASDIN, Eugene (1859-1911), surgeon in the United States Public Health and Marine Hospital Service, was born in Georgetown, South Carolina, September 28, 1859, son of Thomas W. Wasdin and Mary Eliza Tarbox. His ancestry was of old English stock; his early education was had in the public schools of Georgetown, after which he started a business career; but he soon decided to study medicine, and entered the South Carolina Medical College and graduated first honor man in 1882. In 1883 he entered the United States Marine Hospital Service as assistant surgeon; in 1886 he was made passed assistant surgeon, and surgeon in 1898. Wasdin held the chair of pathology and bacteriology in the South Carolina Medical College, 1891-1893, and during that time established a well-equipped bacteriological laboratory in the college. He did notable work in the yellow fever epidemics and in 1897 was sent by the Government to Havana at the head of a commission to study yellow fever, especially with reference to the Sanarelli bacillus; he continued this work in 1899 at the Pasteur Institute at Paris, and in recognition of his services was decorated by King Humbert, of Italy; the same year he represented the United States at the International Medical Congress, held at Brussels.

Stationed at Buffalo when President McKinley was assassinated, he was one of the attending surgeons; the first to reach his side and continued in attendance until the President's death.

In 1884 he married Agnes Morgan of Georgetown, South Carolina; there were no children.

A nervous breakdown of long standing terminated in death at Gladwyne, Pennsylvania, November 17, 1911.

W. E. SPARKMAN.

Washburn, Cyrus (1774-1859), of Vernon, Vermont. See Cyclopedia of American Medical Biography. H. A. Kelly, Philadelphia, 1912, vol. ii, p. 480.

Washington, James Augustus (1803-1847), early New York practitioner of courtly manners and a large practice. See American Medical Biographies. H. A. Kelly and W. L. Burrage, Balto. 1920, pages 1199-1200.

WATERHOUSE, Benjamin (1754-1846), was the introducer into the United States of vaccination for the prevention of smallpox; he was the first professor of theory and practice in the Harvard Medical School; he was the first to give systematic lectures on natural history subjects in America; he was the founder of the Botanical Gardens at Cambridge, and he started the collection of mineralogy at Harvard.

Waterhouse was born in Newport, Rhode Island, March 4, 1754, the son of a tanner, Timothy Waterhouse, who moved from Portsmouth, Rhode Island, to Newport, where he later became a judge of the court of common pleas and a member of the Royal Council for the Colony of Rhode Island and Providence Plantations. His mother, Hannah Proud, was the niece of the then prominent Dr. John Fothergill of London, England. Both sides of the family were of the sect of Friends. Gilbert Stuart, the painter, was a schoolmate of Waterhouse, who also at one time thought of becoming a painter. At the age of 16 he was apprenticed to Dr. John Halliburton of Newport, studying with him until sailing for Europe in 1775. He left Boston in the last ship allowed by the British to sail from that port, and arrived in England in April, 1775. Just before leaving, his portrait was painted by Gilbert Stuart, and it is at present in the Redwood Library at Newport. Arriving in London, he went directly to his greatuncle, Dr. Fothergill, studied with him for a time, and later went to Edinburgh for medical lectures and hospital experience. While there he also acted as secretary for the Royal Society at its meetings. On his return to London, he studied still further under the direction of Dr. Fothergill, and in 1778 was sent to the University of Leyden, at that time the most noted medical school in the world. There he remained four years, taking his degree in 1781. He had attracted attention by enrolling himself as "a citizen of the free and United States of America," but the faculty refused to allow him to have that title on his diploma. When not engaged in the study of medicine, he evidently made use of his time in travels about Europe, meeting Franklin and John Adams, and during the semesters

at one time, he lived with John Quincy Adams. The elder Adams later joined the young men in their quarters at Leyden while waiting for the negotiations that were taking place with England.

After obtaining his degree, Waterhouse again worked with his uncle in London. At his house a number of the more serious-minded people: philosophers, authors, distinguished foreigners, members of the House of Lords and Commons, were accustomed to gather at breakfast, to discuss things scientific. In this way Benjamin Waterhouse formed many distinguished acquaintances, with whom he kept up a correspondence for the remainder of his life. Dr. Fothergill was a bachelor, and the question naturally came up, whether or no Waterhouse should remain in London as Fothergill's assistant and successor; but he determined that it was for the best interests of all concerned that he should return to America, bringing to his own country the erudition that he had acquired during his years of study in England and on the continent. Finally, in June, 1782, after an absence of more than seven years, Waterhouse, 28 years of age, returned to his native town and began to practice. He was probably the best educated physician in America. Plans were being made in Boston and Cambridge for the formation of a medical school in connection with Harvard College, and Waterhouse was invited to take the chair of theory and practice of medicine. The inauguration of the three new professorships followed in 1783. Almost immediately Dr. Waterhouse and Dr. John Warren (q. v.) realized the need of clinical material for supplementing the lectures on medicine and surgery, and in 1784 applied to the town of Boston for the use of the infirmary at the almshouse. This application was opposed by members of the Boston Medical Society from motives of jealousy and thus the progress of medical education was blocked for more than twenty years.

In the year 1786-87, Waterhouse delivered a course of lectures on natural history at the Rhode Island College at Providence, and these were later repeated at Cambridge. They were in reality the first systematic instruction in the branches of mineralogy and botany that were given in America. Dr. Lettsom, of London, sent a valuable collection of minerals which was the nucleus of the present museum of mineralogy at Harvard. Waterhouse was also instrumental in forming a botanical garden at Cambridge in order to have specimens with which to illustrate his lectures.

The most important medical event which happened in America prior to the discovery of anesthesia was the introduction of vaccination, and its introduction and, later, its acceptance on a scientific basis were due to the efforts of Dr. Waterhouse. In the year 1799, he received form his friend, Dr. Lettsom, a copy of Edward Jenner's "Inquiry into the Causes and Effects of the Variolae Vaccinae or Cowpox," published in 1798. It was probably the first copy to reach America. Waterhouse was much impressed by the work, and immediately published in the "Columbian Sentinel" of Boston, March 12, 1799 a short account of the new inoculation method under the title, "Something Curious in the Medical Line." "This publication," he says, "shared the fate of most others on new discoveries. A few received it as a very important discovery, highly interesting to humanity; some doubted it; others observed that wise and prudent conduct which allows them to condemn or applaud, as the event might prove; while a greater number absolutely ridiculed it as one of those medical whims which arise today and tomorrow are no more." Later in the same year Dr. Waterhouse received from London Dr. George Pearson's book entitled, "An Inquiry Concerning the History of the Cowpox Principally with a View to Supersede and Extinguish the Smallpox." Later in the year, at a meeting of the American Academy of Arts and Sciences held at Cambridge and presided over by President John Adams, and before an audience of many eminent literary men, Waterhouse read a paper on the new vaccination method that he had gleaned from Jenner's and Pearson's books. This communication was received with much interest by the members of the Academy.

Waterhouse apparently tried to secure vaccine from England immediately on the receipt of the book, but it was not until June, 1800, that, after many futile attempts, he succeeded in getting vaccine virus from Dr. Haygarth of Bath, England. With this, on July 8, he vaccinated his oldest son, Daniel O. Waterhouse, five years of age; later, another child of three, and several other members of the family. He watched the phenomena associated with the vaccination and found that they corresponded in every way with the accounts given by Jenner in his book. In order to make certain in his own mind that vaccination really protected from smallpox, he made

application to Dr. Aspinwall (q. v.), who had a private smallpox hospital in Brookline, Massachusetts, and requested that he inoculate the persons that Dr. Waterhouse had vaccinated with the variolous matter. This was done and none of the persons so inoculated contracted smallpox. Thus Waterhouse was assured that the process of vaccination was the same in America as in England and that vaccination protected against smallpox. He comments on his work as follows: "One fact in such cases is worth a thousand arguments." Soon after this, various young men who had been studying in England, returned to America with vaccine. Some of these men had studied with Woodville, whose book with its erroneous teaching had been read by Waterhouse. As a result, vaccination soon fell into disfavor because Jenner's golden rule was broken, namely; "Never to take the virus form a vaccine pustule, for the purpose of inoculation, after the efflorescence is formed around it." Another cause for this disfavor was the fact that many persons took any old piece of cloth and saturated it with the pus from a vaccinated arm and hawked small strips of the cloth at a small price about the country. The result was many badly infected arms, and it is probable that by 1801 all real vaccine had disappeared from Boston and the surrounding counties; and the same was true in other parts of the country. Waterhouse finally obtained new material from ten different sources in England, and it was with this, his second importation, that vaccination was introduced throughout the country. Dr. Waterhouse had been in correspondence with President Jefferson for some time regarding the matter of vaccination, and after several unsuccessful attempts, in 1801 he succeeded in sending some active virus to Monticello, with which President Jefferson had his family vaccinated; from there it was sent to Washington, and later to various points in the South. New York and Philadelphia were likewise supplied, not once but several times, as their vaccine suffered the same deterioration as had taken place in Boston and vicinity.

The value of vaccination was much debated in and about Boston, as well as elsewhere, and in order to settle the matter finally, Dr. Waterhouse proposed to the board of health of Boston that a public experiment be made by taking a number of children, vaccinating them, and later having them inoculated for smallpox. This plan was adopted although a similar proposition made by Dr. James Jackson on his return from Europe had been previously refused. The experiment was carried out under the observation of a committee of seven of the most reputable physicians in the town. In August, 1802, nineteen children were vaccinated; in November of the same year, these children were inoculated on two different occasions with variolous matter and exposed for twenty days to the contagion of smallpox at the smallpox hospital on Noddle's Island (East Boston). The experiment proved conclusively that cowpox is a complete security against smallpox, as not one of the children took the disease. Similar experiments were carried on in Milton, and a very extensive one, in which seventy-five persons or more were involved, at Randolph, Vermont. Dr. Waterhouse continued to write and to work hard for the new prophylactic remedy, and it is due entirely to his persistence in maintaining the purity of his vaccine virus that vaccination was finally put on a true and scientific basis.

Dr. Waterhouse was never popular with his professional brethren. He was not a good practitioner of medicine as "patients bored him." He lived in Cambridge and belonged to the sect of Friends; he was a Jeffersonian Republican when such political ideas were entirely hostile to the temper of the ruling faction in the State of Massachusetts, which was long the home of Federalism. Early in the nineteenth century, young and vigorous men, fresh from European hospitals, returned to Boston and sought for an outlet of their newly-attained medical enthusiasm, and the first decade of the century was filled with acrimonious disputes with the unpopular professor of theory and practice. At the end of this time, he was deprived of his professorship, and from then on devoted himself largely to letter writing and the care and supervision of the United States medical posts on the coast of New England.

Waterhouses's most important literary productions were his writings regarding smallpox. A lecture delivered to the students of Cambridge on "Cautions to Young Persons Concerning Health" became very popular. It contained the general doctrine of chronic disease, showing the evil tendency of the using of tobacco upon young persons, more especially the ruinous effects of smoking cigars, with observations on the use of ardent and vinous spirits in general. Dr. Waterhouse pictured in his lecture the rapid deterioration of the Harvard student of the day and asserted that "six times as much ardent spirits

were expended here (in Cambridge) annually as in the days of our fathers. Unruly wine and ardent spirits have supplanted sober cider." For twenty-seven years, from 1769 to 1796, there had been but nine deaths among the students; in the following eight years, there had been sixteen deaths, mostly from consumption. Indeed, never in his twenty-three years of experience had Waterhouse seen "so many hectical habits and consumptive affections as of late years." All of which he ascribed to the evil effects of smoking and drinking. It was a vigorous argument, not sparing the clergy, and calculated to do great good. Six editions were printed during the next fifteen or twenty years, and the lecture was translated into several foreign languages. The fame of this popular lecture always displeased Dr. Waterhouse.

Dr. Waterhouse married twice, the last time a daughter of Thomas Lee, of Cambridge. In personal appearance the eminent doctor was of medium height, compactly built and destitute of any superfluous flesh; quick and alert in all his movements, he seemed at all times to be prepared both bodily and mentally for immediate action or speech. Being of Quaker origin he was scrupulously nice in his attire, dressing always in the English medical style in fine black broadcloth, and carrying a gold-headed cane. When speaking he gesticulated freely and enunciated strongly. In conversation he was full of information and of anecdote, and very entertaining.

Waterhouse's long period of study in England in association with distinguished medical and scientific men probably partially unfitted him for his work in the new world. The fact that he never had and never wished for a practice always kept him short of funds. His controversial spirit and the fact that very few of his contemporaries had anything like an adequate scientific training brought him into frequent conflict with them. Added to this, the fact that he was a dissenter in religion and opposed to the aristocratic group that controlled affairs in Boston and about the university, led to many unpleasant complications, the result being that while American medicine owes much to this first professor of theory and practice at Harvard, until the appearance of the paper on "Waterhouse, the Jenner of America," by Prof. William H. Welch of John Hopkins, this distinguished American, although recognized by his contemporaries abroad and in other parts of America, had no proper place in the annals of Boston and Harvard.

He died in Cambridge, October 2, 1846, at the advanced age of ninety-two years and seven months, having been in poor health for many years before the end.

The following are the titles of some of his publications: "Rise, Progress and Present State of Medicine," Boston, 1786; "Dissertatio Med. de Sympathia," Ludg. Bal., 1780; "The Botanist." 1811; "Lectures on Natural History with a Discourse on the Principle of Vitality," 1790; "Circular Letter to the Surgeons in the Second Military Department of the United States Army (on dysentery)," Cambridge, 1817; "An Essay Concerning Whooping Cough, with Observations on the Diseases of Children," Boston, 1822; "Essay on Junius and his Letters; Life of W. Pitt, etc.," Boston, 1831; "Journal of a Young Man of Massachusetts Captured at Sea by the British, May, 1812," a novel, Boston, 1816; "Oratio Inaug. Quam in Academia Harvardinia Habuit., 1783," Cantab, 1829.

ARTHUR K. STONE.

WATERMAN, Luther Dana (1830-1918), of Indianapolis, organizer of the Indiana Medical College, was born in Wheeling, West Virginia, November 21, 1830, and died at Indianapolis, Indiana, June 30, 1918. His father, Joseph Aplin Waterman, of Cornish, New Hampshire, was educated as a physician but became a Methodist minister. The mother, Susan Dana of Belfry, Ohio, died when Luther was but seven years old, leaving five young children, three of them younger than Luther. Luther was reared by his maternal grandmother, a descendant of Captain Dana, one of the settlers of Fort Marietta, Ohio. After attending Miami University four years, Dr. Waterman entered the Medical College of Ohio, from which he was graduated in 1853. While a student he supported himself by teaching school. While a medical student he won a prize of fifty dollars offered by one of the Cincinnati papers for the best poem for a New Year's edition. Dr. Waterman never lost interest in literature. Of his publications, the most noteworthy is "Phantoms of Life," a book of poems published in 1883. His paper published in 1878, an address as president of the Indiana Medical Society, entitled "Economy and Necessity of a State Board of Health," resulted in the establishment of the State Board of Health of Indiana. At the outbreak of the Civil War

Dr. Waterman volunteered and for more than three years served his country, first as surgeon of the Thirty-ninth Regiment Indiana Volunteer Infantry, and of the Eighth Indiana Cavalry; later as medical director of the first and second divisions of the Second Army Corps, Army of the Cumberland. He was surgeon at the hospitals at Huntsville, Alabama, and at Bridgeport, Tennessee. He was twice captured by Confederate forces. At the close of the war Dr. Waterman settled at Indianapolis where he practiced his profession until his retirement in 1893, at the age of sixty-three.

He was one of the charter organizers of the old Indiana Medical College, in which he was first professor of anatomy and later professor of the principles and practice of medicine. With the consolidation of the several medical schools of the state into the Indiana University School of Medicine, Dr. Waterman became emeritus professor of medicine. In 1915 Dr. Waterman placed in the hands of the Trustees of Indiana University deeds to property valued at one hundred thousand dollars for the promotion of research in science, the largest gift for the purpose ever made in Indiana. He lived to see the establishment of the Luther Dana Waterman Institute for Research at Indiana University at Bloomington and the work of the Institute in progress. He was never married.

ARTHUR LEE FOLEY.

Waterman, Sigismund (1819-1899), of New York City, police surgeon, writer. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1204.

WATERMAN, Thomas (1842-1901), of Boston, expert in mental diseases, was the son of Thomas and Joanna Twole Waterman, and was born in Boston, December 17, 1842. He was the grandson of Col. Thomas Waterman and of the eighth generation from the English ancestor who settled in New Hampshire. As a lad he went to the Brimmer Grammar School, Boston Latin School and Harvard College, where he graduated in 1864. He began the study of medicine with Jeffries Wyman (q. v.), at that time professor of comparative anatomy and physiology in Harvard University. Waterman received his M. D. from the Harvard Medical School in 1868 and practiced medicine in Boston from that time until his death, December 14, 1901. After 1883 he devoted much of his time to mental diseases and was examining physician to the commissioners of public institutions of Boston. He also appeared in the courts of law as an expert in mental disease. His honesty, self-possession and carefully weighed testimony made him an excellent witness. He was a member of the Massachusetts Medical Society, Boston Society for Medical Improvement, and Boston Medico-Psychological Society.

During his medical training he was house surgeon at the Massachusetts General Hospital and physician and surgeon to the Boston Dispensary from 1870 to 1881, surgeon to St. Joseph's Home from 1871 to 1878; instructor in comparative anatomy and physiology at Harvard University in 1873 and 1874, and assistant demonstrator of anatomy in the Harvard Medical School from 1879 to 1882.

He married Harriet Henchman, daughter of Edward Howard, maker of the famous Howard clocks, December 4, 1872, and had two daughters.

Dr. Waterman was much interested in the exposure of pseudo-spiritualism and mediumistic imposters.

WALTER L. BURRAGE.

WATHEN, William Hudson (1846-1913), a founder of the Kentucky School of Medicine, early gynecologist, was born near Lebanon, Kentucky, January 23, 1846. His father was Richard Wathen, and his mother, Sophia Abell Wathen. His ancestors migrated from St. Mary's County, Maryland, in 1783, and settled near his place of birth. His early training was in the district schools and his academic work was at St. Mary's College; he received his medical education at the University of Louisville, graduating in 1870.

William H. Wathen was one of the founders of the Kentucky School of Medicine and served as its dean for a number of years, holding the chair of gynecology and abdominal surgery on its faculty that he retained after the consolidation with the University of Louisville. He was a fellow of the American Gynecological Society; president of the Kentucky State Medical Society in 1888; a member of the Southern Surgical and Gynecological Society, the Mississippi Valley Medical Society, the American Association of Obstetricians and Gynecologists; chairman of the section on obstetrics and gynecology of the American Medical Association in 1889, and orator on surgery in 1907. He did much work in surgery and was a leader among the

specialists in his state, especially in the field of vaginal surgery; a tireless, enthusiastic worker, a contributor of many surgical papers to the journals and society transactions.

In appearance, tall and gaunt, with an earnest face somewhat like Lincoln's. In conversation and society discussions, he seemed at first to have a sort of mutiny in his speech, which added to the impression of earnestness as he broke through the impediments and his ideas found expression. He was deeply interested in education and was widely known to the physicians of the South, many of whom had been his students. He was one of the few men in the South who limited his work to gynecology and abdominal surgery.

In 1871 he married Miss Kate P. Roach, and four daughters and one son were born; the son, Dr. John R. Wathen being professor of surgery in the University of Louisville.

He continued his daily work up to his death of angina pectoris at St. Anthony's Hospital, October 7, 1913.

JOHN R. WATHEN.

Watkins, Tobias (1780-1855), editor of the Baltimore "Medical and Physical Recorder," auditor of the United States. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1205.

WATSON, Beriah André (1836-1892), surgeon and writer who helped to obtain an anatomy act for New Jersey, was born near Lake George, New York, March 26, 1836, the third son of Perry and Marion Watson. He attended the local schools and the State Normal School, Albany, and studied medicine with Dr. James Reilly at Succasunna, New Jersey, matriculating at New York University in 1859, and taking his M. D. there in 1861.

He served as surgeon during the Civil War in the United States' service and after the battle of Gettysburg was commissioned surgeon with the rank of major. After this he settled in Jersey City and was instrumental in the formation of the New Jersey Academy of Medicine, and was one of the organizers of the Jersey City Hospitals, where he became surgeon in 1869. In 1873 he was surgeon to St. Francis' Hospital and, later, to Christ Hospital. Even with all his work as surgeon he managed to do a great deal of writing in his library—one of the largest medical libraries in the State. He took a great interest in mineralogy also, and had a good collection. A keen sportsman—he had many trophies hanging on his walls and wrote a volume in 1888, "The Sportsman's Paradise." The passage of the act that legalized the dissection of the human cadaver in New Jersey was secured principally through his efforts and those of Dr. John D. McGill (q. v.).

His death on December 22, 1892, was the result of exposure and fatigue while in pursuit of game. His wife and one daughter survived him.

His writings, of which there is a fairly long list in the catalogue of the Surgeon-General's Library, Washington, D. C., included: "A Case of Facial Neuralgia treated by Extirpation of the Superior Maxillary Nerve" ("Medical Record," 1871); "Woorara in Rabies" ("American Journal of the Medical Sciences," vol. lxxiii); "Disease Germs, Their Origin, Nature and Relation to Wounds" ("Transactions of American Medical Association," vol. xxix).

In 1882 Rutgers College gave him her honorary A. M.

He translated several medical essays from the French and German, and wrote one large volume, "Amputations and Their Complications" (1885) and left an unfinished work on "Surgery of the Spine." He contributed "Pyemia and Septicemia" to Pepper's "American System of Practical Medicine" and a chapter on "The Operative Treatment of the Spleen" to Keating's "Diseases of Children." A short "History of Surgery" was one of his contributions to medical history and he also wrote a brochure on "Experimental Study of Lesions Arising From Severe Concussions."

WATSON, Irving Allison (1849-1918), secretary of the New Hampshire state board of health from its organization in 1881, medical biographer, was born at Salisbury in that state, September 6, 1849, the son of Porter B. and Luvia B. Ladd Watson. His early education was obtained at the common schools and at the Newbury, Vermont, seminary and collegiate institute. Lectures were attended at the Dartmouth Medical School and at the University of Vermont, the M. D. degree being received at the latter in 1871. The next ten years were passed as a practicing physician at Groveton, New Hampshire. Here Dr. Watson served the town as superintendent of schools and in 1879 and 1881 was a representative in the legislature. In the latter year the state board of health was organized and Dr. Watson became its secre-

tary, removing to Concord and taking up his duties that were to be terminated only by his death, which occurred at his home in Concord, April 3, 1918. Other offices held by Dr. Watson were secretary of the New Hampshire commissioners of lunacy; registrar of vital statistics of New Hampshire; president of the state board of cattle commissioners; secretary of the American Public Health Association (1883-97); president of the New Hampshire medical society (1903); assistant secretary-general first Pan-American medical congress; president international conference State and Provincial boards of health (1903).

Dr. Watson compiled and edited "Physicians and Surgeons of America," a quarto volume published in Concord in 1896. This is an illustrated book of the lives of contemporary medical men, for the most part. Like other books of the sort containing the lives of those who were living when the material was gathered, it had biographies of many who were not really eminent. From the standpoint of the medical biographer the book has a value because it contains data concerning a large number of physicians that have been supplied and corrected by the physicians themselves and therefore may be considered to be accurate, a most important consideration. Dr. Watson edited New Hampshire Registration Reports after 1881; Reports of the State Board of Health after 1882; Reports of the American Public Health Association, 1883-97; Reports of the New Hampshire Commissioners of Lunacy; besides furnishing papers to medical periodicals on medical and sanitary topics.

In 1872 he married Lena A. Farr of Littleton, New Hampshire. She died in 1901, leaving a daughter, Bertha M., who was an assistant in the office of the state board of health in the department of registration of vital statistics.

WATSON, John (1807-1863), of New York, organizer of one of the first dispensaries for the treatment of skin diseases, and introducer of reforms in the New York Hospital, was born in Londonderry, Ireland, April 16, 1807. His parents, who were of Scotch descent, emigrated to the United States in 1810 and settled in New York City in 1818. John took his medical degree from the College of Physicians and Surgeons, New York, in 1832, having served as house surgeon at the New York Hospital, and the following year was appointed on the staff of the New York Dispensary; he served the hospital as visiting surgeon from 1839 to 1862, introducing great reforms so that it became one of the most complete hospitals in the country both in its care of patients and as a place of instruction for students. At his death he left to the New York Hospital his very considerable private library. In 1836, in connection with H. D. Bulkley (q. v.), he established an infirmary for cutaneous diseases, which within a few months led to the organization of the "Broome Street School of Medicine," in which Dr. Watson held the chair of surgical pathology. This school was finally merged in the "extra course" of the College of Physicians and Surgeons, where, as well as at the hospital, he continued to lecture on surgical pathology. Dr. Watson was one of the prime movers in the organization of the New York Academy of Medicine, being president in 1859, and of the American Medical Association. He is credited with having performed the earliest esophagotomy for the relief of organic stricture of the esophagus, reported in 1844. He wrote much for the medical journals and published "Thermal Ventilation and other Sanitary Improvements applicable to Public Buildings, recently adopted in the New York Hospital," 1851, 8vo; "The Medical Profession in Ancient Times," 1856; "The True Physician," 1860; "History of Medicine," nearly completed in November, 1862. He died in New York in 1863.

WAUGHOP, John Wesley (1839-1903), alienist and writer, was born October 22, 1839, near Peoria, Illinois. He received his medical degree from the Long Island College Hospital Medical School in 1865. Settling in Chicago, he practiced for a number of years, then, on account of his health, removed to Olympia, Washington, where, soon after his arrival, he was made superintendent of the Western Washington Hospital for the Insane at Fort Stellacoom. While in Washington he was very active in medical society work, the old Medical Society of Washington Territory being organized in his house. He was president of the state medical society; vice-president of the Medico-legal Society of New York, and a member of other societies. In 1897 he removed to the Hawaiian Islands, where he practiced for six years. A part of this time he was superintendent of the Koloa Hospital. He did much special work on tuberculosis for the Hawaiian board of health, and wrote a good deal on medico-legal topics,

and was an experienced and careful anethetist, having, according to report, administered chloroform in Washington and Hawaii over ten thousand times without a single death.

Dr. Waughop was a tall and heavily-set man, of dark complexion and with brown hair and black eyes. He was very fond of general, as well as of scientific literature, and his favorite authors were Shakespeare, Dickens, Tennyson, Schiller, Goethe. By way of recreation, he was given to translating from the German and would frequently drop down in his chair during a spare twenty minutes, and, taking up his quill (which he always preferred to any other pen) would write out the translations of a couple of paragraphs from some German author. In this way he put into English numerous German stories which were published in the newspapers, as well as one or two German historical works. Two little anecdotes paint his character in adversity. When a boy, while at play on the ground near the old family mare she accidentally stepped on him, laying open a large portion of his scalp. Though the injury must have been painful, he did not go to his parents about it; and they were shocked when they came upon him to find him still at play with the great gash over his forehead, a scar which persisted all his life. So again when he almost severed his great toe while splitting kindling one winter's eve. He stole off to bed without telling anyone of the occurrence, and it was only when his good mother was drying her children's stockings that night before going to bed that the tell-tale cut and blood in his sock betrayed the mishap.

In 1866 he married Eliza S. Rexford, of Chicago, by whom he had one child, Philip Rexford, who became a physician in Seattle, Washington.

Dr. Waughop died August 31, 1903, at sea off Cape Flattery, Washington, enroute per steamship "Noana" from Honolulu to Victoria, British Columbia. He had been gradually sinking while in the Hawaiian Islands, from pernicious anemia, and in order to seek relief from this affection was on his way to the healthier climate of the North.

THOMAS HALL SHASTID.

Wayne, Edward S. (1818-1885), chemist and pharmacist of Philadelphia. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto., 1920, pages 1207-1208.

WEBER, Gustav C. E. (1828-1912), surgeon of Cleveland, Ohio, was born in Bonn, Prussia, May 26, 1828, the son of M. I. Weber, professor of anatomy in the University of Bonn. The father was a noted man, the author of an "Anatomical Atlas" that was translated into many languages and of other books on anatomy. Young Weber was educated in Bonn, but being under suspicion of implication in the revolution of 1848 emigrated to America, entering the St. Louis Medical College in 1849 and receiving an M. D. in 1851. He then returned to Europe and spent much time with Carl Braun, an old friend of his father, in Vienna, and after a year went to Amsterdam, as Germany was still closed to him. In Amsterdam he had special training as an internist and finally passed a year at Paris under Roux, living in the Quartier Latin, following his master and learning English. In 1853 Weber went to New York, where his brother Edward had been practicing, and on Edward's death carried on his practice until 1856, when his health failed.

He settled in Cleveland in 1856 and accepted the chair of surgery in the Cleveland Medical College made vacant by the resignation of Horace A. Ackley (q. v.), retaining the position until the breaking out of the Civil War. He established the Cleveland "Medical Gazette," the first medical journal of the city, in 1859, carrying it on for several years. He did not write much, however, devoting his energies more to the practice of surgery. Governor Tod appointed Weber surgeon-general of the Ohio forces in the fall of 1861, with a special mission to organize a system for the better medical care of the troops in the field. He gave efficient service but was obliged to retire in 1863 because of his wife's health. Soon after his return he closed his connection with the Cleveland Medical College, and organized the Charity Hospital Medical College in 1864, becoming professor of clinical surgery and dean of the faculty. Through the efforts of his wife and the donations of Mr. J. L. Woods, inspired by him, the Charity Hospital came into being and remained as his monument.

Dr. Weber came to his full development from his forty-fifth to his fiftieth year. He was in very general demand as a consultant, and as an operator was rapid, painstaking and gentle. He had the eye of a mechanic and was accurate in his plastic work—harelip, rhinoplasty and chiloplasty being favorite operations. His dissection was clean and rapid and he was ambidextrous. In his lec-

tures to students he was inclined to dwell on the wider problems of surgery rather than on the commonplace details and thus was not a good teacher of the rudiments but he taught care and thoroughness. One had to see him operate to learn the best lessons he could give.

Dr. Weber was one of the prime movers in uniting the Cleveland Medical College with the Medical Department of Wooster College and became dean and professor of clinical surgery in Western Reserve Medical Department as it was then called, holding the former office from 1880 to 1897.

In 1854 he married Ruth Elizabeth Cheney, of New York City, and they had two children, Carl and Ida.

In 1898 he retired from the active practice of surgery and was Consul at Nuremberg, where he remained four years. After his return in 1903, while attending a banquet given in his honor by the Cleveland Medical Library, to which he had given his books and instruments, he suffered a stroke of apoplexy. His declining years were spent at his home in Willoughby, on the piazza looking into the trees that he and his wife had planted. There he sat a decade long, with no repining, with no complaints, content with his home, with his family and occasional friends until he slipped away after an attack of influenza in his eighty-fifth year, March 21, 1912.

WEBSTER, James (1803-1854), Philadelphia anatomist and surgeon, was born in Washington, Lancashire, England, December 24, 1803. His parents emigrated to this country while he was still a small boy, and settled in Philadelphia, where his father became an eminent book-seller and publisher, and established the "Medical Recorder," of which his son later became an editor. Webster's father meant him to study law, but the boy's inclinations led to the study of medicine, which he took up first in Baltimore and then in Philadelphia, graduating at the University of Pennsylvania in 1824, at the age of twenty. He was a private pupil of J. D. Godman (q. v.), and when the latter went to Rutgers College in 1826, he was succeeded at the Philadelphia School of Anatomy by Webster, a post retained for four years. He was a good teacher and excellent anatomist, although not so talented and energetic as some of the others who had had charge of the Philadelphia School of Anatomy. He made a practice of performing all dissections before his classes. He was thoroughly devoted to the interests of his class, and according to Dr. W. W. Keen, at one time, when there was greater difficulty than usual in getting subjects, he sat up night after night, watching that neither the University or any private room should obtain them till he was supplied, and gaining his point.

His literary efforts while in Philadelphia were limited to editing the "Medical Recorder," from 1827 to 1829, when it was merged into the "American Journal of the Medical Sciences." Dr. Keen also states that he believes that Webster was the editor of another rather pugilistic journal, which, however, was shortlived. In 1835 Webster moved to New York, where he acquired a reputation as a surgeon, especially of the eye and ear. In 1842 he went to Rochester as professor of anatomy in the Geneva Medical College. In 1849 he took the chair of anatomy in the University of Buffalo, which he resigned in 1852. He was one of the most popular surgeons in western New York, cautious, yet bold. In character he is said to have been a man of gentle instincts, generous to a fault, and thoroughly likeable. At the time of his death, July 19, 1854, he was emeritus professor of anatomy at the Geneva Medical College.

CHARLES R. BARDEEN.

WEBSTER, John White (1793-1850), Erving Professor of Chemistry and Mineralogy in Harvard University, was the author of a standard text-book on chemistry and had taught chemistry for twenty-five years in Cambridge and at Harvard Medical School when he came into world-wide notoriety as the murderer of Dr. George Parkman, one of his creditors, the donor of the land on which the new building of the medical school had recently been erected. The murder trial, a "cause célèbre," was attended by over 60,000 persons, and some 5,000 inspected the medical school, the scene of the murder, the building being thrown open to the public.

John W. Webster was the only child of Dr. Redford Webster, an apothecary at the north end of Boston, where John was born May 20, 1793. The father had gathered together a considerable property and at his death in 1833 it amounted to about fifty thousand dollars, a sum which was augmented by funds bequeathed John by his mother, who died soon after, altogether a large fortune at that time. It is to be noted that Red-

ford Webster willed all his real estate to his four female grandchildren and his personal estate to his wife, showing a lack of confidence in his son's judgment. John attended Harvard College, was graduated in arts in 1811 and at Harvard Medical School in 1815, traveled abroad and married "an intelligent and well-bred lady." In 1821 he published a "Description of the Island of St. Michael," in the Azores, where he had spent some time; in 1824 he was appointed lecturer in chemistry, mineralogy and geology at Harvard, succeeding John Gorham (q. v.) as Erving professor three years later. In the meantime he had published his "Manual of Chemistry," 600 pages, 1826, and had acted as co-editor of the "Boston Journal of Philosophy and Arts" with John Ware and Daniel Treadwell, 1823-1826. In 1841 he edited "Liebig's Organic Chemistry." These were his only literary output. As a lecturer he appears to have been "respectable," in the language of the day, but not brilliant. There seems to be no doubt that he was extravagant for he built a very costly house in Cambridge the year before his father died and gathered there a mineralogical cabinet, an expensive establishment for a professor having only a slender salary and lecture fees from his students as his permanent income. As early as 1842 he had borrowed $400 from Dr. Parkman, mortgaging his collection of minerals as security, only to sell this same collection to Robert G. Shaw in 1849 without notifying Parkman. Webster seems to have had an unassuming disposition and unusually affable manners; he was a musical amateur of considerable accomplishment, and had a great fund of small talk. Extravagant and improvident habits coupled with an ungoverned temper led to his great crime. In his confessional statement to the Rev. Dr. George Putnam, May 23, 1850, after his conviction, Webster said: "A quickness and brief violence of temper has been the besetting sin of my life. I was an only child, much indulged, and I have never acquired the control over my passions that I ought to have acquired early; and the consequence is—all this."

Dr. George Parkman, three years older than Dr. Webster, had inherited a large fortune from his father, Samuel Parkman, a Boston merchant. Educated at Harvard he had taken an M. D. at the University of Aberdeen in 1813 and had written two pamphlets on the care of the insane. A thin man, with a quick and irritating manner, a truth-teller, he cared for his property with great particularity and was reputed to be miserly and eccentric; generous in large matters and fussy in small ones. He held notes and mortgages of Professor Webster amounting to over $2,000 and had been insistent on payment, as was his wont. Webster asked Parkman to call on him in his laboratory at the medical school after his lecture, November 23, 1849, for the purpose of arranging about the payment of the debt. Parkman called at the appointed time and was never seen again. At the trial in March, 1850, Webster was convicted, chiefly on the circumstantial evidence of the dentist who had made a set of mineral teeth for Dr. Parkman that he had worn at the dedication exercises at the opening of the new medical school building. The teeth had been found partly destroyed in Professor Webster's laboratory furnace and were identified positively by Dr. N. C. Keep. Portions of a body, supposed to be Parkman's, were discovered in different receptacles in Webster's laboratory. The trial lasted twelve days and many of the prominent professional and other men of the time testified, including O. W. Holmes, Charles T. Jackson, J. B. S. Jackson, W. T. G. Morton, John G. Palfrey, Francis Parkman, R. G. Shaw, Jeffries and Morrill Wyman; also Dr. Webster's three unmarried daughters. Webster petitioned the court for a writ of error and it was denied; he petitioned for a rehearing with the same result, always alleging his innocence. Finally, in June, he asked for commutation of sentence and his confession as given to Dr. Putnam was placed before the governor and council. He said that Parkman came to his laboratory at the appointed time, asked if he had got the money, called him "scoundrel" and "liar" and other opprobrious epithets, shook the mortgage notes in his face, showed a letter of David Hosack (q. v.) congratulating Dr. Parkman for having secured the appointment of Webster to his professorship, remarking: "You see, I got you into your office, and now I will get you out of it." Webster interposed, trying to pacify Parkman. At last he lost his temper and while Parkman was gesticulating, shaking his fist in his face, he picked up a stick, a stout piece of grapevine root that happened to be handy, and dealt him an instantaneous blow with all the force that passion could give. The blow fell on the side of Parkman's head and he dropped instantly to the pavement and did not move. Blood flowed from his mouth. Webster got ammonia and a sponge and attempted to resuscitate him, but after ten min-

utes or so found that he was dead. The one thought in Webster's mind was concealment of the body, as an alternative to infamy. In a cold-blooded manner he burned the clothes, dismembered the body, after hauling it into the laboratory sink, put some of it in a lead-lined sink with potash, burned some in the furnace, including the head and viscera and the grapevine stick which had dealt the fatal blow. Webster said he did not know why he crossed out the signatures on the two notes and put them in his pocket instead of burning them. Removing all traces of the crime he collected himself and went home to Cambridge to spend the evening with his family, in apparent composure, having thrown Parkman's watch into the river as he crossed the bridge.

In accordance with the sentence of the court, Webster was hanged August 30, 1850.

WALTER L. BURRAGE.

WEBSTER, Noah (1758-1843). The writer whose published contributions in the eighteenth century are of the greatest permanent value to medicine was not a physician, but a useful and versatile man, Noah Webster, who graduated from Yale in 1778, M. A., and Princeton, 1795, also Yale LL. D. in 1823. Thus he was a doctor of laws though not of medicine. He was the first epidemiologist this country produced. In 1796 he published "A Collection of Papers on the Subject of Billious Fevers Prevalent in the United States for a Few Years Past," and in 1799 a two-volume work known to all students of epidemiology entitled "A Brief History of Epidemic and Pestilential Diseases," which is of unusual interest and on account of its records and observations of epidemic diseases in this country has an enduring value. There are scattered papers by him on various medical subjects, and one of these is buried in the "Medical Repository," 2 s. vol. ii, and should be rescued from forgetfulness. In this critique of Erasmus Darwin's "Theory of Fever," Noah Webster gives a well reasoned, clear and definite presentation of that modern theory associated with Traube's name which explains febrile elevation of temperature by the retention of heat within the body.

Webster was admitted to the bar in 1781, and in 1788 settled in New York as a journalist. He was a co-founder of Amherst College, Massachusetts, and lived in Amherst in 1812. His other writings included the well-known "Spelling Book" (1783-5); "Dissertation on the English Language" (1789); "A Compendious Dictionary of the English Language" (1806); "American Dictionary of the English Language" (1828); "Rights of Neutrals" (1802); "A Collection of Papers on Political, Literary and Moral Subjects," and "A Brief History of the United States" (1823).

In 1789 he married Rebecca, daughter of William Greenleaf, of Boston. Dr. Webster died in New Haven on May 28, 1843, when eighty-five years old.

WILLIAM H. WELCH.

WEBSTER, Warren (1835-1896), Surgeon, U. S. Army, was born in Gilmanton, New Hampshire, on March 7, 1835, graduating from the Medical Department of Harvard University in 1860. In March, 1860, he continued his medical studies in Paris and upon his return to the United States took the examination for the Medical Corps, U. S. Army, and was commissioned lieutenant and assistant surgeon on June 30, 1860 (accepted June 29, 1860). After a period of frontier service, he was ordered to Washington, in connection with the outbreak of the Civil War, to take charge of Douglas General Hospital and to assist in the construction and organization of other permanent military hospitals in the national capital. He took part in the second battle of Bull Run, was made one of the medical inspectors of the Army of the Potomac in 1862, was on duty at the battle of Fredericksburg and was breveted captain on May 13, 1863, for gallant and meritorious work at Chancellorsville, where he was very active in the care of the wounded and in the organization of field hospitals. During 1863-4 he was in charge of MacDougal General Hospital at Fort Schuyler, New York. On March 13, 1865, he was promoted surgeon with a brevet of major for faithful and meritorious services during the war. He was appointed captain and assistant surgeon on June 23, 1865, and major and surgeon on July 28, 1866. During 1866 he was in charge of DeCamp General Hospital, New York Harbor, and on September 28, 1866, he was breveted lieutenant-colonel for his distinguished services at Hart's Island and David's Island, New York Harbor, during the cholera epidemic which prevailed at that time. In 1868-70 he was made medical director of the Fifth Military District and during this time he organized a system of quarantine for the Texan coast. He afterwards served at var-

ious military stations in California and the East and was retired from active service in the Army on February 28, 1889. After this time, he made his headquarters in Baltimore, Maryland, where he died from pneumonia, on January 13, 1896. He was the author of "The Army Medical Staff" (1865), "Regulations for the Government of DeCamp General Hospital" (1865), "Quarantine Regulations, Fifth Military District" (Austin, Texas, 1869).

Doctor Webster was an accomplished and scholarly medical officer, reputed for his affable disposition, his kind nature, his warmth of heart and his fidelity in friendship. His military career was an honor to himself and his Corps.

MERRITTE W. IRELAND.

WEBSTER, William Bennet (1798-1861), geologist and mineralogist, of Kentville, Nova Scotia, was born in that town, January 18, 1798. He was the son of Dr. Isaac Webster, a lineal descendant in the fifth generation of John Webster, one of the royal governors of Connecticut, and of Prudence Bentley. His father came to Cornwallis in 1791, and was married in 1794. Although not a regularly educated physician he practiced medicine at Kentville, and there acquired the reputation of being "a stern man and a skilful doctor." He died in 1851, at the age of 85. William Bennet Webster received his general education, partly at the Cornwallis Grammar School conducted by Rev. William Forsyth, and partly at Pictou Academy. It seems that one or more of his early instructors encouraged him to study natural history, and to such investigations his energies were largely devoted throughout his life. His studies were taken in New York, where he was graduated M. D. from the College of Physicians and Surgeons in 1824. Then he spent a year in London and Paris, devoting his whole time to medical studies. Settling in Kentville, he soon acquired an extensive practice which was maintained down to the date of his death in 1861. He was an able practitioner, skilful as a surgeon, and was especially noted for his success in performing delicate operations on the eye.

Dr. Webster was well versed in natural history. His favorite studies were geology and mineralogy, and he devoted all his spare time to research work, mainly in his native country. He accompanied Sir Charles Lyell in that great geologist's tour through the western part of the Province. Sir Charles afterwards corresponded with him, and sent him copies of his works as tokens of remembrance and esteem, and these Dr. Webster prized very highly. Dr. Webster made a very extensive collection of Nova Scotian minerals and fossils. This collection was generously donated by his widow to the provincial museum, but only a few of the specimens now remain, for most of them were seriously damaged and ultimately destroyed in transportation to various international exhibitions. Dr. Dawson was very favorably impressed with Dr. Webster's attainments in geology, and in his work on Acadian geology makes frequent reference to his discoveries. To a fossil plant which Dr. Webster found in the slates of Beech Hill, near Kentville, Dawson gave the name "Dictyonema Websteri," in honor of the discoverer; and no doubt Dawson's influence had weight in securing the election of Webster as a Fellow of the Geological Society of London.

Dr. Webster represented the County of Kings in the House of Assembly from 1855 to 1861. In politics he did not distinguish himself, and perhaps made some enemies. But he did some good work in the House, was ever a strenuous supporter of all measures introduced to improve the status of the medical profession, and most notably, was the introducer of the Medical Act of 1856, which he supported by a carefully prepared and effective speech.

WEEKS, Henry Martin (1850-1909), alienist of New Jersey and Pennsylvania, was born at Irvington, New Jersey, October 26, 1850. He attended the public schools of his village during the early years of his life, and at the age of 13 moved to New York City, where he held a clerical position. At the age of 17 he began the study of medicine, and in 1873 he was graduated from the Medical Department of the University of New York. After his graduation he was associated with Dr. William A. Smith, of Newark, New Jersey, in the practice of his profession. In 1877 he settled in Falsington, Pennsylvania, where he actively engaged in the practice of medicine until 1881, when he moved to Trenton, New Jersey, opening there, in 1886, a private hospital for the treatment of nervous and mental diseases. Soon after his removal to Trenton he took an active part in the establishment of the Trenton City Dispensary, the parent of the Mercer Hospital, and

was a member of the surgical staff of that hospital. In 1897 he was elected to the position of assistant physician at the New Jersey State Hospital for the Insane at Trenton, where he remained until 1899, when the New Jersey State Village for Epileptics, at Skillman, was established, and he was chosen its superintendent. In 1907 he was elected superintendent of the Eastern Pennsylvania State Institution for the Feeble-minded and Epileptic at Pennhurst, Pennsylvania, and began his official duties on December 1, 1907. He was thus called on to establish two institutions, and the success of both is largely due to his indefatigable energy during the formative period of these institutions.

He was a member of the American Medico-Psychological Association, the American Medical Association, the New Jersey State Medical Society, the Somerset County Medical Society, and at one time was president of the National Association for the Study of Epilepsy.

He died at Spring City, Pennsylvania, on December 16, 1909, after a short illness.

HENRY M. HURD.

WEIL, Richard (1876-1917), of New York, one of the leaders in American cancer research, was born in New York City, in 1876, son of Leopold Weil and Matilda Tanzer. He was graduated from Columbia College in 1896, and received his medical degree from the College of Physicians and Surgeons, Columbia University, in 1900, and then served as interne in the German Hospital, New York. After studying abroad, chiefly in Marchand's laboratory, he returned to New York and devoted himself to scientific medicine. He became pathologist to the German Hospital in 1904 and while there collaborated with Hensel and Jeliffe in publishing "Urine and Feces in Diagnosis." Active in the administration of the Huntington Fund for Cancer Research after 1906, he was constantly engaged in this problem at the Loomis Laboratory, where he initiated those investigations on the reactions of cancer and immune sera which became his chief interest. His contributions in the field of the serology of cancer, as well as in the general problems of immunity, gained him a wide reputation. One of the founders of the American Association for Cancer Research, he was a founder and editor-in-chief of the "Journal of Cancer Research." When the Memorial Hospital was reorganized in 1913, Weil became assistant director in cancer research and attending physician to the Hospital and labored energetically to establish efficient routine work; here he perfected and employed the method of transfusing citrated blood. On his appointment as professor of experimental medicine in Cornell University in 1915, he resigned his directorship of the Memorial Hospital, but continued his experimental work in cancer.

On the declaration of war by the United States in 1917 he offered his services to the Government, and spent a summer at the Medical Officers' Training Camp, Fort Benjamin Harrison, Indiana, and only a short time before death was detailed as chief of the medical staff of the base hospital at Camp Joseph Wheeler, Macon, Georgia, where he died from pneumonia November 19, 1917, at the age of forty-one, a major in the Medical Reserve Corps.

Weil was a fellow of the American Medical Association and a member of the American Association of Pathology and Bacteriology; he was visiting physician to Mount Sinai Hospital and to the Montefiore Home, New York.

In 1905 Dr. Weil married Minnie, daughter of Isador Strauss, who survived him with their three children, Evelyn, Richard and Frederick Peter.

JAMES EWING.

WEISSE, Faneuil Dunkin (1842-1915). The author of an excellent textbook on anatomy, illustrated by many original plates, Dr. Weisse was born in Watertown, Massachusetts, August 27, 1842. His father, Dr. John A. Weisse, tutored his son for twelve years previous to his entering the medical department of the University of the City of New York, where he received his M. D. in 1864. At once young Weisse became assistant demonstrator of anatomy in his alma mater and the following year began to teach diseases of the skin in the same institution. From 1874 to 1875 he was professor of surgical pathology, then of practical and surgical anatomy, 1876 to 1888. At the end of this time he published his textbook, "Practical Human Anatomy."

During his professional life he was professor of anatomy, surgical pathology and oral surgery in the New York College of Dentistry, being dean after 1897; he was an organizer of the American Veterinary College in 1875, serving later as professor and presi-

dent of the board of trustees. He must be credited with being a founder of the New York Dermatological Society and the author of many articles for the medical press.

Dr. Weisse married Mary Elizabeth, daughter of Henry Suydam, of New York, in 1872.

Dr. Weisse died at his country home, Gedney Farms, New York, June 22, 1915, aged 73 years.

WEIST, Jacob Rollin (1834-1900), surgeon of Richmond, Va. In a little log cabin in Preble County, Indiana, about ten miles from Richmond, Jacob Rollin Weist, or as he preferred to be called—J. R. Weist, was born on November 26, 1834. His father, of German descent, was a brick layer and taught his trade to his son; his mother, of English parentage, cherished higher ambitions for him and lived to joy in their fulfilment. Through the dense forest to the nearest school, the mother blazed a path for the frail lad; later he studied along classical and scientific lines at Wesleyan University, Delaware, Ohio. His first preceptor in medicine was Samuel Ferris, also of Preble County; a series of lectures at the Cleveland Medical College was followed by a course at Jefferson Medical College in Philadelphia from which he was graduated in March, 1861. He first settled in New Paris, Ohio, moving from there shortly to Richmond, Indiana, where he remained.

During the Civil War, Dr. Weist served as acting assistant surgeon from March to July, 1862, then as assistant surgeon, Fourth Ohio Cavalry, taking charge of the hospitals at Nashville for a time, and as surgeon First U. S. C. T., having charge of the hospitals at Newbern and Goldsborough, North Carolina; subsequently, he was medical inspector of the Tenth Army Corps, North Carolina, and medical director of the Twenty Fifth Army Corps; and finally, chief operating surgeon in the First Division of the Eighteenth Army Corps. He was the first to suggest a hospital for the sick and wounded at Richmond and through his efforts St. Stephens was procured.

Dr. Weist was a general surgeon of the old school, doing hip amputations, tracheotomy, lithotomy, cataract extraction, ligation of the external and common iliacs and femoral arteries, and operations for vesico-vaginal fistulas. For fourteen years, he and Charles S. Bond were partners. He reported on the water supply of Richmond (1880) and wrote on foreign bodies in the air passages, studying over one thousand cases to determine the properties of bronchotomy (1882). He was one of the projectors of the American Surgical Society and its first secretary; president of the Indiana State Medical Society; representative of the American Medical Association at the International Congress in London in 1881; city health officer of Richmond for a number of years; surgeon to the Richmond Division of the Pennsylvania Railroad, and a member of the United States Pension Board.

During the last ten years of his life, while he was having frequent attacks of angina pectoris, he devoted a great deal of time out of doors to his camera, going many miles to find worthy subjects. He illustrated Riley's "The Old Man come back to the Old Swimmin-hole" with eighteen views from the vicinity of Richmond and also Gray's "Elegy in a Country Churchyard." His extensive work in photographing and classifying native mushrooms is accorded greatest recognition; numerous full page prints illustrate McIlvaine's "One Thousand American Fungi," the negatives of which are entrusted to the librarian of the Mossisson-Reeves Library of Richmond.

On April 3, 1856, he married Sarah S. Mitchell; their son, Harry H. Weist, was a physician.

After a only a few days' illness, Dr. Weist died May 14, 1900.

WELCH, William Wickham (1818-1892), was born in Norfolk, Connecticut, December 10, 1818, and died in the same town, July 30, 1892. He was born, lived, and died in the same house which had been built by his father, who was Dr. Benjamin Welch, a practicing physician in the same village in which he resided until his death, which occurred in December, 1849, in his eighty-third year. Dr. Benjamin Welch married Elizabeth Loveland, and they had five sons, all of whom became physicians.

Dr. William W. Welch was a graduate of the Yale Medical School in 1839. In addition to his professional work, he was interested in many other spheres of labor. He took an active part in business, politics, and in different philanthropic organizations. In 1855-57 he was elected to Congress in the fourth congressional district and in 1852 he was elected to the state senate and in 1848-50-69-81 he went to the state legislature to represent his native town. He held the following offices of trust: President of the Norfolk Leather Company which was organized

in 1853; president of the Welaka Company, manufacturers of woolen yarns, organized in 1854; one of the incorporators of the Connecticut Western Railroad; incorporator of the Norfolk Savings Bank, which was organized in 1896. Thus it is evident that he was a public-spirited citizen, as well as a "beloved physician" as he was familiarly known in the community in which he resided. In his professional work during nearly a half century in which he practiced he won the love and affection of every man, woman and child living in Norfolk. Dr. Wm. W. Welch was a practitioner of medicine in its broad sense. He was the first to demonstrate the importance of fresh air in the treatment of fevers and was in the habit of taking out the windows of the sick room to permit an abundance of fresh air to the patient. He was especially successful in the treatment of hydrophobia and the bites of venomous reptiles. He was far in advance of his day in the art of nursing and many of his valuable suggestions are in use today. He was honored and esteemed as a citizen, he was loved as a physician in the sick room, he was sought after as a congenial companion in all social functions.

In 1845 he married Miss Emeline Collin from Hillsdale, New York. She died in 1850. There were two children by this marriage. Miss Emma Welch, who became the wife of Wm. T. Walcott of New York Mills, New York, and Professor William H. Welch, the distinguished pathologist of Johns Hopkins University, Baltimore, Maryland. In 1866 Dr. Wm. W. Welch married for his second wife Miss Emily Sedgwick, of Cornwall, Connecticut, who was the sister of General Sedgwick, a famous general in the Civil War.

Dr. Wm. W. Welch's five brothers were Dr. Asa Welch of Lee, Massachusetts; Dr. Benjamin Welch of Lakeville, Connecticut; Dr. James Welch, of Winsted, Connecticut; and Dr. John Welch of Hartford, Connecticut. In the succeeding generation there were three physicians bearing the name of Welch, namely, Dr. William H. Welch of Baltimore, Maryland; Dr. Edward Welch of Winsted, Connecticut; Dr. W. C. Welch of New Haven, Connecticut. The father and his five sons are buried in the family plot in the Norfolk village cemetery.

FREDERIC S. DENNIS.

WELLFORD, Beverly Randolph (1797-1870). The son of Dr. Robert Wellford (q. v.), of Fredericksburg, Virginia, he was born in that town on July 29, 1797. The son studied medicine under his father and then attended two courses of lectures in the University of Maryland, taking his M. D. in 1817. He was a member of the Medical Society of Virginia (ante-bellum), in 1851-2, president of the State Society and president of the American Medical Association in 1852. In 1854 he was professor of materia medica and therapeutics in the Medical College of Virginia; he continued to fill the position until the infirmities of age caused his retirement in 1868, when he was made professor emeritus. After graduation he began practice in conjunction with his father in his native place, where he remained until called to Richmond.

His first wife was Betty Burwell Page, whom he married in 1817. She died the next year, leaving one daughter. He married his second wife, Mary Alexander, in February, 1824, by whom he had five sons and a daughter, all surviving him, except the second son, Dr. Armistead N. Wellford, of Richmond, who died in 1884. The oldest son, Dr. John S. Wellford, succeeded his father in his chair in the Medical College of Virginia.

Beverly Wellford died after a protracted illness following a stroke of paralysis, in Richmond on December 27, 1870.

ROBERT M. SLAUGHTER.

WELLFORD, Robert (1753-1823), of Fredericksburg, Va., surgeon in the British Army during the Revolution, was the son of William Welford (the name was spelled in England with a single l), a surgeon of the town of Ware in Hertfordshire, where he was born on April 12, 1753, and most probably pursued his professional studies in London, as he was a licentiate of the Royal College of Surgeons, London. Soon after he began practice in Ware a traveler who was passing through sustained a fracture of the thigh, and in the absence of Wellford's father, who was urgently summoned, the treatment of the case fell into the son's hands, and so successfully did he manage that the patient became a friend and through this friend, who had influence at court, the young surgeon was tendered an appointment in the medical service of the British Army, either in India, or with the troops then preparing for service in America. Choosing the latter, he came to this country as surgeon of the First Royal Grenadiers for service in the War of the Revolution. The battles of Brandywine and Germantown threw many prisoners into the

hands of the British; these, who were held in Philadelphia, receiving the most unkind, if not brutal, treatment at the hands of the British surgeon and many valuable lives were unnecessarily lost in consequence. This condition of affairs caused Gen. Washington to remonstrate forcibly with Gen. Howe, with the result that the latter upon investigation removed the surgeon, and in his place appointed Dr. Wellford. His administration proved a great success, for by his careful attention a marked change for the better was brought about in the physical condition of the prisoners, that was much appreciated by them, their friends, and by Gen. Washington, who, with many others, became his life-long friend. But, it also made for him some bitter enemies in the persons of certain of his superior officers—notably of the Tory and Hessian contingents of the British Army—and by their conduct towards him his position was rendered intolerable, so he resigned from the service, and determining to make this country his future home, settled down to practice in Philadelphia. One of his patients among the prisoners was Col. John Spotswood (a grandson of the old colonial governor of Virginia), whose brother came to Philadelphia to carry the colonel home, as soon as the way was opened by the retreat of the British troops. Upon the solicitation of the Spotswoods, and following the advice of Gen. Washington that he adopt as his American home the vicinity of Fredericksburg, Dr. Wellford accompanied them to Virginia. He brought with him to his new home on the banks of the Rappahannock letters of earnest commendation and of introduction from Washington, and, in addition, possessed the affectionate appreciation and good will of all the Spotswood clan. Settling in Fredericksburg, he soon had a good practice, and married a granddaughter of Edward Randolph, the youngest of the seven sons of William Randolph, of Turkey Island, Catherine Yates by name. When, in 1794, the so-called "Whiskey Insurrection" in Pennsylvania broke out and assumed so serious an aspect that troops were mobilized by the federal government to subdue it, the president appointed Dr. Wellford surgeon-general of these troops. His services, however, were not required, as the raising of forces was sufficient in itself to quell the uprising.

He lived and practiced in Fredericksburg until his death in that city April 24, 1823. His son, Beverly R. Wellford (q. v.), was a physician, and from 1854 to 1868 professor of materia medica and therapeutics in the Medical College of Virginia.

ROBERT M. SLAUGHTER.

WELLS, Brooks Hughes (1859-1917), of New York, gynecologist and widely-known genial editor of the "American Journal of Obstetrics," was born in New Haven, Connecticut, July 28, 1859, son of Edward Livingston Wells and Mary Huder Hughes. His father was born in Columbia, South Carolina, and educated at New Haven and in Paris; his mother came of old New England ancestry; two uncles, Charles and William Lowndes Wells, were graduates of the College of Physicians and Surgeons, New York. Brooks Wells, as we commonly called him, received his early education in the Southport (Connecticut) Academy, and, after graduation, intended to enter Yale, but, owing to "res angustae domi," went to New York and entered a banker's office. Later he matriculated in the College of Physicians and Surgeons, New York, and graduated in 1884. His preceptor was Paul F. Mundé (q. v.), and he assisted James W. McLane in the department of obstetrics. Upon graduation, Wells went to the Charity, now City Hospital, and the Maternity Hospital for eighteen months. In 1893 he became professor of gynecology at the New York Polyclinic and was gynecological surgeon at the New York Polyclinic Hospital, and associate surgeon of the Woman's Hospital in the State of New York. In 1885 he began private practice with Mundé, with whom he continued for twelve years, acting as assistant editor of the "American Journal of Obstetrics." Upon Mundé's retirement in 1892 he became editor-in-chief, and held this position until his death. Wells supervised the translation and made additions to the American edition of Pozzi's "Medical and Surgical Gynecology;" he wrote articles also on gynecology, obstetrics and abdominal surgery. He was an active, interested member of the American Gynecological Society and of various local medical societies.

As a writer he dealt with such current gynecological topics as the relation of cervical lacerations and uterine disease, the use of eserine, early rising after abdominal operations, and hypernephroma.

He joined and was greatly interested in the work of the Medical Reserve Corps and as a captain in this corps, a few months before his death, was assigned to active service

in examining recruits. At his expressed desire he was laid away in his captain's uniform.

In 1884 Dr. Wells married Mary Frances, daughter of Benjamin Pomeroy, of Southport, Connecticut, of an old New England family. His wife and four daughters survived him.

He was a wiry man of spare habit, with sandy hair, and a clear, penetrating glance; keen, alert, responsive and always courteous, a man of many friends. His claim upon posterity rests in his good judgment and admirable management of so important a periodical as the "American Journal of Obstetrics" during the years when gynecology was the most active, growing medical specialty. In their useful and not inconspicuous fields his talent for industry found the recognition which slowly comes to patient, faithful service.

He was a good cyclist and when the American Gynecological Society met in Baltimore in 1895 the writer tried to do Wells up by leading him to the foot of the nanny-goat hills in Druid Hill Park and starting up the steep ascent. The result was that the writer fell off and Wells went triumphantly over the top!

Wells died on July 6, 1917, from the results of an injury received while riding his wheel.

HOWARD A. KELLY.

Wells, Ebenezer (1801-1879), lecturer on obstetrics at the Medical School of Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1216.

WELLS, Horace (1815-1848). The credit of first using inhalation of an effective anesthetic for surgical purposes is generally assigned to Horace Wells, a dentist of Hartford, Connecticut. Born in Hartford, Vermont, January 21, 1815, he died in New York City, January 24, 1848. He was educated in New England academies and began to study dentistry in Baltimore in 1836. He had seen a person made insensible to pain at a lecture by Dr. G. O. Colton in December, 1844, and himself had a tooth extracted next day under the influence of the nitrous oxide gas. He at once began to use it in dentistry.

In January, 1845, he went to Boston, where his pupil, Dr. W. T. G. Morton (q. v.), gave him an opportunity of experimenting. In 1847 he removed to New York and was arrested for throwing vitriol on the clothes of women in streets. This aggrevated a mental disorder he had and he committed suicide.

"Wells was the first to take the step to which the finger of Humphry Davy had pointed forty-five years before and the results and claims of Wells were familiar to his friend and former partner, Morton." ("A Consideration of the Introduction of Surgical Anesthesia," W. H. Welch, Boston, 1906.)

WELLS, John Doane (1799-1830), popular lecturer on anatomy at Brunswick, Me., was born in Boston, March 6, 1799, and graduated in the academic department of Harvard, in 1817, afterwards entering on the study of medicine and serving an apprenticeship with G. C. Shattuck (q. v.), who offered special advantages for the study of anatomy. "It was the custom among the young men, with whom he associated, for each one, having dissected a part, to give a lecture thereon to his fellow students. In this useful exercise Wells took much pleasure, and he would often give an exposition, which for accuracy of knowledge, clearness of arrangement and facility of expression would often not have been discreditable to an older and much more experienced lecturer." Wells received his M. D. from Harvard in 1820, when his dissertation—on cancer—is said to have been a very good one.

In 1821 he went to Brunswick, Maine, as assistant dissector to Nathan Smith (q. v.). He frequently took Smith's place in the lecture room, and in the following May was appointed professor of anatomy and surgery. He then went to Europe, and visited France, England and Scotland to prepare for his work. He returned in 1822, and began work in 1823 at Brunswick, where his great success as a lecturer served to establish a high reputation for the school. He spent much time in building up a library and a museum. The yearly course of lectures in medical schools in his day was short. After completing his course of lectures, he returned to Boston to establish a practice and in 1823 was appointed physician to the Boston Dispensary, but continued his work each year at Brunswick, and became the most popular lecturer on anatomy in New England. In 1826 he was elected professor of anatomy and surgery in Berkshire Medical Institution at Pittsfield, in which the course of lectures was held at a different time of the year from that at Brunswick. In 1829 he received a call to the University of Maryland, at Baltimore,

and in the same year the Berkshire Medical Institution gave him her M. D. Overwork in connection with the two New England schools, as well as in Baltimore, is said to have sapped his strength so that tuberculosis gained a rapid hold on him, and he died in Boston, July 25, 1830. Wells, while not gifted with an original mind, was both brilliant and eloquent.

CHARLES R. BARDEEN.

WELLS, William Charles (1757-1817), the first medical graduate in this country to contribute any notable discovery in physics, was born in Charleston, South Carolina, in May, 1757, of Scottish parents; his father—an uncompromising tory who instilled his principles into his son—was a bookseller and binder and printed a newspaper. William Charles journeyed to the grammar school in Dumfries, Scotland, before he was eleven, and remained nearly two years and a half and then went to the University of Edinburgh. He returned to Charleston in 1771 and studied medicine under Alexander Garden (q. v.). At the outbreak of the Revolution, he returned to England and in 1776 began medical studies in Edinburgh. In 1778 he heard William Hunter's lectures in London and became a student at St. Bartholomew's Hospital. He was made surgeon to a Scotch regiment in Holland in 1779, but after a personal difficulty with a tyrannical colonel resigned from the service. In 1780, after spending three months at Leyden preparing a thesis "De Frigore" he took the medical degree at Edinburgh. He was in Charleston the next year while the King's troops were in possession; on the evacuation in 1782, he went to St. Augustine, Florida, and set up the press he had brought with him and published a weekly paper. After peace preliminaries he returned to Charleston to be arrested and imprisoned for three months. In 1784 he crossed again to London and later to Paris where "Dr. Wells" on a doorplate marked his lodging. His peregrinations and a certain constitutional lack of adaptability to the exigencies of private practice ran him into debt only slowly liquidated by years of painful effort. In 1800 he had a slight stroke of paralysis which seriously incapacitated him. In 1812 hydrothorax supervened with symptoms varying in intensity until he died, September 18, 1817.

In November, 1793, he was made a F. R. S. He refused fellowship in the Royal College of Physicians of London, holding that it abused its privileges and powers in advancing private interests. He was rated as a revolutionist with republican sentiments, in spite of the sacrifices made in abandoning his native land in loyalty to the mother country. In discussing certain eminent contemporaries, he exhibits an admirable spirit and writes delightfully of their virtues.

Some of Wells' signal contributions to the literature are: "Single Vision with Two Eyes," 1792, "On the Influence which Incites the Muscles to Contract," 1795, "On the Color of the Blood," 1797, and "On Vision," 1811. He is claimed by two hemispheres: the land where he lived and worked and the land of his birth and visitation, because of his notable "Essay on Dew," 1814, in which this important phenomenon is for the first time clarified in a series of scientific observations; for this he received the Rumford Medal of the Royal Society. He was the first medical graduate in this country to contribute any noteworthy discovery in physics. Working in the garden of his friend, James Dunsmore, in Surrey, with the simplest apparatus,—a few small thermometers, some metal plates, some watch glasses, some pledgets of swan's down, Wells began his investigations in the autumn of 1812 while suffering from the cardio-vascular disease which was soon to terminate his career. Panting at the least exertion, with palpitating heart and ankles swollen at the close of a day, followed by restless, unrefreshing nights, he persevered in his researches all the weary winter, until at the close of the following year he became too infirm. A last futile effort was made to repeat some experiments of a Mr. Patrick Wilson of Glasgow on hoarfrost early in 1814, but alarming symptoms checked the work and his faithful friend, Dr. Lister, warned him that life must soon ebb to its close. "Upon receiving this opinion" (he says), "I set about immediately composing my essay upon dew, as my papers containing the facts upon which my theory was founded, would, after my death, be altogether unintelligible to any person who would look into them. I labored, in consequence, for several months with the greatest eagerness and assiduity, fancying that every page I wrote was something gained from oblivion." He shows in his essay that dew is the result of a cold in the substances on which it appears which arises from the radiation of heat from the body in question, in other words that the cooling necessary to produce dew on

exposed surfaces is to be attributed to the radiation from these surfaces to a clear sky. Also the phenomena of hoarfrost and dew are identical. All bodies radiate heat, but at night there is no source of supply to make up the loss. Bodies which are bad conductors of heat like grass radiate more rapidly and are consequently more quickly cooled below the dew point of the atmosphere when the dew is precipitated upon their surface. According to Charles Darwin, Wells was also the first to recognize and announce the theory of evolution by natural selection.

HOWARD A. KELLY.

WELLS, William Hughes (1859-1919), was born September 25th, in Philadelphia, the son of Hughes and Letitia S. Wells. He was a graduate of Jefferson Medical College in 1891 and subsequently served his alma mater as assistant professor of obstetrics; he was also assistant obstetrician to Jefferson Medical College Hospital and physician to Willing's Day Nursery.

Wells was the author of "Compend of Gynecology," 1896 (4th ed., 1911), "Manual of Diseases of Children" (with J. Madison Taylor), 1898, and Textbook of "Diseases of Children" (with McKee), 1913; he edited "Landis Compend of Obstetrics" in 1894.

On April 14, 1898, he married Mary Anderson. He died in the Jefferson Hospital, February 26, 1919.

WERDER, Xavier Oswald (1857-1919), gynecologist of Pittsburg, Pa., was born in Cham, Canton Zug, Switzerland, December 4, 1857, the son of Oswaldmus and Barbara Selder Werder. At the age of fourteen, he came to this country alone and entered St. Vincent's College at Beatty, Pennsylvania, where he remained two years and then studied classics and philosophy at St. Michael's Seminary, Pittsburg, where he was graduated. Also he took a course in theology, but after teaching school for two years, abandoned his desire to become a priest and entered a medical school in Baltimore. In 1879, he got his M. D. from the College of Physicians and Surgeons of New York. The next year he was an intern at St. Francis Hospital, Pittsburgh. When he had been in general practice in the West End, Pittsburgh, for three years, he went abroad for post-graduate work, studying in Berlin, Vienna, Munich, and London. On his return, he resumed his practice. In 1899, he was appointed assistant gynecologist to Mercy Hospital and two years later, chief gynecologist, a position he held at death. For some time after his former appointment, the Sisters were loath to permit him to do his first laparotomy. From 1897 to 1919, he was professor of gynecology in the Western University of Pennsylvania, now the University of Pittsburgh.

Werder was the pioneer in modern gynecology in Pittsburgh and was the first in western Pennsylvania to do a gastroenterostomy. He was greatly interested in cancer of the cervix and early advocated the radical operation, practically as later popularized by Wertheim; his result of 46 per cent. of five year cures in 38 cases has been equalled by few. By constant practice of bimanual palpatation and excellent judgment, he acquired an insight into diseased conditions almost uncanny. As a teacher, he was clear, logical, and concise, and an inspiration to his students. His internes will always remember his careful, conscientious, and painstaking methods; he was an able diagnostician and a good surgeon.

Werder was one of the early members of the American Association of Obstetricians and Gynecologists, treasurer for eight years, and president in 1911-12; a member of the American Gynecological Society; and a Fellow of the American College of Surgeons.

Of twenty one articles from his pen on surgical subjects, ten are published in the "American Journal of Obstetrics and Gynecology." All his writings show study, careful analysis of his cases, and clear logical deductions.

On October 20, 1885, Werder married Mathilda C., daughter of Joseph Vogel of Alsace; they had six sons and five daughters.

He died of pneumonia, November 20, 1919.

WESBROOK, Frank Fairchild (1868-1918). In the death of Dr. Wesbrook on October 21, 1918, the University of British Columbia lost its president and the medical profession one who had a distinguished scientific career before he devoted himself entirely to educational work.

Born in Brant County, Ontario, in 1868, he was graduated in Arts and Medicine at the University of Manitoba. Later, he studied abroad in Cambridge, London, Dublin and Marburg. For a time he was professor of pathology and bacteriology in the University of Manitoba, and in 1895 was appointed to

the corresponding professorship in the University of Minnesota, which he held until 1913. He was dean of the Medical School from 1906-13. His work in public health, was recognized as of the best, for many years being director of the laboratories and a member of the Minnesota State Board of Health. In 1913 he was appointed president of the University of British Columbia and threw himself with energy and enthusiasm into the heavy work of organization of a new institution. It is not usual for college presidents to be chosen from the medical profession, but presumably Dr. Westbrook's powers of organization and his ability in administration had much to do with the choice. The Great War added to his difficulties and interfered with the program of development which had been planned.

He belonged to many societies both on this continent and abroad, and among other honors had held the presidency of the American Public Health Association and of the section on state and municipal hygiene in the International Congress of Hygiene. The Universities of Manitoba, Toronto and Alberta had conferred the degree of LL. D. on him.

There have been few men with a more cheering and attractive personality, and had he been spared he would undoubtedly have put into execution many of his hopes and plans for the new university and education in general.

He married Annie, daughter of Sir Thomas W. Taylor, chief justice of Manitoba, April 8, 1896.

WESSELHOEFT, Conrad (1834-1904), Boston homeopathist, was born in Weimar, Germany, March 23, 1834, and came to America with his parents, Robert and Ferdinanda E. Wesselhoeft, when a boy. He was graduated from Harvard Medical School in 1856 and at once began practice in Boston, soon becoming one of the leading homeopathists. As physician and trustee of the Massachusetts Homeopathic Hospital for nearly the entire period of his professional life, he was unremitting in his labors for the cause of homeopathy. In 1879 he was president of the American Institute of Homeopathy and in later years president of the Massachusetts Homeopathic Medical Society, and also of the Boston Homeopathic Medical Society. He filled the chair of pathology and therapeutics in the Medical School (Homeopathic) of Boston University for many years, with distinguished ability and he was chairman of the consulting staff of the Westborough, Massachusetts, insane hospital.

As a medical author his work covered a wide range, the most notable of his writings being a translation of the "Organon" of Hahnemann. He was one of the committee for preparing the "Cyclopedia of Drug Pathogenesy," also on the committee for publishing the "Pharmacopeia of the American Institute of Homeopathy," and his writings for journals and medical societies were very numerous.

Dr. Wesselhoeft married Elizabeth Foster Pope, who with a daughter survived him. In March, 1904, more than two hundred of his friends and associates celebrated his seventieth birthday by a banquet and presented him with a loving-cup and a purse of $2,000. Dr. Wesselhoeft had closer relations with the members of the regular profession than most homeopathists. He lectured on one occasion at least to the students of the Harvard Medical School, explaining the principles of homeopathy, and it was his aim to bring into closer touch all practitioners of the healing art.

His death occurred in Newton Centre, Massachusetts, December 17, 1904.

WALTER L. BURRAGE.

WEST, Hamilton Atchison (1830-1903), professor of medicine in the University of Texas, was born in Russell's Cave, Fayette County, Kentucky, the second child and eldest son of James N. and Isabella Atchison West. His father was a native of Georgia and his grandfather, Dr. Charles West, a physician of Georgia and a member of the Legislature. He went as a boy to the common schools and entered the medical department of the University of Louisville, graduating in 1872 with first honors—the faculty medal—for the best thesis, his subject being the "Thermometry of Disease." In 1873 he moved to Galveston, Texas, where he lived till his death. It was largely through his efforts that the medical department of the University of Texas was founded in Galveston, and upon its organization he was elected to the chair of general and clinical medicine. He was a vice-president of the American Medical Association in 1898.

Dr. West's first wife was Sallie Mason Davenport, of Virginia, and his second Mrs. Ella May Fuller. Five children survived him.

His death was due to acute suppression of urine, occurring in the course of chronic interstitial nephritis, which was further complicated by pneumonia. He had gone to New

York City in the hope of getting relief, but within a week after his arrival he rapidly succumbed, dying at the home of his brother, December 30, 1903.

Dr. West was a good writer and contributed largely to medical literature. He wrote the articles on "Dengue," and "Dysentery" in the "American System of Medicine," and the article on "Yellow Fever" in Gould and Pyle's "Cyclopedia of Medicine."

HENRY E. HANDERSON.

WEST, Henry Sergeant (1827-1876). The only son of Silas West, M. D., he was born in Binghamton, New York, January 21, 1827. After a short time in the class of 1844 at Yale he was graduated at the College of Physicians and Surgeons in New York City, March, 1850. Immediately after graduation he began to practice in Binghamton, in company with his father, and so continued for a number of years. In 1858 he accepted an appointment as missionary physician from the American Board of Commissioners for Foreign Missions. The field of service assigned him was Turkey in Asia, and, accompanied by his wife, he sailed from Boston to join that mission in January, 1859. He was stationed at Sivas, a city containing a population of 35,000 or 40,000 inhabitants, situated about 450 miles southwest of Constantinople. On reaching the station assigned him, Dr. West entered at once upon his duties and his services soon became in great demand. The center of his practice was at Sivas and the numerous towns and villages by which it is surrounded. There were other important cities in Asia Minor into which the practice of Dr. West extended—the nearest of these being Tokat, about fifty miles to the northwest, containing about 30,000 people, and Kaisarieh, 100 miles to the southwest, embracing, with its suburbs, a population of 150,000. In giving a description of the extent of his practice, the doctor remarks: "My practice was largely in these cities also, therefore I had frequent occasion to visit them professionally, when I was always thronged with patients, and many came to me to be treated from those places, at Sivas. I was frequently called also to other important towns and cities of Asia Minor, distant from 150 to 300 miles."

Many of these calls were to surgical cases, and in treating them the doctor developed a tact and an operative ability, of which he himself was probably unaware until they were brought out by the emergencies of his position. Of the surgical cases, affections of the eye, and of the genitourinary organs, were largely predominant. In 1868 he ré-visited the United States and reported upward of sixty-eight operations for stone in the bladder. He read before the Medical Society of the State of New York a paper, "Medical and Surgical Experience in Asia Minor," published in the "Transactions," of that year. In 1870 he was elected an honorary member of the State Society, and in 1872 Yale conferred on him the honorary degree of A. M.

He died at Sivas, Turkey in Asia, April 1, 1876, aged 49.

GEORGE BURR.

WESTMORELAND, John Gray (1816-1887), originator of the Atlanta Medical College, was born in Monticello, Jasper County, Georgia, in 1816. When about five years of age his father removed to Fayette County, near the Pike County line, in a region that was inhabitated principally by a friendly tribe of Indians. As soon as the Westmoreland family arrived, these Indians with a couple of negro men, which the old gentleman owned, built him a two-room house out of logs, which they cut and hewed to proper shape. John Gray was the second son of a family of eight, raised on this pioneer farm, working on the farm in the summer and going to school in the winter, till at the age of eighteen, he finished his education at the Fayetteville Academy, and studied medicine with a neighboring country doctor, graduating at the Medical College of Georgia in March, 1843. Directly he began to practice in Pike county, afterwards settling in Atlanta, where he continued in active practice for at least forty-five years.

To his brain is due the conception and putting into existence of the Atlanta Medical College, later known as the Atlanta College of Physicians and Surgeons. To this college Dr. Westmoreland gave much time and hard work, at the same time contributing very liberally out of his own funds to build it up. From the beginning he held the chair of materia medica and therapeutics for at least forty years, at the same time being dean of the faculty. From an humble beginning at its first session in the summer of 1855, with only a very few students, then known as the Atlanta College of Physicians and Surgeons, it had in actual attendance in its various departments several hundred students. In connection with the Atlanta Medical College, Dr.

Westmoreland originated the Brotherhood of Physicians. Each member upon joining this society was given a beautifully engraved certificate of membership, to which was attached an engraving of his then five-year-old son, Robert W., who, following the footsteps of his father, became an active practitioner of medicine of Atlanta. From this Brotherhood has sprung the Atlanta Society of Medicine, of which at least two hundred leading physicians are among its members. Together with his brother, Willis F. (q. v.), Dr. Westmoreland established the "Atlanta Medical and Surgical Journal."

When the Civil War came on and the sessions of the college were suspended, there were several subjects on hand in the anatomical department. These Dr. Westmoreland embalmed and carefully stored away. Several years after the war, he turned them over to the college in such good condition that they were used in place of fresh subjects. Dr. Westmoreland established the first hospital in the city of Atlanta, for many years maintaining it principally at his own expense. During the early part of the war he sold $100,000 worth of Atlanta city property, lending the entire amount to the Southern Confederacy. Of course this was to him an entire loss.

Long before the pestiferous, "stegomyia fasciata," and his cousin, "culex," began to buzz in medical circles, Westmoreland took the position that yellow fever was non-contagious and to convince the public and medical profession of the correctness of his position, he often took his yellow fever patients into the inner room of his office and slept with them, and did not contract the disease.

The only public office he ever held was in 1855 when elected member of the House of Representatives of Georgia, going there solely for the purpose of getting a donation from the State to help build the Atlanta Medical College. In this he succeeded to the extent that the State granted the college $15,000, in return for which the college has ever since that time gratuitously educated some young men every session from each of the congressional districts of the State of Georgia.

He married Annie Buchanan, a near relative of President James Buchanan, and had two children, Louisa, and a son, Robert W.

R. J. Massey.

WESTMORELAND, Willis Furman (1828-1890), surgeon of Atlanta, Georgia, was born in Pike County, of that state, June 1, 1828. He was a descendant of Lord Westmoreland of Westmoreland County, England, from whom Westmoreland County, Virginia, was named about three centuries ago. In 1740 three Westmoreland brothers emigrated from England to Virginia, settling at Jamestown. They were Robert, William and Thomas. Robert settled in Virginia, William in North Carolina, and Thomas in South Carolina. Willis Furman was the great-grandson of William, one of whose descendants came to Georgia and settled at that time in Fayette County, known as Pioneer Georgia, coming here long before the Indians had left that part of the State.

Young Willis went to the best country schools and like most farmer boys alternated between farm and schoolhouse till about twenty years old. He then read medicine with his brother, Dr. John Gray Westmoreland (q. v.), at that time practicing in Pike County. His first course of lectures was in the Georgia Medical College during the winter of 1848 and 1849; he graduated at the Jefferson Medical College in Philadelphia in 1850. In 1851 he went to Paris, where he spent three years making himself proficient in his favorite department, surgery. Returning home, he first settled in his native county in 1854, but soon removed to Atlanta and from the very beginning fully identified himself with surgery. Together with his brother, John G., he established the "Atlanta Medical and Surgical Journal." He joined the Georgia Medical Association in which he held during his life many important positions. For fifteen years he was president of the Atlanta Association of Medicine.

Dr. Westmoreland was an active, energetic man, capable of undergoing much physical labor. Wishing to visit Texas in his youth, he rode all the way on horseback from Pike County, Georgia, to middle Texas. Remaining a short time, he returned, each ride taking him about thirty days. At present the same distance can be traveled in as many hours by rail. As a monument to the memory of this energetic man, his old neighbors in Pike County point with pardonable pride to a plain, two room frame building, still standing at a neighboring cross-road. In 1851 when he determined to start country practice, there was no room to be had fit to see patients in. He had no money to build one, so he went to the woods, cut down and hauled the timber to the nearest sawmill, had the lumber sawed and with his own hands built the rooms himself. Aside from being a leading surgeon,

during the Civil War he ranked as a general in the Confederate service by special appointment from President Davis himself. He was an ardent supporter of the Atlanta Medical College from its very beginning, and occupied the chair of surgery for at least thirty years.

In 1856 he married Maria Jourdan, of LaGrange, the daughter of a leading politician; they had two children, the second being Willis F. Jr., who became a surgeon and after the death of his father, occupied the same chair (surgery) at the Atlanta College of Physicians and Surgeons.

Dr. Westmoreland died of apoplexy, June 27, 1890.

R. J. Massey.

Wey, William C. (1829-1897), leading physician of Elmira, N. Y. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto, 1920, page 1221.

WHEATON, Charles Augustus (1853-1916), surgeon of St. Paul, Minnesota, was born at Syracuse, New York, March 17, 1853. He was educated in the graded schools at Northfield, Minnesota, and later attended Carlton College. He was graduated from the Harvard Medical School in the class of 1877, and later served as interne in the Boston City Hospital. Beginning practice in St. Paul just at the start of the new era of surgery, when Lister's methods of antisepsis were beginning to be adopted, Dr. Wheaton, who was fresh from the Massachusetts General and the City Hospitals in Boston, gave the new methods a thorough trial, and while he appreciated fully the principles laid down by Lister, he was not very enthusiastic about the details as then practiced, and he quickly abandoned the carbolic spray. He was one of the first to appreciate the vast difference between antisepsis and asepsis, and the latter method was urged and practiced by him some time before it became general. He was a profound student of gross anatomy, and as a rapid, clean and sure operator he had few equals. A thorough mastery of the principles of surgery, a deep insight into the art of surgical diagnosis, and an unmistakable honesty and earnestness in expressing his opinion, combined to earn for him a position as a surgical consultant which no other man ever approached in this part of the country. It is a significant fact that a great majority of the leaders in surgery in Minnesota at the time of his death had been at one time or another either students or associates of Dr. Wheaton and owed not a little of their success to his teachings and to his example. Dr. Wheaton's contributions to medical literature were not numerous, but whatever he wrote was original and based upon his own personal experience; consequently, the papers which he did publish had a very real value. In debate he was always ready and he was always listened to with great respect. His quick wit, and his unusual fund of anecdotes to illustrate the point he wished to make, made his remarks at medical meetings particularly charming.

He was a deep student of surgical literature and especially of the writings of the old surgical masters, and had accumulated a very valuable library, particularly rich in the works of the older teachers of anatomy and surgery, which he presented some time before his death to the University of Minnesota, where he had for so many years taught surgery.

Accomplished as he was in every department of surgery and surgical technique, it would be difficult to point out just where Dr. Wheaton chiefly excelled in his operative work. It is certain that his work on the bladder and prostate was far and away the best which has ever been done by any surgeon in this part of the country, and he was a pioneer in gall-bladder surgery. In bone surgery, too, he was bold and radical, and hundreds of his patients owe it to his wisdom and skill that they now have sound and useful limbs.

Dr. Wheaton had retired from practice, on account of failing health, a few years before his death, which occurred April 29, 1916. He left a widow and three children.

Burnside Foster.

WHEATON, Levi (1761-1851), pioneer physician of Providence, Rhode Island, was born in that city, February 6, 1761. He was the son of Deacon Ephraim Wheaton and the fourth lineal descendant of Robert Wheaton, who emigrated from Wales and settled in Rehoboth, Massachusetts, about the year 1640. Levi entered Rhode Island College in 1774, but owing to the national disturbances of the times, his collegiate course was interrupted in 1776 and he did not graduate as A. B. until 1782, when he was a member of the Phi Beta Kappa Society. In the meantime, however, he had pursued his classical studies, and without any definite object in view, not having decided on a profession, he read, during this period, some of the standard works upon medicine and surgery. He also, during this inter-

ruption of his regular course of studies, had an opportunity of seeing something of a medical and surgical practice in the office of Dr. Hewes, a friend and neighbor. At the age of sixteen, he passed a season in the town of Smithfield, teaching school. In referring to this period of his life, in an autobiography, written some two or three years before his death, he says that he became familiar with Pope's works at an early age; and after making some remarks upon that author, he adds: "I record this especially as an event in my life, for, strange as it may seem, I think I can say with truth, no man has had so much influence on my tone of thinking of men and things."

In the year 1778, he entered the Military Hospital in Providence as a volunteer. The summer of 1779 he passed at Westerly, studying medicine with Dr. Babcock, and in the following year he completed his medical studies under the tuition of Dr. William Bowden, of Providence. After finishing his medical education, he served as surgeon on board a privateer; and in the autumn of 1782, while cruising off the southern coast, was taken prisoner and carried into New York by the British frigate "Vesta." While detained prisoner in New York, he had charge for some months of the prison hospital ship, "Falmouth", and ever after, this event was recalled with much pleasure as having given him an opportunity to render some good offices to his imprisoned countrymen. At the close of the war he accepted an invitation to settle in Hudson, New York State, which was then being settled by Eastern people. After ten years, however, this experimental settlement proved a failure. The town declined as rapidly as it had grown and Dr. Wheaton removed to New York City, where he lived for two years, when the death of Dr. Comstock, who had a large practice in Providence, seemed to make an opening for him there and he permanently established himself in his native town. In the early part of his career in Providence he, in connection with Dr. William Bowen, established a smallpox hospital, to which many resorted for innoculation.

After a medical school was organized at Brown University in 1812, Dr. Wheaton was appointed professor of theory and practice of medicine in 1815, holding the position until 1828, lecturing on obstetrics as well as on medicine. He was physician to the post of Providence and original fellow of the Rhode Island Medical Society, being its president from 1824 to 1829. Dr. Wheaton was a trustee of Brown University from 1789 to 1851, and at the time of his decease was at the head of the list of that honorable body. He was for many years physician to the Marine Hospital at the port of Providence.

It was not only as the thoroughly read and sound practical physician that Dr. Wheaton was entitled to pre-eminence; he was still more so a man of erudition and general scholarship. He was a fine classical scholar and was, to an unusual extent, familiar with both ancient and modern literature and ready and frequent in his quotations in conversation. Few works of any pretentions, whether medical, scientific or literary, escaped his notice. As a prose writer, he had few superiors. He wrote an article upon yellow fever, as it appeared in Providence and another on calomel was published in one of the Philadelphia journals. In 1832 a somewhat lengthy article upon Asiatic cholera, from his pen, was published in the city papers and later in life he contributed several papers to the "Boston Medical and Surgical Journal," under the signature of "Senex."

Dr. Wheaton, in his stature was tall and erect, in his deportment, dignified and graceful. His death, which occurred on August 29, 1851, was sudden and painless. He was fully aware that his end was fast approaching, but manifested no alarm, or concern, seeming to contemplate his case from a professional point of view, and to consider it a phenomenon in pathology.

GEORGE CAPRON.

Whelpley, James Davenport (1817-1872), of New York City, who wrote on physics and metallurgy. See American Medical Biographies, H. A. Kelly and W. L. Burrage. Balto. 1920, page 1223.

WHITE, Charles Abiathar (1826-1910), geologist, paleontologist, was born at Dighton, Bristol County, Massachusetts, January 26, 1826, the second son of Abiathar White and his wife Nancy, daughter of Daniel Corey, of Dighton. The first of this line in America was William White, who established himself at "Wind-mill Point in Boston about 1640."

When Charles was twelve years old his father's family removed to Burlington, Iowa, but he revisited his old home in Dighton in 1847, and married a school mate, Charlotte R. Pilkington, daughter of James Pilkington, of Dighton. Eight children were born, six of whom survived him. It was at Burlington

that his first scientific papers were written. He made many journeys to various parts of the great Mississippi Valley for geological study, and in the years 1862 and 1863 assisted Prof. James Hall in his paleontological work for New York State. In pursuance of his long-cherished purpose, he studied medicine under Dr. S. S. Ransom, and in 1863 graduated M. D. from Rush Medical College, now the medical department of the University of Chicago. In 1864 he removed with his family from Burlington to Iowa City and there began to practice.

While practicing medicine in Iowa City he was appointed state geologist of Iowa. He conducted that survey until 1870, when two volumes of reports were published, devoted mainly to structural and economic geology. In 1866 he received the M. A. from Iowa College at Grinnell, and in 1867 was appointed professor of natural history in the Iowa State University. He became first member, then fellow of the American Association for the Advancement of Science in 1868, and closed his work upon the Iowa survey in 1870, when he assumed the full duties until 1873, when he was called to a similar chair in Bowdoin College, Brunswick, Maine. In 1874, at the request of Maj. (then Lieut.) G. M. Wheeler, he undertook the publication of the invertebrate paleontology of the government survey west of the one-hundredth meridian, then under his direction. In 1875 he removed with his family to Washington, and joined the United States Geological Survey of the Rocky Mountain Region, in charge of Maj. J. W. Powell. In 1876 he joined the United States Geological Survey of the Territories in charge of Dr. F. V. Hayden and remained with it until its suspension in 1879. He was appointed curator of paleontology in the United States National Museum in 1879, and geologist to the reorganized United States Geological Survey in 1882. In 1882 he was commissioned by the director of the National Museum of Brazil to prepare for publication the cretaceous invertebrates which had been collected by members of the geological survey of that empire. The results of this work were published at Rio de Janeiro in both Portuguese and English.

The degree of LL. D. was conferred upon him by the State University of Iowa in 1893. He was one of the founders of the Geological Society of America, and elected to corresponding membership in the Geological Society of London and in several foreign societies of naturalists. An annotated list of his papers was published in "Bulletin No. 30" of the United States National Museum in 1885, a continuation of it in the "Proceedings" of the same vol. xx, in 1897, some 220 in all. They embrace subjects pertaining to geology, paleontology, zoology, botany, anthropology, local history, medicine and domestic science.

MARCUS BENJAMIN.

WHITE, Frances Emily (1832-1903), professor of physiology in the Woman's Medical College of Philadelphia, was a graduate of that institution in 1872, and then was appointed demonstrator of anatomy and instructor in physiology in her alma mater, being promoted in 1876 to the professorship of physiology, a position held until ill health forced her to resign in 1903. A woman of scientific mind, clear headed, and logical, she also had the quality of making her students reach the standard set for them. She was one of the first women to lecture before the Franklin Institute of Philadelphia and was a delegate to the International Medical Congress in Berlin in 1890, being the first woman to act in that capacity. She was a member of the Philadelphia County Medical Society.

She died at Jamacia Plain, Massachusetts, December 29, 1903.

Dr. White wrote frequently on scientific subjects, some of the more important writings being: "Woman's Place in Nature" ("Popular Science Monthly," 1875); "Persistence of Individual Consciousness" ("Pennsylvania Monthly," 1878), also contributions to the "International Journal of Ethics"; "Relations of the Sexes" ("Westminster Review," 1879); "Protoplasm" ("Popular Science Monthly," 1883-4); "Blood, is it a Living Tissue?" ("New York Medical Record," 1883, vol. xxxiii); "Matter and Mind" ("Popular Science Monthly," 1887); "Hygiene as a Basis of Morals" ("Popular Science Monthly," 1889).

ALFREDA B. WITHINGTON.

WHITE, James Clarke (1833-1916), dermatologist of Boston, was born in Belfast, Maine, on July 7, 1833, the fifth of the seven children of James Patterson and Mary Anne Clarke White. On the paternal side of the house the first American ancestor was born in 1688 during the siege of Londonderry, Ireland, in which his father fought as a captain and subsequently received the keys of the city when the siege was raised. This child, William White, emigrated as a grown man to America in 1725 with other Ulstermen, helped found

the town of Londonderry, New Hampshire, and died as a deacon of the Presbyterian church. His son, a third William, "filled many offices in his native state, was on the committe of safety in 1775, fought as a colonel in the Revolutionary Army, and served as state senator from 1806 to 1808." The next in descent moved to Maine in 1797 and assisted in the founding of the town of Belfast. His son, James Patterson, entered actively into business, was a builder and owner of many ships, became a founder of the Belfast National Bank in 1836, and acted as its president from 1867 to 1879, was mayor of the city for two years and served as state senator during the troublous years of 1862 and 1863.

James Clarke White passed his boyhood in this beautiful New England town and obtained his early education at the Academy and his final preparation for college under the guidance of the resident clergymen. He entered Harvard College in the early autumn of 1849 and during his four years in Cambridge came in contact with many of the famous teachers of those days. College work was scrupulously performed but time was found also to devote to natural history and to the foundation of a collection of birds which was kept intact for many years. A natural taste for reading was much fostered in these early days and was continued throughout life, always with system, for throughout many busy years it was his custom to devote part of his reading hours to medicine; part to books of natural history, of travel, of art, or of pure literature; and part to German novels or German biography. Medical work was entered upon immediately after graduation from college and again Harvard was the chosen field of his higher education, supplemented by work at the Tremont Medical School. Of course, the medical education of those days was very primitive in comparison with that of today, but there were wise men and good teachers and every opportunity was grasped by this eager student to learn all that they could impart. A growing interest in chemistry was cultivated during his student days and a special interest in urinary calculi led to a thesis which received the Boylston Prize. An intimate diary of events and people written throughout these six years of Harvard experiences has kept intact the life of those days, and its publication in an abridged edition within the past few years has given much pleasure to a wide circle of present-day readers. A year as "house pupil" in the Massachusetts General Hospital followed graduation from the medical school, and again association with the prominent men of the day added to a rapidly accumulating store of knowledge. It was during this year that the one illness of a long life was experienced, but typhoid fever left no serious harm in its wake and was soon a thing of the past.

In 1856 Dr. White, now a full-fledged physician, sailed for Europe on the steamer "Washington," a most toy-like craft as depicted in a colored lithograph of the period. Paris as a medical Mecca had just passed the heyday of its triumphs, and, on the advice of Calvin Ellis (q. v.), Vienna was chosen as the field for future endeavors. Oppolzer, Skoda, Roitansky, Hyrtl, Bruecke, Hebra, and Sigmund, all in their prime, were the lode-stars and the choice was never regretted. It is perhaps not an exaggeration to state that the year spent in the then brilliant capital was the great joy of a lifetime. Association with such masters of medicine, intimacy with the American minister and all it meant to a young American of those days, and first contact with the beautiful and the gay music of the epoch, produced an effect which time never effaced and which the "Vienna Club"* in its long career fostered to its uttermost. In November, 1857, Dr. White began the practice of Medicine in Boston and then followed the long series of medical and scientific activities, the numerous hospital and teaching positions, the membership in many societies, engrossing activities which continued uninterrupted until 1902, when he was made professor emeritus by Harvard University and appointed consultant by the Massachusetts General Hospital. In 1856 Dr. White joined the Boston Society of Natural History and acted as curator of comparative anatomy from 1858 to 1868. In 1856 he became a member of the Massachusetts Medical Society, was chosen anniversary chairman in 1881, was appointed orator in 1889 and served as president in 1892-93. In 1857 came membership in the Observation Society and two years later in the Society for Medical Improvement, and its chairmanship in 1879. In 1866 the much coveted honor of election to the American Academy of Arts and Sciences was conferred. In 1876 the American Dermatological Association was founded and Dr. White was chosen its first president and acted again in the same capacity in 1897. In 1907 he enjoyed the great privilege of serving as

*The Vienna Club was a dining club of the six Bostonians who spent this happy year together and kept alive its memories for many years. The members were Dr. Francis P. Sprague, Dr. Henry K. Oliver, Dr. Hasket Derby, Dr. B. Joy Jefferies, Dr. Gustavus Hay and Dr. James C. White.

president of the Sixth International Dermatological Congress. During the course of these many years Dr. White was elected corresponding member of the French and the Argentine Dermatological Societies and honorary member of the Dermatological Society of Italy, London, Vienna, Berlin, and New York and enjoyed also the distinction of having named for him a ward in the hospital of the University of Cagliari in Sicily.

Dr. White's first hospital position came in 1858 when he joined the staff of St. Vincent's Orphan Asylum. In 1860, in conjunction with B. J. Jeffries (q.v.), he opened a dispensary for skin patients. In 1863 he was appointed physician to out-patients at the Boston Dispensary. In 1865 he was given the same position at the Massachusetts General Hospital and constituted the whole department. Think of the change which a generation has witnessed! In 1870 came the final change when Dr. White assumed control of the skin department—a post which he held for thirty-three years. And finally, with the foundation of the House Pupil Alumni Association in 1905 he became its first president. In 1863 a course of University lectures was established in the Harvard Medical School and Oliver Wendell Holmes (q. v.) and Dr. White were appointed its first lecturers. Subsequently Dr. White, with the title of lecturer, gave courses in dermatology in the department of clinical medicine. In 1866 he was made adjunct professor of chemistry; and in 1871 professor of dermatology, a new chair in the Harvard Medical School and the first to be established in the United States. Despite all these arduous quasi-public duties, time was found to mount many skeletons of animals, to act as state expert in chemistry, to prepare an almost complete herbarium of the wild flora of New England, to serve as medical examiner of a large life insurance company, to edit the "Boston Medical and Surgical Journal" and to serve as chairman of the standing committee of the First Church (Unitarian).

Throughout these long years he strove persistently in public utterance and in private acts for the betterment of medical education and for the up-lifting of dermatology and it is perhaps true that he took more pride in his share in the successful outcome of these endeavors than in any other of the many activities of his long medical career. As a writer he was prolific and catholic and his titles extend to 364 numbers. They may be found in the catalogue of the surgeon-general's library at Washington, D. C.

Apart from medical work—the main-spring of his life—Dr. White found time for travel, making six journeys to Europe and two to the Pacific Coast and Alaska. He was devoted to beautiful things and took great pleasure and pride in his old porcelains, his old furniture, his many books, and his good German wines. He was a Unitarian in faith and was a devoted member of the First Church for perhaps forty-five years. In 1862 he married Martha Anna Ellis and had three sons, one of them Charles James, following dermatology in his father's footsteps.

Dr. White died in Boston from one of the infirmities of old age on January 5, 1916, after a life extraordinarily free from illness. His was a long and useful career and he died contented. CHARLES J. WHITE.

WHITE, James Platt (1811-1881), of Puritan ancestry, descendant of Peregrine White, the first white child born in the Plymouth colony, was professor of obstetrics in the Buffalo Medical School. He was the son of David Pierson White and was born on March 14, 1811, at Austerlitz, Columbia County, New York. With a fair classical education he attended medical lectures at Fairfield, New York, and at Jefferson Medical College, taking his degree from the latter in 1834, and the next year marrying Mary Elizabeth, daughter of Henry F. Penfield of New York. Practice came to him before graduation in the shape of a cholera epidemic at Black Rock, Buffalo, an emergency doctor being required. The establishment of the medical school in Buffalo was largely due to his exertions and his work as professor of obstetrics and gynecology went on until his death. He was the first to introduce into the United States the custom of clinical illustration of labor and the innovation roused a storm of abuse from the enemies of the college and in the medical and lay press, Dr. White being obliged to bring a suit for libel in self defence, a suit he gained. One of his important improvements in obstetrics was the restoration of the inverted uterus in cases where this condition had existed for a long period, even for fifteen or twenty-five years. Two of his cases were reported before the first publication by Tyler Smith of London, on behalf of whom priority has been claimed. As an overiotomist he was very expert, performing over one hundred during the last twenty years of his life.

His appointments included: president of the Medical Society of the State of New York,

1870; president of the Buffalo Medical Association; a founder of the American Gynecological Society.

His death was unexpected, following a brief illness, but he was weakened by overwork and this cheery, kindhearted, skilful healer died in the autumn of 1881.

His chief contributions to medical literature were published in the "Buffalo Medical Journal" and the "Proceedings of the New York State Medical Society." He was also the author of the article on "Pregnancy" in Beck's "Medical Jurisprudence;" "A Report of the Reduction of Two Cases of Chronic Inversion of the Uterus" ("Transactions New York Medical Society," Albany, 1874); "Chronic Inversion of the Uterus" ("Transactions International Medical Congress," 1876, Philadelphia, 1877); "Hints Relative to Intrauterine Medication" ("Transactions American Gynecological Society," 1879, Boston, 1880, vol. iv).

DAVINA WATERSON.

WHITE, James William (1850-1916), surgeon of Philadelphia, son of James William White and Mary Anne White was born in Philadelphia, November 2, 1850, and died on April 24, 1916. His first American ancestor was the Rev. Henry White, who emigrated from England and settled in Virginia in 1649. A later maternal descent in the White family is traced from Richard Stockton, one of the signers of the Declaration of Independence. On his own maternal side he was descended from New England stock. Dr. White's early training was obtained in the schools in Philadelphia, after which he entered upon the study of medicine in the University of Pennsylvania, and was graduated in 1871, somewhat later in the same year obtaining a degree of Ph. D. from that university on account of additional studies. He was appointed a member of the staff of Professor Louis Agassiz (q. v.) on the Hassler Expedition which sailed from Boston, December 4, 1871. Dr. White contributed to the columns of the "New York Herald" a series of letters descriptive of the places visited and the work accomplished by the expedition. On his return to Philadelphia he became resident physician of the Philadelphia Hospital, and the next year was appointed to the same position at the Eastern Penitentiary, holding the latter office until 1876, when he resigned to take up private practice. He associated himself as an assistant with Professor D. Hayes Agnew (q. v.), and after holding some minor positions was appointed professor of genito-urinary diseases in the University of Pennsylvania, and subsequently, professor of clinical surgery, and then John Rhea Barton, professor of surgery, occupying the last office until January 1, 1911. He was at various times surgeon to the Philadelphia Hospital, the German Hospital and the University Hospital, and was consulting surgeon to the Jewish, Bryn Mawr and Maternity Hospitals. He was a member of the American Surgical Association; a member and president of the American Genito-Urinary Association, and a fellow of the College of Physicians of Philadelphia.

He was joint translator and editor of "Cornil on Syphilis" (Sims and White), 1875; joint author of the "American Text-book of Surgery" (Keen and White), 1896; "Genito-Urinary Surgery" (White and Martin), 1897; and Piersol's "Human Anatomy" (1907). He published numerous articles on medical and surgical subjects in medical journals, of which the following specially deserve mention: "Hereditary Syphilis;" "Iodide of Potassium in Syphilis;" "The Surgery of the Spine;" "The Present Position of Antiseptic Surgery;" "The Supposed Curative Effect of Operations Per Se;" "The Treatment of Glandular Tumors of the Neck;" "The Abortive Treatment of Syphilis;" "The Topical Treatment of Focal Epilepsy;" "The Surgery of the Hypertrophied Prostate;" "The Diagnosis and Treatment of Appendicitis;" "The Value of Early Operation in New Growths;" "The Surgical Affections of the Kidneys;" also a memoir of Dr. D. Hayes Agnew, and numerous addresses.

In surgical literature his claim to originality will probably rest especially on "The Surgery of the Hypertrophied Prostate" which brought forward the idea of orchidectomy as a means of bringing about atrophy of the prostate. Though this method has fallen into disuse, the thought underlying it, stimulated research in other directions regarding the effect of ablation of certain endocrine glands upon the structure and functions of other glands. In surgical practice he will be remembered chiefly as a careful diagnostician and as a cautious and successful, rather than a brilliant, operator. His lucid lectures and writings, which will be long remembered by his contemporaries and pupils and which will, undoubtedly, through the latter leave lasting impressions upon the surgery of the future, constitute his greatest service to the profession he loved and adorned.

Throughout his life, Dr. White was deeply interested in athletics and physical education and was the first professor of physical education at the University of Pennsylvania, having himself been the founder of that department. At different times of his life he was a devotee of swimming, rowing, cross-country riding, bicycling, pedestrianism and mountain climbing. He was a member of both the American and Swiss Alpine Clubs. On one occasion he swam from Narragansett to Newport, a distance of ten miles, in cold, rough water, in five hours and forty minutes. As might be assumed from his interest, his personal characteristics were essentially virile and remained so to the end of his life. His public spirit was shown by his interest in Fairmount Park of Philadelphia and in various enterprises for the betterment of conditions in his native city. Upon the outbreak of the European War in 1914 he entered upon a large correspondence with friends in England and France and contributed two books, "A Primer" and a "Text-book of the War" for the purpose of presenting to the American public the facts leading up to the war and the reasons for American participation on the Allied side.

In March, 1888, he married Letitia, daughter of Benjamin H. Brown, Esq., of Philadelphia. They had no children.

In 1906 a serious abdominal condition necessitating operation developed that was thought to be malignant disease of the sigmoid. He sought the services of Dr. William Mayo of Rochester, Minnesota, and fortunately, the condition turned out to be non-malignant (Diverticulitis). His recovery from this operation was speedy, and in the same year he was able to be present at the four hundredth anniversary of the University of Aberdeen, where he was chosen to make the speech of congratulation on behalf of all the American universities, and at the same time received the degree of LL. D. His health remained vigorous until late in the fall of 1915, when he had symptoms from a retro-abdominal tumor (sarcoma of the lumbar vertebrae) which finally terminated his life.

In his memory the J. William White Surgical Pavilion at the University Hospital was dedicated, December 14, 1922.

His portrait was painted by his old and intimate friend, John Singer Sargent, in 1907.

ALFRED STENGEL.

WHITE, Samuel Pomeroy (1801-1867). The son of Dr. Samuel White, this New York surgeon was born November 8, 1801, in the city of Hudson, New York, and went as a boy to Middlebury College, Vermont, and Union College, Schenectady, N. Y., where he received an honorary diploma when recalled by his father to work under him. Later, two years in the medical departments of the University of New York and the University of Pennsylvania well fitted him to be his father's partner. In 1823 the Medical Society of the County of Columbia, New York, granted him a license to practice. In 1827 he had his attention called to a case of gluteal aneurysm for which he ligated the internal iliac artery, this being the second time on record the operation had been performed for this disease.

Successful in ligating the internal iliac artery, which he termed his "darling operation," it seemed a fit reward that he should be invited to the chair of surgery and obstetrics in the Berkshire Medical Institution, Pittsfield, Massachusetts, the professorship becoming in 1830 that of theoretical and operative surgery. But he coveted a wider field and three years later went to New York and there was equally successful.

He was singularly reluctant to appear before the public even in writing and never yielded to those who wanted some of his valuable lectures printed, yet at all times he gladly helped anyone by conversation.

About ten days before death he was seized with a violent chill, the prelude of typhoid fever and he died June 6, 1867, when sixty-five years old. He married Caroline Jenkins of Hudson, who with three sons and four daughters, survived him.

DAVINA WATERSON.

WHITE, William Thomas (1829-1893), editor of the "Medical Register" of New York, New Jersey and Connecticut, was born in Richmond, Maine, July 7, 1829, the eighth in descent from John Howland and Tristam Coffin, both of the Mayflower, and the eighth also from Christopher Hussy and George Bunker. He obtained his medical education in the Medical School of Maine, and the New York Medical College, graduating from the latter in 1855. He served as interne in the hospitals on Ward's and Blackwell's Islands, during that year and the next and became demonstrator of anatomy at the former school under E. R. Peaslee (q. v.). He served three and a half years as surgeon-in-chief of the Panama Railroad, acquiring a critical knowledge of the Spanish tongue, by reason of which he

afterwards became a leading physician in the Spanish and Cuban colonies of New York, where he removed in 1865. He was attending surgeon to the Dermilt Dispensary for fifteen years, visiting surgeon to the Presbyterian Hospital for three and a half, and to the City Hospital on Blackwell's Island for seventeen years. He edited the "Medical Register of New York, New Jersey and Connecticut," for fifteen years.

In May, 1860, he married Eveline J., daughter of Jeremiah Springer, of Litchfield, Maine, who died in 1885, leaving three daughters. Two years later he married Mary A., daughter of Captain James D. Barstow, of Bath, Maine. He died in 1893 of heart disease.

For many years he was a fellow of the New York Academy of Medicine; also a member of the New York County Medical Society, and one of the founders of the Medical Society of the State of New York and of the New York County Medical Association.

WHITEHEAD, Richard Henry (1865-1916), anatomist and noted teacher of anatomy in North Carolina and Virginia, was born in Salisbury, North Carolina, July 27, 1865. His father, Marcellus Whitehead, was a physician; his mother's maiden name was Virginia Coleman. He was graduated at Wake Forest College, North Carolina, in 1886, and in 1887 received his M. D. at the University of Virginia. In 1910 the University of North Carolina conferred on him the degree of LL. D. He was demonstrator of anatomy at the university at Chapel Hill from 1887 to 1889; professor of anatomy and dean of the Medical Department, University of North Carolina, 1891-1905; professor of anatomy and dean of the Medical Department, University of Virginia, Charlottesville, from 1905 until his death.

Dr. Whitehead wrote "Anatomy of the Brain" (1900), and was author of anatomical and pathological papers.

In 1891 he married Virginia Whitehead, of Amherst, Virgina. Dr. Whitehead died at his home in University, Virginia, February 6, 1916, of pneumonia.

WHITEHEAD, William Riddick (1831-1902), professor of clinical medicine in the New York Medical College, army surgeon, was born at Suffolk, Virginia, December 15, 1831, the son of William Boykin Whitehead of Southampton County, Virginia, of English descent and kinsman of William Whitehead, poet laureate of England, who emigrated during the reign of Cromwell. His father was a sugar planter in Louisiana, his mother was Miss Riddick of Suffolk, Virginia, descendant of Col. Willis Riddick of the Revolutionary War.

In 1851 he was graduated at the Virginia Military Institute at Lexington, studied medicine one year at the University of Virginia and took an M. D. from the University of Pennsylvania in 1853, after which he studied medicine in Paris. Thence he went to Vienna and applied to Gortchakoff, the Russian Ambassador to the Austrian Court, for a position as surgeon in the Russian Army which was then engaged in war with France, England and Turkey. The minister received him most graciously, secured him a Russian passport and gave him letters to his cousin, Prince Gortschakoff, the commander-in-chief of the armies of Southern Russia. His diploma was sent to St. Petersburg and he was appointed staff surgeon and sent to Odessa where, for several months, he remained, enjoying the gay, fashionable life of officers in his position. At his request, he was assigned to active duty with the army at Sebastopol. On arrival, he found Dr. Turnipseed (q. v.), of South Carolina, ill with typhus fever and in the same room with the body of Dr. Draper of New York City, who had just died of the same disease, both in the service of Russia. Here Dr. Whitehead was under the guidance and teaching of the great surgeon, Pirogoff, who treated the young American surgeon with much kindness and consideration. On Pirogoff's recommendation at the close of the war, Dr. Whitehead was given, by order of the Emperor, the cross of Knight of the Imperial Russian Order of St. Stanislaus. Shortly before the treaty of peace, he was honorably discharged and returned immediately to Paris and resumed his duties in its hospitals and dissecting room. In 1860 he received the degree of M. D., de la Faculté de Paris; then returned to New York and was elected professor of clinical medicine in the New York Medical College.

After the fall of Fort Sumter, he returned to his native state, Virginia, and was subsequently appointed by Mr. Davis, surgeon of the Forty-fourth Virginia Infantry. He was present at the battle of Chancellorsville and put the wounded "Stonewall" Jackson in the ambulance and sent him to the rear. After the battle of Gettysburg he took charge of the wounded of Jackson's old corps, and on the retreat of the Confederates, the camp fell into the hands of the Federals who permitted Dr. Whitehead to remain in charge and fur-

nished him with necessary supplies for the wounded.

A month later, he, with others, was sent to Baltimore and imprisoned at Fort McHenry, instead of being exchanged as he anticipated. In the meantime, his cousin, to whom he was afterwards married, was living in Brooklyn, and obtained permission from Secretary Stanton to cross the lines into Virginia. Dr. Whitehead was informed of this and one dark night made his escape in citizen's clothes, scaling the brick walls across the peninsula, and the following night was in Brooklyn, at the home of his betrothed. He left the next morning for Canada, visiting Toronto, Montreal and Quebec, and on to Bermuda, where he met Maj. Walker of Petersburg, Virginia, Confederate quartermaster, who gave him a passage on a blockade runner destined for Wilmington North Carolina, which was reached in safety. He went to Richmond and, after a short leave of absence, during which time he was married, was appointed by Surg.-Gen. Moore, president of the board of examination of recruits and disabled soldiers.

At the close of the war he returned to New York and practiced, chiefly as a surgeon, until 1872, when he went to Denver to spend the rest of his life, making occasional trips to Europe with his family.

He married his cousin, the daughter of Thomas Benton of Suffolk, and they had three children, Charles B., Frank, and Florence.

He was a prolific contributor to medical periodicals and the inventor of the well-known, useful mouth-gag, which goes by his name.

Many of his writings appeared in the columns of the New York "Medical Record," the New York "Medical Journal" and the "American Journal of the Medical Sciences" between the years 1866 and 1886. The subject of operative treatment of the palate was what largely interested him.

WILLIAM W. GRANT.

WHITING, Joseph Bellamy (1822-1905), army surgeon, surgeon-general of the Grand Army of the Republic, descended from New England ancestors, was born in Barkhamsted, Litchfield County, Connecticut, December 16, 1822. When seventeen he began teaching school, studying medicine at the same time and several years later, in 1848 was graduated from the Berkshire Medical Institution at Pittsfield, Massachusetts. He began to practice at Wolcottville, Connecticut, and married there, in 1850, Frances Hungerford. In 1852 he removed to Brooklyn, New York, where his wife died in 1854. A few years later he removed to Janesville, Wisconsin, where, in 1860, he married the widow of Chief Justice Whiton. During the Civil War he was surgeon-in-chief of the Military Hospital at Milliken's Bend, opposite Vicksburg, and surgeon-in-chief of hospitals in the Military District of Natchez, Mississippi. His arduous duties, especially onerous during a very severe outbreak of smallpox, so undermined his health that he was compelled to resign and return to Janesville, where in 1865 he resumed practice.

Dr. Whiting found time for other duties as well as giving faithful devotion to his professional career; in 1889 President Cleveland appointed him a member of the Chippewa Indian Commission to buy lands of that tribe in the White Earth, Red Lake and Leech Lake reservations in northern Minnesota, and in 1895 he was surgeon-general of the Grand Army of the Republic.

The illness and death of his only son, Dr. Joseph Whiting, Jr., a month preceding his own death was a great blow, from which he failed to rally, and he died at Janesville, Wisconsin, March 27, 1905, from the infirmities of old age.

SAMUEL B. BUCKMASTER.

WHITMAN, Marcus (1802-1847), noted pioneer and medical missionary to Oregon, was born at Rushville, Yates County, New York, September 4, 1802, the son of Beza and Alice Whitman and a descendant of John Whitman, early colonist from Hereford, England. After private tutoring, he studied medicine in the Berkshire Medical Institution at Pittsfield, Massachusetts. Dr. Whitman first settled in Canada and later in Wheeler, New York. In 1834, he was appointed missionary physician to the Indian tribes west of the Missouri River by the American Board of Commissioners for Foreign Missions and set out on his long journey in 1835. He returned, however, almost immediately to secure other workers. Early in 1836, he married Narcissa Prentiss, and in March with Rev. Henry N. Spalding and his wife and W. H. Gray, they journeyed slowly westward, the young wives being the first white women to cross the mountains. In opening a road for the one wagon which he insisted on taking,

in spite of the avowedly impassable route, Whitman blazed the trail for subsequent migrations. The officers of the Hudson Bay Company at Fort Hall, who had discouraged many possible settlers, attempted in vain to deter Whitman and his company. After several years of residence at Waülatpu on the Walla Walla River, realizing that the British were reporting the inacessibility of Oregon to secure it for English colonists and aware of the discussion of the Webster-Ashburton treaty, he set out for the east on horseback, October 3, 1842, travelling over difficult trails during mid-winter. On his arrival in St. Louis, he learned of the pending ratification of the treaty and hurried on, reaching Washington, March 3, 1843. There, with great earnestness, he depicted to the government, Oregon's limitless resources and value to the United States and thus helped to avert its sale. After his visit to Washington, he went to Boston, and, on his return, led a train of two hundred wagons into the Valley of the Columbia. The little mission station having incurred the wrath of the Cayuse Indians, Dr. and Mrs. Whitman, their two adopted children, and ten others were massacred on October 29, 1847.

Whitman College was founded in 1859 at Walla Walla, Washington, to perpetuate the memory of Dr. Whitman—the first medical missionary of the Pacific Coast and the first physician west of the Rocky Mountains. The story of Whitman's exciting adventures in the crossings of the Rockies, his relations with Dr. John McLoughlin (q.v.) in charge of the land which lay west of the Rocky Mountains as "chief factor" of the Hudson Bay Company, his dealings with the Indians, has been well told by Honoré Willsie Morrow in a strong novel, entitled: "We Must March", N. Y., 1925.

WHITNEY, William Fiske (1850-1921), curator of the Warren Anatomical Museum at Harvard Medical School and pioneer clinical microscopist at the Massachusetts General Hospital, was born in Boston, March 26, 1850 and died of cerebral hemorrhage in the same city, March 4, 1921, at the age of 70. He was a graduate of Harvard in the class of 1871 and of Harvard Medical School, four years later. After serving as house officer at the Massachusetts General Hospital Whitney went abroad for study in anatomy and pathology, spending the years 1875 to 1878 in Berlin Munich and Strassburg. On his return to his native city he was appointed pathologist to the hospital where he had served as house officer. A life position it proved to be, and in 1879 he was made curator of the Warren Anatomical Museum, another office he held during life, from 1905 on his title being: "John Barnard Sweet Jackson Curator of the Warren Anatomical Museum." The only other position he had was professor of parasites and parasitic diseases in the Harvard Veterinary School (1891-1901). He helped plan the building of the Harvard Medical School at the corner of Exeter and Boylston streets, in 1880 and twenty years later served in the same capacity for the magnificent group of buildings for the school at the end of the Avenue Louis Pasteur, where the new quarters of his museum lost nothing in suitable proportions and convenience from arrangement by a master hand.

His time was divided between the hospital and the museum. At the former he established in the nineties the system of immediate examination of specimens of tissue removed at surgical operations, being present with his freezing microtome and microscope in order to give the operator the benefit of his opinion on malignancy, or whether all the tissue had been removed, while the operation was yet in progress; at the museum he prepared specimens, arranged and rearranged. His opinion was sought on all occasions by anatomists, as to variations, also by operating surgeons and by the medical students. A constant attendant at the meetings of the Obstetrical Society of Boston (1861-) he could be depended on to discuss any pathological problems that were raised, intelligently and always in the kindliest manner. For two years he was president of the society. From the year 1917 Dr. Whitney was a vice-president of the Boston Society of Natural History. He prepared the thirty-second annual report of the Massachusetts State Board of Health for 1900; he gave the Shattuck Lecture before the Massachusetts Medical Society in 1901, with the subject: "The Alleged Increase of Cancer in Massachusetts". He was a modest but most approachable man and was ready always to assist the practitioner and student. The total value of his services to the profession, both at the hospital and in the museum, it would be hard to estimate. It was very great. Not often a man prepares himself so thoroughly for a life of pure science, entirely devoid of practice, and at the same time is so approachable and takes pleasure in helping along his brother mem-

bers of the profession out of the fruits of a wide experience.

Dr. Whitney held membership in the customary medical societies and social clubs, was married and had two sons, both of them becoming graduates of Harvard. He was of medium height, inclined to be stout in his later years, and of a genial presence.

On November 18, 1927, a portrait of Dr. Whitney was presented to the Warren Museum at formal exercises in Harvard Medical School by Dr. George Burgess Magrath, medical examiner of Suffolk County, the portrait being received by the dean of the school, Dr. David Linn Edsall.

WALTER L. BURRAGE.

WHITTAKER, James Thomas (1843-1900), professor of the theory and practice of medicine in the Medical College of Ohio, the son of James and Olivia S. Lyon Whittaker, was born in Cincinnati, March 3, 1843, and was educated in Covington, Kentucky, graduating in 1859. In September of that year he entered Miami University, Oxford, Ohio, and graduated in 1863. While in the navy, 1863-65, he received leave of absence to attend the medical lectures at the Medical College of Ohio. He was graduated from the University of Pennsylvania in 1866, and from the Medical College of Ohio in 1867. In 1868, going to Berlin, he attended the lectures of Langenbeck, Martin and others. He went also to Prague to study clinical obstetrics and in January, 1869, to Vienna. In 1870, he received the A. M., and in 1891, the LL. D. from Miami University.

Whittaker was acting assistant surgeon in the United States Navy; member of the American Academy of Medicine; Association of American Physicians; fellow of the College of Physicians of Philadelphia; fellow of the Chicago Academy of Medicine. In 1869 he was assistant professor of obstetrics and diseases of children in the Medical College of Ohio, and pathologist to the Good Samaritan Hospital; in 1870, professor of physiology, and in 1879, professor of theory and practice of medicine, a position he held until his death.

Something of a linguist, he would, while studying a language in his busy years, take his teacher with him in his carriage, reading and conversing in the intervals between visits. He was much interested in Koch's work on the bacillus of tuberculosis, and introduced tuberculin into Cincinnati. He edited the "Cincinnati Clinic" from its foundation in 1871 until July, 1876, and later was an associate editor of the "International Medical Magazine."

Dr. Whittaker was married three times; to Mary Box Davis, in 1873, who died in 1883, leaving no children. In 1884, to Ella M. Harrison, who died in 1888, leaving three children, James, Alice and Hugh. In 1890, he married his third wife, Virginia Lee Joy, who survived him; by this marriage there were two children, Wallace and Virginia.

Dr. Whittaker died in Cincinnati on June 5, 1900, of carcinoma of the rectum.

His more important works are: "Morbid Anatomy of the Placenta," prize essay, New York, 1870; "Text-book on Physiology," Cincinnati, 1879; "Theory and Practice of Medicine," 1893; "Exiled for Lèse Majesté," 1898 (a novel).

ALEXANDER G. DRURY.

WHITTIER, Edward Newton (1841-1902), Boston physician, was born July 2, 1841, at Portland, Maine. He entered Brown University in 1858, but before graduating the Civil War had begun and Whittier left his books, and did not return until peace was restored. With a spirit and a purpose that were characteristic he sought early opportunity to enter the service of the Union. He began with a term of three months with the First Rhode Island Volunteer Regiment. Immediately upon his return from duty he joined the Fifth Maine Battery, and was commissioned a second lieutenant, and presently became first lieutenant. At the battle of Gettysburg this battery, then under his command, won conspicious distinction by resisting effectually a night attack by the enemy upon the Union troops stationed at Culp's Hill. For this service and for services equally gallant in 1864, under General Sheridan in the valley of the Shenandoah, he received the special medal of honor conferred by Congress for "faithful, gallant, and meritorious services," with brevet rank of captain of volunteers. He resumed student life at Providence after his discharge from the army, reentering the class of 1862; then went to Harvard Medical School, from which he was graduated in 1869, and in 1873 was on the visiting staff of the Massachusetts General Hospital, a position he held for many years. In 1877 he was assistant in clinical medicine; his teaching service in the Harvard Medical School continued until 1888, when he

held the position of assistant professor of clinical medicine.

Whittier was a remarkably able teacher of the elementary branches of clinical medicine and many a man now living remembers his public clinics at the Massachusetts General Hospital. "Gentlemen," he would say, "The patient who comes to us this morning is peculiarly fitted by reason of his intelligence to tell us all that is the matter with him." Meanwhile, Pat Mahoney, a good deal frightened at being the center of interest to some two score pairs of eyes ranged around the large amphitheater, blinks and gasps. "Mr. ——. What is your name?" "Yes, Mr. Mahoney is not content with the diagnosis of one man, he wishes to have the combined wisdom of all these doctors." And then Dr. Whittier, erect and military in bearing, would sweep his arm in a semicircle towards the seats. By this time Pat felt he was getting more attention than the average patient and showed signs of returning confidence. After a little further buoyant treatment he was quite ready to have any number of stethoscopes applied to his chest and submit to an unlimited amount of percussion. A differential diagnosis by the aid of tables and schedules written on the board and a summary of the treatment were parts of every clinic.

After resigning his appointment in 1888, Dr. Whittier devoted himself with great success to private practice; and it is fair to say that at no period of his life was he more widely esteemed than at the time of his last sickness. He died at his home in Boston, June 14, 1902, aged sixty-one, the end coming suddenly, as a result of sclerosis and obstruction of the coronary artery.

WALTER L. BURRAGE.

WICKES, Stephen (1813-1889), medical historian of New Jersey, was born in Jamaica, Long Island, March 17, 1813, son of Van Wyck Wickes and Eliza Harriman; an ancestor, Thomas Wickes, was granted land in Huntington, Long Island, in 1666. Graduating from Union College in 1831, the next year Stephens Wickes was a student of natural sciences at Rensselaer Polytechnic Institute at Troy, New York, and in 1833 entered the Medical Department of the University of Pennsylvania, receiving an M. D. in 1834. In 1835 he practiced in New York City, then moved to Troy, New York; in 1852 he settled in Orange, New Jersey, and became identified with the medical life of the state and an authority on its medical annals. After 1861 he edited the "Transactions of the New Jersey State Medical Society" and gave the annual reports on current medical history of New Jersey. He edited also the "Old Transactions" of the state medical society, 1766-1800, and out of this grew his history.

He wrote the "History of Medicine in New Jersey and of Its Medical Men to A. D. 1800," a notable book of 449 pages which took five years to prepare and was published in 1879. Part I contains the history of medicine and Part II biographical sketches of New Jersey physicians to A. D. 1800. In 1834 Union College conferred an A. M. upon him "ad eundem" and in 1868 Princeton did the same.

In 1873 he became physician to Memorial Hospital at Orange. He was a ruling elder in the Presbyterian Church for twenty years and president of the Essex County Bible Society in 1873.

In 1836 Dr. Wickes married Mary Whitney, daughter of Isaac Heyer, of New York; in 1841, he married Lydia Matilda, daughter of Joseph Howard, of Brooklyn, New York, and widow of William H. Van Sinderen, a physician.

He died at his home in Orange on July 8, 1889, having placed posterity greatly in his debt by the labor spent in gratifying what Sidney Lee calls the "commemorative instinct."

WIDMER, Christopher (1780-1858), was one of the clever young army surgeons whom warfare caused to settle in a new country. He had taken his membership and fellowship degree at the London Royal College of Surgeons and joined the Fourteenth Light Dragoons as surgeon when the war of 1812 broke out and he was sent to Canada and elected to stay in Toronto (then York) when peace was declared. The recognized leader of the profession, the life and soul of the General Hospital, he gave to the earlier practitioners of the province an enormous impulse towards scientific surgery, and was equally skilled in surgical diagnosis and in operative technic. In 1833 he founded and was the first president of the Medical and Chirurgical Society of Upper Canada, and was also a member of the Upper Canada Medical Board from its first meeting in 1819, until his death, being chairman after 1823.

In person he resembled Lord Roberts, though his military service had not engendered a perfectly controlled temper, and he had a lurid gift in the use of expletives when

things did not go right. But he was just and honorable and full of charity for the poor.

He was twice married: the first union an unhappy one, the second not ideal because of wide difference in social rank. His death was tragic. Deeply affected by the loss of a much loved son he walked to the cemetery and fainted on the grave, and though promptly carried home he never quite recovered consciousness and died the following morning, May 2, 1858.

N. Albert Powell.

WIESENTHAL, Andrew (1762-1798), anatomist, the only son of Dr. Charles Frederick Wiesenthal (q. v.), of Baltimore, was born in the year 1762. Having received a good education in his native city, he began to study medicine in his father's private school, then studied anatomy under Shippen and attended lectures in Philadelphia and London. He spent three years in the latter city, 1786-1789, as interne in St. Bartholomew's Hospital, studying under John Sheldon, Cruikshank, John Marshall, and Percival Pott. Returning to Baltimore in the summer of 1789, shortly after the death of his father, he began instruction, the ensuing winter, in anatomy, physiology, pathology, operative surgery and the gravid uterus, to a class of fifteen. He attempted, with Dr. George Buchanan (q. v.), to found a medical college, but while he failed in this, he continued instruction in anatomy and surgery in his private school up to the time of his death, which occurred in Baltimore December 2, 1798.

In 1789 he married Sarah Van Dyke, of Eastern Shore, Maryland. They had one son, Thomas Van Dyke Wiesenthal, who became a physician in the United States Navy.

In the "London Medical and Physical Journal" vol. ii, No. 8, October, 1799, it is said that Andrew made an important pathological discovery in Baltimore, in 1797. The account of it is conveyed in a letter from him dated May 21, 1797, and it is sent to the editors of the above journal for publication by "Andrew Marshall, Bartlett's Building, September 10, 1799." The discovery was that the deadly epizoötic in fowls and turkeys—known as syngamosis, a verminous tracheobronchitis (vulgarly "the gapes") was due to a cylindrical worm, since known as "Syngamus Trachealis". This worm infests the trachea, choking the young chicks. He gives an illustration of it, of natural size and as magnified under the microscope. This probably represents the first discovery of an organism producing an epidemic or infectious disease ever made. Dr. Wiesenthal's priority is well established. The worm was seen in England for the first time by Montagu, in 1806-1808, and did not figure in French publications till well into the latter half of the nineteenth century. See L. G. Neumann, "Traité des Maladies Parasitaires," translation by Fleming, London, 1892. The letter, which was published, as has been seen, after Andrew's death, is reproduced in "Old Maryland," vol. ii, No. 4, April, 1906.

Eugene F. Cordell.

WIESENTHAL, Charles Frederick (1726-1789), of Baltimore, was born in Prussia in 1726, but of his family and life little is known. Family tradition asserted that he was physician to Frederick the Great, and the knowledge of the details of the military service in Prussia, as displayed in his correspondence, favors the view that he was connected in some way with the army. It is not known whether he possessed a medical degree or not. He arrived in Baltimore, which was first settled chiefly by Germans, in 1755, and for thirty-four years thereafter, was in active practice. Shortly after his arrival he married a lady of York, Pennsylvania, and had one son and three daughters. Naturalized in 1771, he warmly espoused the cause of the patriots and his services and advice were of the greatest value during the Revolution. In January, 1775, he was made a member of the Committee of Observation of Baltimore County; March 2, 1776, he was commissioned surgeon-major of the First Maryland (Smallwood's) Battalion; in 1777 he was surgeon-general of the Maryland troops, having general charge of the medical interests of the government in Baltimore, including the hospital which he established. Dr. Wiesenthal erected buildings for a medical school and dissecting room on the rear of his lot, and these buildings were still standing in 1900. He taught many students of his time, and in 1788, while they were dissecting the body of a murderer, a mob gathered and broke up the proceeding. He was a leader among the Lutherans and secured the building of the first church of that denomination in Baltimore (1762).

Keenly desiring a law for the regulation of medical practice in the state he headed a movement for professional organization, which resulted in the formation of a medical society on November 27, 1788, of which he

was elected president. His death took place on June 1, 1789, during the absence of his only son Andrew (q. v.), then a student of medicine in London. He was the first physician in Baltimore to drive a four-wheeled carriage; on this was inscribed his crest and motto—"a horse's head bridled and bitted, with two crossed arrows beneath and the words "Premium Virtutis." His rare and singular virtues and his nobility of character earned him the title "The Sydenham of Baltimore." His coat of arms, mortar and pestle, and much of his correspondence are still extant.

EUGENE F. CORDELL.

WIGGLESWORTH, Edward (1840-1896), Boston dermatologist, was born in Boston, December 30, 1840, and educated in Chauncy Hall and the Boston Latin School, afterwards graduating from Harvard College in 1861, and from Harvard Medical School in 1865. He then studied in London, Paris and Vienna for five years, devoting especial attention to dermatology. On returning to this country there were but few exclusive practitioners of this branch of medicine, and he became one of the pioneers, devoting his life to it. It was his ambition to collect the best and rarest books, the most perfect models, and other costly means of illustrating this subject. This collection was later given to Harvard Medical School, but his library was always freely open to those who could make it useful. At his own expense he opened a dispensary for diseases of the skin, at which he continued to minister, regardless of time and expense until special departments for such treatment were made part of the leading medical institutions of Boston. He was for some time one of the physicians for diseases of the skin in the Boston City Hospital, and later became head of that department. For several years he was one of the instructors of Harvard Medical School, and impressed upon the students the importance of the details necessary for the successful treatment of the repulsive and distressing maladies which they encountered.

He was a member of a number of medical societies, including the American Dermatological Association, also corresponding member of the New York Dermatological Society.

His contributions to the literature of dermatology were many and valuable, especially in the earlier part of his professional life, and though later partially disabled by failing health he was still keenly interested in the work of his colleagues and in the progress of his specialty. Among his earlier publications were papers on "Alopecia," read before the Massachusetts Medical Society in 1871; contributions to the "Archives of Dermatology," of which he was a founder, on "Fibromata of the Skin," and on "Sarcoma of the Skin," in 1875; on the "Auto-inoculation of Vegetable Parasites," and on "New Formations," in 1878; and on "Faulty Innervation as a Factor in Skin Diseases," in the "New York Hospital Gazette," in 1878. In 1882, in conjunction with E. W. Cushing (q. v.), he published in the "Archives of Dermatology," a paper on "Buccal Ulcerations of Constitutional Origin." In 1883 a communication on "Purpura from Quinine" appeared in the "Boston Medical and Surgical Journal"; and in 1896 he delivered the annual address before the American Dermatological Association.

Throughout his active career there was but little medical work of general importance to his community in which he was not a participant. He devoted considerable time and money unsuccessfully to the popularizing of the metric system, and was a founder of the Boston Medical Library Association in 1875, serving on its executive committee until his death. He did active service as one of the committee to raise the large sum necessary to establish the Harvard Medical School in its building on Boylston Street, and was actively interested in the early attempts to secure registration of physicians in order to protect citizens of his native state against quackery and extortion. As a member of the health department of the American Social Science Association he spent years of faithful and persistent effort in promoting its unselfish objects. Although through inheritance he might have lived solely for his own pleasure, his life was one of continued devotion to the welfare of others. A hater of shams and uncompromising in his own sense of right, he was nevertheless tolerant of the views of others.

While still in practice, and apparently still fit for years of continued usefulness, he died at the age of fifty-five. Death came as he would have wished, swiftly and surely, without suffering. A preliminary brief attack of unconsciousness, followed by such slight discomfort that the few intervening days were rather those of rest than prostration, and the final apoplectic stroke, so immediate and so beneficent that to him at least, the blow was

surely full of mercy. He died in January, 1896, of apoplexy following Bright's disease.

In 1882 he was married to Sarah Willard Frothingham, who with two children survived him.

PRINCE A. MORROW.

WILBUR, Hervey Backus (1820-1883), pioneer educator of the feeble-minded, was born in Wendell, Massachusetts, August 18, 1820. His father was a Congregational minister and was known as a lecturer on natural history, and the author of a popular work on astronomy. The son was graduated from Amherst College in 1838, and from the Berkshire Medical Institution at Pittsfield, Massachusetts in 1842, then practiced medicine at Lowell and at Barre and married Elizabeth Holden. After her death he married Emily Petheram of Skaneateles, New York, and was survived by two sons by his first wife, Charles H. and Harry, and by his second wife and two sons, Hervey and Dr. Fred Petheram Wilbur.

Hearing of Dr. Edward Seguin's success in the teaching of idiots at Bicêtre, he became interested and eagerly read Seguin's book on the subject. Later, his preceptor at Lowell left his practice temporarily in his charge. In this duty he visited the County Home where he found a feeble-minded man, possessing only a good memory for dates. The belief that from this one faculty the man's mind could have been educated to a certain degree, took possession of Wilbur, and in 1848, at Barre, Massachusetts, in his own house, he opened the first school for the feeble-minded in this country. A physician, Dr. Frederick F. Backus (q. v.), of Rochester, New York, then a member of the New York Senate, became interested in Dr. Wilbur's work in Massachusetts and succeeded in having the state open an experimental school at Albany in 1851. Dr. Wilbur was called to the charge of it, and, in 1854 it was made a permanent charity of the state under his care and removed to Syracuse.

He died suddenly on May 1, 1883, of rupture of the heart.

A tablet in the wall of the main building of the New York State Institution for the Feeble-Minded says: "The first in America to attempt the education of the feeble-minded, and the first superintendent of this Asylum. By his wisdom, zeal, and humanity he secured its permanent establishment."

He wrote the article on idiocy for Johnson's Cyclopedia and contributed many papers to the "Journal of Nervous and Mental Diseases," and he made a report on the British and other European asylums, which he had visited. He made a good fight for an unpopular cause.

WILDER, Alexander (1823-1908), physician, writer and teacher of eclecticism, was the son of Abel W. Wilder and was born at Verona, New York State, May 14, 1823. His education was obtained at the common schools, but in the higher branches mainly at home; he may have been said to be self-educated. In 1850 he was graduated in medicine at Syracuse University, practiced medicine in Syracuse and became connected with the "Syracuse Star" (1852-3) and the "Syracause Journal" (1853) in an editorial capacity. Subsequently the New York Homeopathic Medical College and the United States Medical College conferred the degree of M. D. on Dr. Wilder. In 1854 he was clerk in the state department of public instruction and in 1856 took charge of the "New York Teacher." Then we find him in Springfield, Illinois, where he assisted in drawing a bill to incorporate the state normal university, and in 1858 he settled permanently in New York and was on the staff of the "Evening Post" for thirteen years, an opportunity for perfecting himself in the art of writing that was well utilized. Finishing with the "Post" he was elected alderman in 1871 on the anti-Tweed ticket. At about this time he became interested in the eclectic cult in medicine and served as president of the New York Eclectic Medical Society (1870-1) and of the National Eclectic Medical Association (1876-95), editing nineteen volumes of transactions. For four years, 1873-7, he was professor of physiology in the Eclectic Medical College of the city of New York and from 1878 to 1883 he held successively the chair of physiology and psychological science in the United States Medical College.

The monographs from Dr. Wilder's pen covered a wide range of subjects. Among them may be mentioned: "Eclectic Medicine; its history and scientific basis"; "Neo-Platonism and Alchemy" (1869); "The Intermarriage of Kindred" (1870); "Plea for the Collegiate its history and scientific basis"; "Neo-Platonists" (1887); "Creation and Evolution" (1895); "Egypt and Egyptian Dynasties" (1899); "Ganglionic Nervous System" (1900); "History of Medicine" (1902).

In his autobiography in Who's Who in America, Dr. Wilder describes himself as "widower." He died at Newark, New Jersey, September 19, 1908, aged eighty-five years.

WALTER L. BURRAGE.

WILKINS, Edmund Taylor (1824-1891), California alienist, was born in Montgomery County, Tennessee, October 20, 1824, and was the son of Dr. Benjamin and Jane Taylor Wilkins. He received his collegiate education at William and Mary College, founded in 1692 at Williamsburg, Virginia, and graduated in 1844. After leaving college he was engaged for several years in raising cotton in Mississippi and Louisiana, and afterwards conducted a sugar plantation in the latter state. Upon the discovery of gold in California he took passage in March, 1849, on the schooner "St. Mary" from New York for the Pacific Coast by way of Cape Horn. After a tedious voyage, filled with irritating delays and great peril, extending over a period of nearly a year, the small craft cast anchor in the Bay of San Francisco.

Being unsuccessful in his mining enterprises, he returned in 1853 to Tennessee and attended one course of medical lectures at the Memphis Medical College, after which he sold his sugar plantation in Louisiana and returning to California in 1854, purchased land in Yuba County and turned his attention to farming. Finding farming unprofitable, he took a second course in the Memphis Medical College, where he was graduated in 1861. He practiced medicine in Marysville, then the most flourishing inland town of the state, and gave special attention to the subject of insanity. When the legislature of 1870 authorized the governor to appoint a commissioner to compile all accessible information as to the construction and management of asylums and the modes of treating the insane, he was chosen for that important mission, and entered at once upon it. He visited 50 of the principal institutions in the United States and Canada, and crossing the Atlantic spent the greater part of two years in travel, during which he inspected about 100 asylums in Great Britain and on the Continent. The results of his mission are embodied in his report made to the Executive Department upon his return to California, which was published and distributed to the various public institutions, because it contained many valuable charts and plans of the best asylum buildings then in existence or in course of construction, and also much important information gathered through interviews with distinguished alienists in Europe and America as to current methods of treating and managing the insane. In view of the experiences and observations thus obtained, Dr. Wilkins was selected one of the commission to find a site and to prepare plans for the additional asylum provided by the legislature of 1872, and in the following year, with his confréres, founded the Napa State Asylum for the Insane, of which he was elected resident physician in March, 1876. Had he lived a few days longer he would have completed his fifteenth year as its superintendent.

He died of influenza, February 10, 1891.

WILKINSON, James (1757-1825), physician, soldier and adventurer, was born in Calvert County, Maryland, in 1757. He gave up the study of medicine to enter the War of the Revolution, serving with Arnold in the Quebec campaign, then with Gates. He rose to the rank of colonel and early in an unscrupulous way to that of brigadier-general. When Colonel John Hardin, of Kentucky, penetrated the British lines he turned back to the American forces and meeting Wilkinson, communicated his discoveries and begged him to give the information to General Gates. This Wilkinson hastened to do, making himself instead of Hardin the hero of the adventure; so when Burgoyne surrendered, Wilkinson was made bearer of the news to Congress. He was eighteen days on the journey and when it was proposed in Congress to give him a sword, Dr. John Witherspoon said: "I think ye'd better gie the lad a pair of spurs." So Congress refrained from the gift, but appointed him a brigadier-general by brevet; this rank he resigned later when officers of his own grade petitioned Congress to rescind his appointment. From 1779 to 1781 he served as clothier-general to the army. He went to Lexington, Kentucky, and looking about him for means to improve his fortune saw that money could readily be obtained if he could secure from the Spaniards the right to trade with New Orleans, for Mississippi was closed to American commerce and western produce was spoiling for lack of a market. He began by gaining the good-will of the commandant of Natchez by the gift of a pair of thoroughbreds, then loaded a boat with Kentucky

produce and sent it down the Mississippi, himself going to New Orleans by land. The boat reached New Orleans before him and was seized by the authorities, but when Wilkinson appeared it was released and the Spanish governor gave him an unlimited trading permission. Wilkinson further allied himself with Spain and endeavoring to separate the West from the East to protect Spanish possessions, and was to receive a pension for his treachery to his country; but his scheme failed and in 1791 he applied for reinstatement in the army. His recommendation was that unemployed he was "dangerous to the public quiet, if not to the safety of Kentucky." He was appointed lieutenant-colonel and performed good service against the northwestern Indians; in 1792 he became brigadier-general, and when General Wayne died in 1796 was given chief command. However, he did not cease to be a traitor and is said to have received a Spanish pension as late as 1800. He had been the intimate of Benedict Arnold and Aaron Burr and he disclosed to the government Burr's plan to form a southwestern empire. He was implicated in the conspiracy and was court-martialed, but was acquitted for lack of evidence.

In 1805 Wilkinson became governor of the territory of Louisiana; in 1813, major-general, but had a disagreement with Wade Hampton that resulted in a court of inquiry, which exonerated him in 1815. At the end of the war he was discharged. He went to live on his plantation near New Orleans, then turned up in Mexico City as applicant for a land grant, and acted as agent for the American Bible Society.

He wrote "Memoirs of My Own Time," Philadelphia, 1816.

At the age of fifty-six he married Miss Trudeau, who was thirty years his junior.

He died in Mexico City December 25, 1825, from "the combined effects of climate and of opium."

WILLARD, DeForest (1846-1910), pioneer Philadelphia orthopedist, was a native of Newington, Hartford County, Connecticut. He was born March 23, 1846, son of Daniel H. and Sarah Maria Deming Willard, both his parents descendants from families closely identified with the development of America in the Colonial period. Dr. Willard was in the ninth generation from Major Simon Willard, the founder of Concord, Massachusetts (1632). He went to Hartford High School and entered Yale in 1863 but did not graduate. Then to the University of Pennsylvania, where he took his M. D. in 1867. He received the degree of Ph. D. from the University in 1871, and the honorary A. M. from Lafayette in 1882. Dr. Willard early selected surgery as his chosen branch of medical practice and from the time he graduated in 1867 up to a short time before his death he was continuously connected with the anatomical and surgical departments of the University. Prior to his graduation in medicine, during the Civil War, he served under the United States Sanitary Commission at City Point and Petersburg. In 1867-1868 he was resident physician at the Philadelphia Hospital and from 1881 to 1907, served as surgeon to the Presbyterian Hospital. He was consulting surgeon to the Home for Incurables and the State Hospital for the Chronic Insane at South Mountain. In 1887 Dr. Willard was appointed lecturer on orthopedic surgery in the University, and was clinical professor of orthopedic surgery from 1889 to 1903, and professor of orthopedic surgery since 1903. In this subject his interest was always most enthusiastic. It was he who organized this department at the University and secured the erection of the orthopedic ward in the Agnew wing of the University Hospital. He was president of the American Orthopedic Association in 1890, of the Philadelphia County Medical Society in 1893-1894, and of the Philadelphia Academy of Surgery in 1900. He was fellow of the Philadelphia College of Physicians and of the American Surgical Association, in which latter society, since 1895, he held the office of recorder.

The strenuous professional career which Dr. Willard had and the high regard which his professional brothers had for him is evinced by the following partial list of offices he held.

At the university he was demonstrator of surgery from 1870 to 1877; demonstrator of anatomy from 1867 to 1870; attending orthopedic surgeon to the University Hospital; surgeon to the orthopedic out-patient department from 1877 to 1889. He was president of the American Surgical Association in 1901; fellow of the American Orthopedic Association; the Philadelphia Academy of Surgery; the Philadelphia County Medical Society; the Pennsylvania State Medical Society; the Philadelphia Pathological Society; and the Philadelphia Obstetrical Society.

He was perhaps one of the most eminent orthopedic surgeons. He specialized in this branch of surgery long before it was recog-

nized as a special branch, and was in every sense a pioneer who should rank with Andry, Potts, Stromeyer, Mutter and Sayre. His special course of lectures given in 1887 at the university, was the first delivered on this subject.

Beginning in 1887, in the out-patient department, Dr. Willard organized the Orthopedic Department in 1889, and with the assistance of the Ladies' Auxiliary raised $150,000 for the department within the last eighteen years, which made it possible to establish the Children's Orthopedic Ward and Orthopedic Clinic, and special gymnasium and machine shop, rendering the department the most efficient of the sort connected with any teaching institution. Dr. Willard planned the magnificent buildings of the Widner Memorial School for Crippled Children in Philadelphia for Mr. P. A. B. Widener and was surgeon-in-chief to the school from its opening in 1906 until his death. He had had an attack of acute multiple neuritis in 1906, but after this had prepared for the press his book on "Surgery of Childhood, including Orthopedic Surgery," published in 1909. His writings are shown in tolerably full list in the catalogue of the surgeon-general, Washington, D. C.

Dr. Willard married in 1881 Elizabeth M. Porter, a daughter of the Hon. William A. Porter, a granddaughter of Governor D. R. Porter, and had one son, Dr. DeForest Porter Willard.

He died of double pneumonia, October 14, 1910, at his home in Lansdowne, Pennsylvania.

WILLARD, Sylvester David (1825-1865), founder of the Willard Asylum for the Insane at Albany, N. Y. Sylvester Willard's ancestors came to Massachusetts from England in 1634, he himself being the son of David Willard, physician, and Abby Gregory, daughter of Lieut. Matthew Gregory of Albany. Sylvester Willard's name is worthy of perpetuation because of his industry in writing biographies of his medical predecessors and his great efforts to ameliorate the condition of the insane.

He was born in Wilton, Connecticut, June 19, 1825, went to school in his native town and graduated at the Albany Medical College in 1848. By 1852 he was making headway as a young doctor in New York. Ten years later patriotism led him to work as a volun- of West Point, nor did his efforts for this re- teer surgeon among the soldiers in the battle lief cease with the war, for he helped raise the sum of $200,000 for the disabled.

Perhaps Sylvester Willard is best known by his determined and well-planned investigations as State Commissioner into the conditions of the insane. He urged the necessity of building a large asylum and a bill to establish such an asylum in the state senate at the time of Dr. Willard's death. It afterward passed and the institution was called the Willard Asylum for the Insane. In addition to some fifteen biographies and the "Annals of the Medical Society of the County of Albany," he wrote "Suicide and Homicide," 1861; and "Conservative Surgery," 1861.

In 1861 he married Miss Susan Ellen Spence, daughter of Mirmion Spence. Two children were born, Margaret and Sylvester David.

Among his appointments were: presidency of the Albany County Medical Society; the surgeon-generalship of New York; secretary and editor of the Transactions of the New York State Medical Society. He died in Albany April 2, 1865.

WILLIAMS, Charles Herbert (1850-1918), Boston ophthalmologist, was born in Boston, April 19, 1850, the eldest son of Dr. Henry W. Williams (q. v.), the first professor of ophthalmology in Harvard Medical School, and of Elizabeth Dewey Williams. He was graduated from Harvard A. B. in 1871 and M. D. in 1874, then he spent several years in Europe studying ophthalmology and settled in practice in Boston with his father.

He married Caroline Ellis Fisher of Brookline in 1884 and the following year accepted a position with the Chicago, Burlington and Quincy Railway as director of its medical and health insurance interests. While there he did pioneer work in color-blindness and wrote important articles on this subject. Returning to Boston in 1895, he resumed the practice of ophthalmology with his brother, Dr. E. R. Williams, residing at Milton. He was possessed of great mechanical ability and was most successful in the diagnosis and treatment of errors of refraction. He was the first to extract a foreign body from the eye by the aid of a Roentgen picture, the picture being made by another brother, Dr. Francis H. Williams. Dr. Williams was surgeon to the Massachusetts Charitable Eye and Ear Infirmary and to the Ophthalmological departments of the Boston City Hospital and Boston Dispensary.

He wrote "The Eyes of School Children," (1885); "Standards and Methods of Examining the Acuteness of Vision, Colorsense and Hearing for Railway and Marine Service" (1901); "The Need of a Supplementary Lantern Test for the Proper Examination of Color Perception" (1903).

Among the many societies in which he had membership were the American Ophthalmological Society, Chicago Ophthalmological Society, American Medical Association, Massachusetts Medical Society.

Dr. Williams died at his home in Cambridge, Mass., June 9, 1918, of heart disease, survived by his widow and two children.

WALTER L. BURRAGE.

WILLIAMS, Elkanah (1822-1888), pioneer ophthalmologist of Cincinnati, was born in Lawrence County, Indiana, December 19, 1822. He was one of the thirteen children born to Isaac and Amelia Gibson Williams, both of Welsh extraction, and born in North Carolina. In 1819 the father moved from Tennessee and settled near the village of Bedford, Indiana, and made a fortune in farming. His older sons were satisfied with the education they could get at home, but Elkanah had higher aspirations and preferred study to farm work. He matriculated at the State University at Bloomington, Indiana, 1843, then went to De Pauw University, where he took his degree in 1847. Bishop Simpson was president while Dr. Williams was at Asbury, and a strong personal attachment was formed between them, which only ended when the former passed away. It was Elkanah's intention to study medicine, but before doing so he taught school for a short time. He matriculated at the University of Louisville, Kentucky, and took his M. D. in 1850.

While a medical student he married Sarah L. Farmer in December, 1847, and practiced in Bedford until the death of his wife in 1851. Against the advice of many of his friends, he determined to make diseases of the eye a specialty, and to that end went abroad, in 1852, to study in the eye clinics of Europe. He chose a most auspicious time, so far as ophthalmology was concerned. A new light was dawning, for the ophthalmoscope was about to enlighten the unseeable fundis oculi and explain many things hitherto only matters of conjecture. He learned the use of this valuable instrument in Berlin, Vienna and Paris, and was one of the first to demonstrate its practical use at the Moorfield's Hospital in London.

When Williams returned from abroad in 1855, he settled in Cincinnati. His specialty was an innovation at that time; the operative part of ophthalmology was within the province of the surgeons, and ordinary eye diseases were treated by all practitioners. It was discouraging work at first, but he steadily held on and his charming personality won him friends from the first. Above the average height, with broad shoulders, slightly stooped, his genial face and his kind eyes inspired confidence in his patients. In time, clients from Kentucky, Indiana, Illinois and from all the towns and cities of Ohio came to seek advice and to have him operate on important eye cases. His fame spread abroad over Ohio and the contiguous states, and in time he had a practice which taxed his endurance. As an operator he was careful, prudent and skilful, and spared no pains to gain the best results.

In 1865 Williams was elected professor of ophthalmology in the Miami Medical College. While there were teachers of eye diseases in the East at this time, yet to him belongs the honor of first filling a chair devoted to this specialty. He was an entertaining and instructive lecturer, presenting his subject in an attractive manner. He filled the chair of ophthalmology in a most acceptable manner until failing health compelled him to resign. He served for twelve years on the staff of the Cincinnati Hospital. His clinical lectures were always very attractive to students, and from the large material at his command he was able to make his lectures practical and instructive.

He was one of the founders of the Academy of Medicine of Cincinnati which was organized in March, 1857. He was also president of the State society in 1875, and president of the International Ophthalmological Congress in New York City, 1876. He was as well a member of the American Otological Society, becoming an honorary member in 1888. He was not only honored at home, but abroad; in 1880 being made an honorary member of the Athens Medical Society, and of the Ophthalmological Society of Great Britain in 1884.

During his last trip to Europe the International Ophthalmological Congress met in London. In the discussion on some important subject he made a speech in English. Then the Germans wanted to hear it in their language, and he delivered it in German.

There were calls from the Frenchmen, and he repeated it in French. Dr. Williams frequently said that if he had a talent for anything it was languages.

His second wife was Sally B. McGrew, whom he married April 7, 1857. She was a beautiful and attractive woman and a devoted wife. Dr. Williams had two daughters by his first wife, one of whom survived him.

For many years Dr. Williams was associate editor of the "Lancet and Observer," his articles reflecting his careful observations. His best article was that on "Injuries of the Eye," in Ashhurst's "System of Surgery."

He died at Hazelwood, Pennsylvania, on October 6, 1888, of cerebral apoplexy.

ALEXANDER G. DRURY.

WILLIAMS, Henry Willard (1821-1895), first professor of ophthalmology in Harvard Medical School, was born in Boston, December 11, 1821, and after a Latin School education, entered a counting-room, later becoming secretary and publishing agent of the Massachusetts Anti-slavery Society. At the same time he began to study medicine at Harvard in 1844, afterwards spending three years in Europe. Besides his general medical and surgical studies he became greatly interested in ophthalmology, studying under Sichel and Desmarres in Paris, Friedrich and Rosas in Vienna, and Dalrymple, Lawrence and Dixon in London. He then returned to America and graduated M. D. at Harvard in 1849. From 1850 to 1855 he was instructor in the theory and practice of medicine in the Boylston Medical School, and in 1850 organized a class of Harvard students for the study of eye disease and after a few years of general practice, limited himself to ophthalmic work. He was ophthalmic surgeon to the Boston City Hospital from the founding of the hospital in 1864 to 1891. He was one of the first to introduce etherization in cataract operations (1853) and the suturing of the corneal flap (1865). In 1856 he read a most important paper "On the Treatment of Iritis without Mercury." His first literary work was a translation of Sichel's "Spectacles: Their Uses and Abuses in Long and Shortsightedness" (1850). In 1862 his "Practical Guide to the Study of the Diseases of the Eye" appeared, and in 1865 his essay, "Recent Advances in Ophthalmic Science," won the Boylston prize. In 1881 his most important work appeared, "The diagnosis and Treatment of Diseases of the Eye" (second edition, 1886). These works presented the science and practice of ophthalmology in the clearest manner and in accordance with the most advanced thought of the day, and their popularity was attested by the demand for new editions. His greatest influence was exercised as a teacher and lecturer (1869) and later (1871) as professor of ophthalmology in Harvard Medical School, also in the medical societies in which he took an active and leading part, being president of the Massachusetts Medical Society, 1880-1882, and of the Massachusetts Medical Benevolent Society from 1871 to 1894. He was an excellent presiding officer.

He impressed his strong personality on his medical brethren, as he lived and worked largely for them. He was, all in all, a doctor first, and other things afterwards * * * of large stature and strong character he was a conspicuous figure on all medical occasions and proved a frequent, forcible and persuasive speaker. Conservative to a fault, he was yet kindly and thoughtful of his professional brothers. He did not grow old, but retained his enthusiasm to a remarkable degree.

In 1864 he was one of those who founded the American Ophthalmological Society, and was for many years its president. On retiring in 1891 from the chair of ophthalmology, on account of ill health, he endowed the professorship. His son, Charles (q. v.) and Edward, followed their father as ophthalmologists; another son, Francis Henry, likewise became a physician.

Dr. Williams died in Boston June 13, 1895.

HARRY FRIEDENWALD.

WILLIAMS, Nathaniel (1675-1738), of Boston, filled the triple rôle of preacher, physician and schoolmaster. The union of these three professions was no infrequent occurrence at the time he lived. In each he appears to have played well his part.

He was the son of Nathaniel and Mary Oliver Williams and was born in Boston, August 23, 1675. He was graduated at Harvard College in the class of 1693, and in the summer of 1698 was ordained, according to the sermon preached at his funeral by Thomas Prince, who was "an Evangelist in the college hall, for one of the West India Islands. But the climate not agreeing with his constitution, he soon returned to his native city." At one time Williams was engaged giving private instruction to boys; he

had the reputation of being an excellent classical scholar. In the year 1703 he was appointed usher at the Boston Latin School, and subsequently was chosen to the headmastership, a position he held until 1734. He studied chemistry and physic under his uncle, the learned Dr. James Oliver of Cambridge and even while teaching, continued to practice medicine.

He died January 10, 1738. The "Boston Weekly News Letter" of January 12 calls him "the Reverend and Learned Mr. Nathaniel Williams," and speaks of him "as a very skillful and successful Physician."

He wrote a medical pamphlet published posthumously under the title: "The Method of Practice in the Small-Pox, with Observations on the Way of Inoculation. Published for the Common Advantage, more especially of the Country Towns, who may be visited with that Distemper," Boston, 1752.

Williams, Obadiah (1752-1799), pioneer physician of central Maine. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 1240.

WILLIAMS, Stephen West (1790-1855), medical biographer, second son of Dr. William Stoddard Williams of Deerfield, Massachusetts, and a lineal descendant of Rev. John Williams, the first minister of that town, was born in Deerfield, March 27, 1790. The family furnished many eminent physicians to New England, and Stephen early showed a studious turn of mind. When sixteen he had read the five volumes of Rush's "Enquiries," "Darwin's Zoonomia," Thornton's "Medical Extract" in five volumes, and other lengthy works, and two years later began an apprenticeship in medicine under his father. Like Rush, he early formed the habit of taking notes on matters that particularly interested him and in this manner and by reporting cases in the medical journals acquired facility in writing. His first medical publication was an account of the two remarkable cases of suicide of the brothers Clap, which was published by Rush in his "Diseases of the Mind," and subsequently quoted by Esquirol in his works on insanity.

In the winter of 1812-13 he attended a term of lectures at Columbia College by Post, Hosack, Mott and others, and in 1813 settled as a doctor in Deerfield, practicing there until he moved in 1853 with his family to Laona, Illinois. In his early years he practiced surgery, but later in life devoted himself to an extensive consultation practice. He became a member of the Vermont State Medical Society in 1815, and of the Massachusetts Medical Society in 1817. In the latter he was an influential member, being orator at its annual meeting in 1842, with a scholarly address, "Medical History of the County of Franklin in the Commonwealth of Massachusetts." He was instrumental in the formation of the Franklin District Society, one of the branches of the Massachusetts Medical Society, in 1851.

In 1816 he published a volume on the indigenous plants of Deerfield and its vicinity and subsequently wrote numerous papers, which were published in the periodicals of the day upon the medicinal properties of plants. In 1817 he read a "Traditionary and Historical Sketch of the Aboriginal People of the Country" before the New York Historical Society published in the Society's "Transactions." From 1823 to 1831 he held the chair of medical jurisprudence in the Berkshire Medical Institution and in 1838 delivered a course of lectures on the same subject in the College of Physicians and Surgeons in New York, supplying a chair made vacant by the illness of Professor Beck; subsequently for two years he served as lecturer upon medical botany and jurisprudence in Dartmouth College (1838-40) and professor of materia medica, pharmacy and medical jurisprudence in Willoughby University (1838-53), during this period delivering over four hundred lectures, carefully written out in full.

Dr. Williams' most noted work was his modest, dun-colored octavo of some 400 pages on American Medical Biography, published in Deerfield, in 1845, in which he continued James Thacher's pioneer biographical writing in a manner most satisfactory to the student of early medicine, at the same time showing a more careful regard for facts than Thacher. He wrote also an "Indigenous Medical Botany of Massachusetts," 1849, and a "Catechism of Medical Jurisprudence". In 1847 appeared the "Genealogy of the Williams Family in America." Many more of his writings are to be found in the medical journals of the time. A list of his published minor works is in Allibone's "Dictionary of Authors." Dr. Williams was the author of the first report to the American Medical Association on medical biographies and the originator of a practice on the part of the Association of collecting biographies of deceased

medical men of the country who had attained prominence.

In 1824 the Berkshire Medical Institution gave him her M. D., and in 1829 Williams College made him an Honorary A. M. He was an honorary member of the New York Historical Society, the Royal Society of Antiquarians at Copenhagen, the State Medical Society of Wisconsin.

Dr. Williams was simple and unostentatious in his habits and, owing to an inborn timidity, was never a polished public speaker. He suffered at times with angina pectoris which disqualified him in a degree from the performance of major surgical operations. After moving from Deerfield to Laona, Illinois, in 1853, he was not altogether happy in his changed surroundings. His strength failed during the spring of 1855, but he was able to visit patients until a week before his death, which occurred from heart disease on July 7, 1855. The last entry in his journal made shortly before had reference to the annual meeting of the Massachusetts Medical Society, of which he was an ardent member, held on June 27, of that year. It was as follows: "Today the Medical Society meets at Springfield, my heart is with them."

WALTER L. BURRAGE.

WILLIAMS, Thomas (1718-1775), pioneer army surgeon of Western Massachusetts, was born at Newton, Massachusetts, April 1, 1718. He was descended from Robert Williams who landed in Boston in 1630 and settled at Roxbury. Of his education we know little except that he studied medicine under Dr. Wheat of Boston. He settled in practice at Deerfield on the Connecticut River about the year 1739. In 1741 Yale conferred her honorary A. M. on him, for what reason is unknown. In the French War, which began in 1743, he was appointed surgeon in the army, in the projected and unsuccessful expedition against Canada, and afterwards he was surgeon to the chain of forts which extended from Fort Dummer, Vermont, to Fort Massachusetts, at Adams. On one occasion previous to the capitulation of the latter fort, August 20, 1746, Dr. Williams had obtained permission to return to Deerfield, and when not far on his way passed through an ambush of hostile Indians unmolested, probably because of their fear of alarming the garrison of the fort by firing on the doctor and his thirteen companions. Thereby he escaped capture and probable deportation to Canada. In the war of 1755 he was surgeon in the army under Sir William Johnson at Lake George. Here he heard of the death of his brother, Col. Ephraim Williams, the founder of Williams College, who had been shot through the head while leading a detachment of troops against Baron Dieskau. The Baron was wounded in the bladder in this engagement and Dr. Williams cared for him until his return to France. The doctor sent home many interesting letters descriptive of the campaign, containing valuable medical information. On returning to Deerfield he was the only surgeon in that part of the country and he had a laborious practice, being called often into the states of New Hampshire and Vermont. Sending to Europe for the latest books and instruments he kept himself abreast with the times. The citizens elected him to the office of town clerk and he was a justice of the peace and judge of the court of common pleas and of probate. One of the chief contributions of Dr. Williams to the advancement of the medical practice of the time was his service in teaching young practitioners under the apprentice system then in vogue, before the advent of medical schools. Two of his pupils were Timothy Childs (q. v.) of Pittsfield, and Erastus Sergeant (q. v.) of Stockbridge.

Dr. Williams died of phthisis September 28, 1775, at the age of fifty-seven. One of his grandchildren was Stephen West Williams (q. v.), the medical biographer.

WILLIAMS, Thomas Henry (1822-1904), Confederate Army surgeon, was born in Dorchester County, Maryland, in March, 1822, the son of Isaac F. and Rebecca R. Stuart Williams. The early years of his life were spent in Cambridge, Maryland, and he studied medicine under Alexander Hamilton Bayly (q. v.), later graduating from the University of Maryland in March, 1849. He was commissioned assistant surgeon in the United States Army and was stationed at various western posts. At the beginning of the Civil War he resigned from the United States Army and went to Richmond, where he was appointed surgeon in the Confederate Army. During the war he was medical director and inspector of hospitals in Virginia. He organized the Confederate Medical Corps of brigade and division surgeons and under his supervision nearly all of the large hospitals in Virginia, outside of Richmond and Petersburg, were established. He held the position

of assistant to the surgeon-general of the army at Richmond for some time prior to the close of the war and did effective service. In 1865 he returned to Cambridge and later went to Richmond to practice. He passed the last years of his life in Cambridge, where he died on September 22, 1904.

Dr. Williams married Bettie Hooper, daughter of Dr. John H. and Anna C. Hooper, of Cambridge.

Dr. Williams was noted for his hospitality and kindness and no man in the county was more respected for his uprightness; he had a large circle of friends. He was very active in organizing the Cambridge-Maryland Hospital and, after his death, the operating room in the hospital was equipped by his wife as a memorial to him.

BRICE W. GOLDSBOROUGH.

WILLIAMSON, Hugh (1735-1819). In the year 1730 a clothier, one John Williamson, from Dublin, emigrated to America and settled in Chester County, Pennsylvania, and the next year married an Irish girl, Mary Davison, from Derry, who in coming over as a little child was captured by the pirate Blackbeard. After this little bit of romance in her life she settled down with John, the clothier, and had four girls and six boys, Hugh being the eldest one, a most studious lad, with a great liking for mathematics. He was born in West Nottingham, December 5, 1735. His father gave him a very good education and meant him to go to Europe, but the College of Philadelphia receiving its charter, he was sent there and took his A. B. when twenty-two in 1757. The University of Pennsylvania gave him an A. M. in 1760 and an LL. D. in 1787. His first idea was to be a minister and he went so far as to become a licentiate, but a delicate chest and church disputes made him turn to another favorite study, medicine. This serious, determined young man found his way to Edinburgh University, studying medicine there and in London and finally getting the M. D. of Utrecht in 1772. Then followed a very diversified life, writing with others concerning the transit of Venus in 1769, individually propounding original theories concerning the comet of that year and so on to a pamphlet on the "Variation of Climate in North America," a remarkably observant paper which brought him honorary memberships from Holland and an LL. D. from another foreign university. Arrayed in new honors he took a new rôle, that of collecting with some colleagues funds from the West Indies and Britain for the Academy of Newark, Delaware. The King of England gave a liberal donation "notwithstanding his great displeasure towards his American subjects," for Williamson was the first to report the tea party in Boston Harbor and advise the Privy Council to use conciliatory measures. Directly after, the war began and Williamson hearing of a clandestine correspondence detrimental to America being carried on between Hutchinson and leading members of the British Cabinet, by a bold ruse obtained the letters and sent them to Franklin, taking care to leave London the next day. But in the midst of these exciting events he found time for scientific experimentation with John Hunter and with Franklin and read a paper before the Royal Society in London "On the Gymnotus Electricus or Electric Eel." On the declaration of independence he went back to Philadelphia and finding no army surgeonship open bought a trading sloop and did a little mercantile voyaging to the West Indies along with his brother from South Carolina, and while in the latter state was invited to Newbern to inoculate with the smallpox. In 1779 the merchant again became the doctor in real earnest as surgeon to the North Carolina Militia, doing valiantly for both conquerors and prisoners. Then followed peace, and three years as a representative in the House of Commons of North Carolina. He was eloquent always and was sent to Philadelphia as delegate to the United States Constitutional Convention in 1787. This piece of civic doctoring accomplished he married Maria, daughter of the Hon. Charles Ward Apthorpe, but she died when the younger of his two sons was only a few weeks old. The widower now devoted himself to his little boys and the writing of a big work on "Climate from a Medical Point of View" and on "The Fevers of North Carolina," and in 1812 appeared his big two-volumed "History of North Carolina," all this done along with endless scientific papers and a "Report as Commissioner to Inquire into the Origin of the New York Yellow Fever Epidemic in 1805." The death of his beloved elder son in 1811 did not abate the zeal of a nearly heart-broken father for everything that could help his country and state. He took refuge among his books when weary, yet with unabated intellectual vigor he reached the first month of his eighty-fifth year "the punctuality and ability he had brought to his never

decreasing duties being a continual source of surprise to his juniors."

On May 22, 1819, while taking his customary ride, the heat of the day being unusually great, "he suddenly sank into a deliquium" and was dead before aid could be summoned. So ended the life of this man who was a preacher, philosopher, scientist and physician. His biographer, David Hosack, (q. v.), gives a little portrait of him as very tall, dignified, in some respects eccentric, and to people who displayed wilful ignorance or disregard to religious truth "his language and manners possessed a degree of what might be denominated Johnsonian rudeness." Fortunately the Johnsonian genius was his also.

DAVINA WATERSON.

WILLISTON, Samuel Wendell (1852-1918), scientist and educator, was born in Roxbury, Massachusetts, July 10, 1852, the son of Samuel, whose ancestors settled in New England early in the 18th century, and Jane Turner Williston. Fired by the desire to "go West," the father moved the family to Kansas in 1859; three years later, the year of the great drought, they were forced to live upon cornmeal and sorghum. At the age of four, Williston had his first lesson in natural history, when his father was planting potatoes in his small garden and several toads were turned up. Eager to raise a crop, the little boy gathered all the small toads he could find and planted them. From this incident he got the nickname "Toad" which followed him through life. After an early education in the public schools of Kansas, he entered the State Agricultural College formed in 1864 by merging with the Blue Mont College which in turn had been founded by the Methodists in 1859. In 1872 he was graduated and three years later received his A. M. Meanwhile, he collected specimens with Prof. Mudge who opposed the theory of evolution which Williston espoused. He delivered in 1874 the first public lecture on evolution west of the Mississippi. In 1873 he began to study medicine in the office of his family physician. For several years, he was occupied with railroad engineering, then the chance acceptance of an invitation to go to northwestern Kansas where Prof. Mudge was collecting resulted in his decision to devote himself to paleontology. Through his work with Mudge, he was called to New Haven to assist O. C. Marsh of Yale, where he continued his medical study and was graduated in 1880. From Yale, he also got his Ph. D. degree in 1885 and the honorary Sc. D. in 1913. Here also, he was demonstrator of anatomy during 1885-86 and professor of anatomy during 1886-90. At this time he practiced medicine in New Haven and in 1888-90 was health officer. In 1890 his old bent reasserted itself, and he turned West to become professor of paleontology and anatomy and dean of the Medical School of the University of Kansas until 1902 when he accepted the chair of paleontology in the University of Chicago.

Williston published about three hundred papers on comparative anatomy, sanitation, zoology, paleontology, entomology, and herpetology; he was a leading American authority on Diptera. One of his early contributions is the "Synopsis of the North American Syrphidae," 1886. His paleontological studies on the cretaceous fauna of Kansas, beginning with "Are Birds derived from Dinosaurs" in 1879, number more than fifty. Among his best known writings are the "Manual of North American Diptera," 1896 and 1908; "Reports of the University Geological Survey of Kansas," volumes IV and VI, 1898 and 1900; "North American Plesiosaurs," 1903; studies on cretaceous reptiles and primitive amphibian and reptilian life of the Permian, 1902 et seq.; "American Permian Vertebrates," 1911; "Water Reptiles of the Past and Present," 1914; and papers on Mycterosaurus which threw light on the origin of the diapsid types, in 1915. His general work on reptiles, recent and fossil, which was left unfinished in his last illness, was edited by Prof. W. K. Gregory in 1925, under the title, "The Osteology of the Reptiles"; the text is illuminated by a large series of excellent drawings by the author.

His collection of Diptera of the United States and Canada is now in the University of Kansas while the remainder is in the American Museum of Natural History. Williston was a member of many professional associations and president of the Kansas Academy of Science in 1897 and of the Society of Vertebrate Paleontology in 1903.

On December 20, 1880, he married Annie F. Hathaway of New Haven, by whom he had four daughters and one son. He died August 30, 1918.

Williston with the spirit of the true scientist was very tolerant and appreciative of the work of other men, his work standing in contrast with that of Cope and Marsh whose personal differences of opinion led to diverse

systems of classification and nomenclature. He had a gift for discovering new material and was noted for the accuracy of his descriptions.

HOWARD A. KELLY.

WILLSON, Robert Newton (1873-1916). Robert Newton Willson, social hygienist, son of Judge Robert N. Willson and Elizabeth S. Dale Willson, was born in Philadelphia, January 3, 1873. His father's ancestors came from New England while his mother's family were Philadelphians. He studied at Rugby Academy and Blight's School, later graduating both from the college (1893) and medical department (1897) of the University of Pennsylvania. After his internship at the University Hospital in Philadelphia he went to Vienna for a year's study. On returning to Philadelphia he worked at the Presbyterian Hospital as pathologist and became one of the visiting physicians to the Philadelphia Hospital. "Blockley," as it has been known for generations, provided a wealth of clinical material for his excellent classes and bedside clinics. He was instructor in medicine and university physician at the University of Pennsylvania (1900-1905). In 1900 he represented the United States at the Tuberculosis Congress in Naples, Italy.

In addition to his medical work Dr. Willson was greatly interested in the matter of public morality. On this subject he lectured widely, fostered propagandas, and wrote numerous books and pamphlets. Well-known books are "The American Boy and the Social Evil," and "The Education of the Young in Sex Hygiene," 1912.

In 1903 he married Miss Dorothea Wurts, daughter of Charles Stewart Wurts, of Philadelphia.

He was a man of positive opinions, often at variance with those of his fellows. In questions of diet his views were original, if not extreme. His unusual personality resulted in the formation of but few intimate friendships.

He died, January 1, 1916, of tuberculosis, his death hastened by close attention to work from which he refused to separate himself until it was impossible for him to get about. One daughter survived him—Elizabeth Dale Willson.

ROBERT M. LEWIS.

WILSON, Ellwood (1822-1889). The son of a farmer in Bucks County, Pennsylvania, Ellwood Wilson, Philadelphia gynecologist and obstetrician, was born in that county on February 4, 1822, and had for early education the village school and library. After acting as druggist's apprentice he graduated from the Jefferson Medical College in 1845 and that same year became a member of the staff of the Philadelphia Dispensary, a place which furnished him plenty of obstetrical and gynecological cases, his ability leading Charles D. Meigs (q. v.) to take him as assistant, and, when Meigs retired, a good deal of his practice fell to Wilson; also he succeeded Dr. Warrington in the Philadelphia Lying-in Charity, and when associated with him founded and conducted the first training school for nurses, and was also a founder of the Philadelphia Obstetrical Society. It is believed he was the first to establish a dispensary there for the exclusive treatment of women and the first to lecture clinically on their diseases. As he was instrumental in helping a very large number of babies into the world he did not get much time to write about any abnormalities in them or their mothers. He entered into a discussion with Dr. William Goodell (q. v.) upon the relative value of podalic version and forceps delivery in narrow pelves, advocating the forceps as a wiser procedure. He was a founder of the American Gynecological Society, its vice-president, and a member of the College of Physicians of Philadelphia, also a president of the Medical and Chirurgical Faculty of Maryland.

He died on July 14, 1889, at his country house near Philadelphia.

DAVINA WATERSON.

WILSON, Harry Augustus (1853-1919), orthopedic surgeon of Philadelphia, was born September 4, 1853, in that city, the son of Henry H. and Mary E. Lewis Wilson both of whom came of a long line of physicians. As a student of medicine under "Dick" Levis (q. v.), he attended the Jefferson Medical College graduating in 1879. The same year, he was appointed ophthalmic and aural surgeon to St. Mary's Hospital and a year later pathologist to the Presbyterian Hospital. For four years after graduation, he was clinical assistant in the medical, surgical, and ophthalmological departments of Jefferson Hospital, and a quiz master giving instruction in bandaging and fracture dressings at the

Philadelphia School of Anatomy, made famous by the labors of D. Hayes Agnew, (q. v.), W. W. Keen, and Levis, (q. v.). He was elected professor of mechanical surgery in the Philadelphia Polyclinic in 1885 and emeritus professor in 1897; clinical professor of orthopedic surgery in the Woman's Medical College in 1889; and clinical lecturer on oral surgery in 1890, clinical professor in 1891, and professor in 1904, in his alma mater. In 1901-02, he was president of the American Orthopedic Association.

Roberts Bartholow (q. v.) in his "Hypodermic Medication" (1882) says, "The greatest advance in recent years has been made by the introduction of soluble compressed hypodermic tablets originated by Dr. H. Augustus Wilson in 1889" (Sol. Compr. Pellets, "Phila. Med. Times," 1880). He wrote on a wide range of orthopedic subjects, in all over one hundred articles, including contributions to text books.

On November 16, 1882, he married Julia Stoutenburgh Davids of Philadelphia.

Dr. Wilson died from uremia April 16, 1919.

WILSON, Henry Parke Custis (1827-1897), practically the founder of gynecology in Maryland, was born on March 5, 1827, in Somerset County, Maryland, and died in Baltimore, December 27, 1897. His father's ancestor, Ephraim, came from England and settled on the Eastern Shore in the early part of the eighteenth century. Henry was the son of Henry Parke Custis and Susan E. Savage Wilson. He was educated at Princeton, where he received an A. B. in 1848, was graduated M. D. from the University of Maryland in 1851, receiving Princeton's A. M. the same year. He settled in Baltimore and practiced there until his death in 1897. Wilson got his start with Dr. Richard Henry Thomas, driving with him on his daily rounds as he visited his patients. For some years he was the only gynecologist in Baltimore and was the second in his state to do a successful ovariotomy and the first there to remove the uterine appendages by abdominal section. Report makes him the second in the world to remove a large uterine tumor, this patient recovering. He also invented a number of instruments for use in gynecological surgery.

In 1858 he married Alice Brewer Griffith, of Baltimore, who with five children survived him, the elder son, Robert Taylor, becoming a physician.

Wilson was a founder and president of the American Gynecological Society; the Medical and Chirurgical Faculty of Maryland; member of the British Medical Association; vice-president of the British Gynecological Society and honorary fellow of the Edinburgh Obstetrical Society and the Washington Obstetrical and Gynecological Society; surgeon to the Hospital for Women of Maryland and consulting surgeon to the Johns Hopkins Hospital.

His chief papers were: "Ovariotomy During Pregnancy;" "Division of the Cervix Backward in Some Forms of Anteflexion of the Uterus, with Dysmenorrhea and Sterility;" "Hysterectomy with a New Clamp for Removal of large Uterine Fibroid Tumors;" "Twin Pregnancy, one Child in the Uterus, Another in the Abdomen;" "Retro-Displacement of the Uterus."

WILSON, John (1784-1847). The early history of "Captain Thunderbolt" is wrapped in mystery. It is supposed he came from Scotland and had studied medicine at Edinburgh. He appeared in Brookline and Dummerston, Vermont, about 1820. In these towns he taught school, and studied medicine at the "Academy of Medicine," at Castleton, afterwards practicing very successfully, but in 1836 going to Brattleboro, where he spent the rest of his life. Dr. Wilson was associated with one Arnold, at Brattleboro, in building a steam saw mill on the site of the present railroad staton. This was an unprofitable venture, but the doctor continued to live at this point. Hence he made professional visits to the rural districts "in a rather inferior carriage, accompanied by a little boy." In his prime, he was a gentleman in appearance and bearing, and apparently well educated. He was reputed a skilful practitioner. During his last years, however, he fell into intemperate habits and his practice dwindled.

A certain air of mystery and romance seems to have followed him during his life. Two years after Dr. Wilson's appearance in the Connecticut Valley, a certain highwayman, Michael Martin, popularly known as "Lightfoot," was hung at Cambridgeport, Massachusetts, for highway robbery. While awaiting execution, "Lightfoot" made a "Confession," which found its way into print. In this, he described his career as a robber and desperado, and showed himself to have possessed unusual talent in this rôle. He had operated with great daring and no mean succes in Scotland, England, and Canada, until

he was finally brought to justice in this country. In this "Confession," Martin frequently mentions a companion and leader, whom he designates as "Captain Thunderbolt." Together they had pursued an eventful career in Great Britain, and later in America. He describes certain wounds received by "Thunderbolt," among which were a cut from a saber thrust on the neck, and a shortened and wounded leg, from the effects of a musket ball. It is related that "Thunderbolt" once held up a stage coach on its way to London, and holding a pistol to a man's head, said, "Give me your money, or I'll blow your brains out," to which the man replied, "Blow away, I'd as soon go to London without brains as without money." "Thunderbolt" seems to have appreciated the joke or the man's nerve, for it is said he left him with a laugh. There is little doubt that the bold highwayman, "Captain Thunderbolt," and the Brattleboro doctor, John Wilson, were the same man. There are many facts corroborative of this supposition. Dr. Wilson led a secluded life, with few acquaintances and no intimates. His necessary errands to grocery and other stores seem to have furnished about the only opportunities for his neighbors to get acquainted with him. He is said to have become greatly excited, whenever "Lightfoot's Confession" was mentioned, and once, when he saw a copy at a patient's house, he threw it into the fire. Summer and winter, he always wore a large muffler about his neck, and it was hinted, that during the delirium preceding his death, those who were present, heard events described very similar to those mentioned in "Lightfoot's Confession."

Dr. Wilson married a Brattleboro lady, the daughter of Seleh Chamberlain, who secured a divorce from him on the ground of cruelty, and she is reported to have said she would not live with a robber. The last of his life was passed in seclusion with a young son, on the banks of the Connecticut River. A marble slab marks his grave in the Brattleboro Cemetery.

CHARLES S. CAVERLY.

WILSON, Robert (1866-1919), of Montreal, pioneer roentgenologist and electro-therapeutist, a martyr to his own early experimental work, was born October 10, 1866, in Constantinople where his father was a marine engineer in the Ottoman Service. His father, Robert Wilson, was a native of Stirling, and his mother, of Dumfries, Scotland. Forced to flee from Constantinople at the outbreak of the rebellion in 1878, the family spent two years in Malta and then settled in Manchester, England. Here Robert qualified as a mechanical engineer and in 1886 went with his father to Canada to take a position with the Grand Trunk Railway. Several years later, he began to study medicine and took an M. D. at McGill University in 1893. While a student, he constructed an artificial larynx which was used by Professor Wolsey Mills in his lectures. He began to practice in Point St. Charles and was appointed one of the surgeons to the Grand Trunk Railway. Following Roentgen's announcement of his discovery in 1895, Dr. Wilson made the first X-ray machine in Montreal, run by a water motor. With Dr. Girdwood, (q. v.), he did much in stereoscopic and X-ray picture work and was one of the first to take an X-ray picture in America; he also worked over methods for finding foreign bodies. Unaware of the personal risk, his hands were burned and one finger had to be amputated. For many years, he was superintendent of the Western Hospital of Montreal, being especially active in electro-therapeutics and X-ray work. He was professor of pharmacology and electro-therapeutics at Bishop's College. While filling the latter post, he did the experimenting that prepared him to render valuable aid in the great conflict.

When the World War broke out, he crossed with the First Canadian Contingent and was attached to Canadian General Hospital No. 1 in France. After a year, he was recalled to London, promoted to the rank of major, and put in charge of organizing for all Canadian hospitals overseas the X-ray department and the department of physio-therapy, including radio-therapy, electro-therapy, hydro-therapy, and massage. The first was established in the Granville Hospital at Ramsgate, England, where he trained workers in massage. Major Wilson's knowledge of mechanical engineering was valuable in purchasing apparatus as well as in improving the machines, one of which is the Wilson Polystat. He first suggested the use of tungsten, cored into carbon shells, to produce violet and ultra-violet rays. He was called home as lieutenant-colonel to take charge of the electro and hydro-therapeutic treatment for the returned disabled soldiers and became responsible for such equipment in the Dominion headquarters in Toronto. Here he established the first military school of physio-therapy in America.

At the time of his death, he was organizing a Dominion association to advance the practice of massage.

On July 23, 1906, Dr. Wilson married Helen Whitney of Oshawa, Ontario, who survived him.

Unsuspicious of the danger, like all our pioneers, he continued to work until it was too late to cure his severe dermatitis. Abdominal pains supervened, and an operation was done in St. Andrew's Military Hospital, revealing cancer of the transverse colon. He died November 1, 1919.

WILSON, Thomas Bellerby (1807-1865), ornithologist, was born in Philadelphia, January 17, 1807, and educated there, afterwards settling in the city of Brotherly Love and acquiring a practice which became one of the most extensive in the city. He may have been a graduate of the medical school of the University of Pennsylvania in 1830, for a Thomas Wilson, of Pennsylvania, is on the list of graduates of that year. In his later years he retired from the practice of medicine and deovted himself wholly to ornithology and kindred branches of natural science. He made an extensive collection of birds, including nearly every known American species, which for size and variety is said to have ranked third in the world at the time. He presented it to the Philadelphia Academy of Natural Sciences. He became a member of the Academy in 1832, and its president in 1863, and participated actively and enthusiastically in all its affairs, contributing extensively to its library, and securing numerous gifts from others. Dr. Wilson, although a tireless student of nature and the author of several letters and monographs, left little or nothing in published form. He died in Newark, Delaware, March 15, 1865.

CHARLES R. BARDEEN.

WINSLOW, Caleb (1824-1895), lithotomist, was born in Perquimans County, North Carolina, January 24, 1824. His father was Nathan Winslow, of that county, his mother, Margaret Fitz Randolph, of Virginia, both Quakers. When about twenty he was graduated from Haverford College, Pennsylvania, and in 1849 took his M. D. from the University of Pennsylvania, settling in Hertford the same year, and becoming widely known as a skilful surgeon. His work consisted largely of amputation of limbs, breast excisions, cataract operations, trephining and removal of external tumors. In the operation of lithotomy he became especially expert and his record of ninety-nine operations with but one death was for a long time the best in the world. A report of these cases is published in the "Maryland Medical Journal" for February 23, 1884 (vol. x). It is stated that he had never seen an operation for stone until after he had performed many himself. He also did a trephining for epilepsy and cured the patient. In 1866 he removed to Baltimore, Maryland, where, finding the surgical field already occupied, he developed a large general practice and died on June 13, 1895. His widow and three children survived him. Two sons, John R. and Randolph, became medical men in Baltimore.

HUBERT A. ROYSTER.

WINSLOW, Charles Frederick (1811-1877), was born in Nantucket, Massachusetts, in 1811. He was graduated M. D. at Harvard in 1834. Dr. Winslow was appointed U. S. consul at Payta, Peru, in 1862, served for several years, visited the Sandwich Islands and other countries, and was for many years a resident of California. He contributed to periodicals, and published "Cosmography, or Philosophical View of the Universe" (Boston, 1853); "Preparation of the Earth for the Intellectual Races," a lecture (1854); "The Cooling Globe" (1865); and "Force and Nature: Attraction and Repulsion, etc." (Philadelphia, 1869).

WINTHROP, John (1606-1676). This scholar, statesman and sometime doctor, John Winthrop the Younger, was born at Groton, Suffolk, England, on February 12, 1606, was prepared for college in the Free Grammar School at Bury St. Edmunds and completed his education at Trinity College, Dublin. Subsequently he studied law and was admitted as a barrister of the Inner Temple, but a thirst for travel and adventure sent him seaward as secretary to Capt. Best of the ship of war, "Repulse," in the fleet under the Duke of Buckingham. After the failure of the expedition of this fleet to relieve the French Protestants of La Rochelle, Winthrop spent the next fourteen or fifteen months in European travel, visiting, during that time, Italy, especially Padua and Venice, Constantinople and Holland. He followed his father, Governor John Winthrop, to this country in 1631 and shortly thereafter was made an assistant in the Massachusetts Colony. A year later

he led a company of twelve to Agawam (now Ipswich), where a settlement was made. There he was brought into contact with Giles Firmin (q. v.). In about a year he returned to England and received a commission to be governor of the river Connecticut, for one year. On coming back to America he built a fort at Saybrook, Connecticut, and lived there part of the time. Then making no effort to have the commission renewed, he returned to Ipswich and became one of the prudential men of the town. Subsequently, he moved to Salem, established some salt works, made another trip to England, and finally, receiving Fisher's Island as a grant from the general court of Massachusetts, went there in the fall of 1646. This grant was, subsequently, confirmed by both Connecticut and New York. In the spring of the following year he removed to Pequot (now New London), but after a residence of eight years, moved to New Haven. From here he was called to dwell in Hartford, on being elected governor of Connecticut, in 1657. He had previously (September 9, 1647) been given a commission to execute justice "according to our laws and the rule of righteousness," and in May, 1651, was elected as assistant of Connecticut. He served as governor one year, then became deputy governor on account of a law which prevented his reelection. This law being repealed the next year, he served continuously as governor from 1659 until his death in 1676, although in 1667, 1670 and 1676 he requested to be relieved of his office.

He was always an omnivorous reader and much given to scientific studies. The journal of his father says that he had a library of more than 1,000 volumes. The taste for medicine came naturally to him, as his father was well versed in it as well as other members of his family. "The scarcity of physicians in the colonies and Winthrop's willingness to give advice free of charge—so far as his studies enabled him to do so"—caused him to be much consulted. Many letters are still extant, coming from all parts of New England, seeking aid for various ailments, and Cotton Mather declares: "Wherever he came, still the diseased flocked about him, as if the Healing Angel of Bethesda had appeared in the place." Winthrop's sovereign remedy, Rubila, was much sought after. It appears to have been composed of diaphoretic antimony, nitre and "a little salt of tin." In one of his son's letters, we find the directions "but remember that Rubila be taken at the beginning of any illness," and Roger Williams elsewhere writes: "I have books that prescribe powders, but yours is probatum in this country." Besides Rubila, Winthrop prescribed nitre, iron, sulphur, calomel, rhubarb, guaiacum, jalap, horse-radish, the anodyne mithrodate, coral in powder form, elecampane, elder, wormwood, anise, unicorn's-horn and an electuary of millepedes. He was made a member of the Royal Society of England shortly after its incorporation, on January 1, 1662, and during his stay of a year and a half in England at that time, he took an active part in the society's proceedings, read a number of papers on a great variety of subjects and exhibited many curious things. Later he wrote letters to Robert Boyle, one of them, in Boyle's works, describes the finding of a large number of dead fish in a pond in Watertown, Massachusetts (Fresh Pond?)

He married first, in 1631, his cousin, Martha Jones, who died at Ipswich, Massachusetts, three years later. In 1635 he married Elizabeth, daughter of Edmund Reade of Wickford, County Essex, and step-daughter of the famous Hugh Peters. She died at Hartford, in 1672. By her Winthrop had two sons and five daughters. The sons, Fitz John (Governor of Connecticut, 1698-1707) and Wait Still (Chief Justice of Massachusetts) had both a very laudable knowledge of medicine.

Winthrop died on April 5, 1676, and is buried in the King's Chapel Burying Ground, Boston. A portrait of him, copied from a painting in the possession of the family, is to be seen in the library of the State Capitol at Hartford. It has been often reproduced, being most accurately given in Waters' sketch of Winthrop's Life.

WALTER R. STEINER.

WISHARD, William Henry (1816-1913), pioneer practitioner of Indiana, was born in Nicholas County, Kentucky, January 17, 1816. He was descended from Scotch ancestry, his grandfather, William Wishard, emigrating to America in 1773, and settling in Pennsylvania; enlisted in the Revolutionary army, serving until the close of the war; later going to Kentucky. His father, Colonel John Wishard, moved to Indiana in 1825, where Dr. Wishard spent his boyhood helping to clear the forest and assisting his parents in establishing a frontier home, receiving only the education offered by the primitive schools. When twenty-two years old he began the study of medicine with Dr. Benjamin Noble,

brother of ex-Governor Noble of Indiana, with whom he afterward formed a partnership. He was graduated from the first Indiana Medical College, situated at La Porte, in 1848, subsequently attended the Ohio Medical College, and also received an honorary degree from the Indiana Medical College of Indianapolis in 1877. Dr. Wishard served as a volunteer surgeon in the Civil War, rendering a signal humanitarian service to the country by his report to Indiana's great war executive, Governor Morton, as to the condition of sick and disabled soldiers at the front, which led Governor Morton to go to Washington and present the situation to President Lincoln, who issued a general order for all incapacitated soldiers, of each state, to be returned to their homes.

For nearly forty years Dr. Wishard covered long distances as a country doctor, riding horseback in the early days when there were only trails through the forests. In 1877 he settled in Indianapolis. He was the last survivor of the group of eighty-four physicians who, in 1849, organized the Indiana State Medical Society and was its president at the fortieth annual meeting. He was president of the Indianapolis Medical Society not long before giving up active participation in his profession, and upon his retirement on his eighty-ninth birthday, received a beautiful parchment appropriately inscribed as a token of esteem. Dr. Wishard was the author of historical papers dealing with early medicine and physicians in Indiana. He married Harriet Newell Moreland in 1840 and they were the parents of nine children. He was an active church man, serving as elder in the Presbyterian Church for more than seventy years, and he frequently represented his presbytery as commissioner in the General Assembly, the highest body of the church. He had almost reached his ninety-eighth birthday when he died December 9, 1913.

Of the many tributes paid to his memory the following epitomizes his character: "Dr. Wishard believed that no man had greater opportunities for usefulness than a physician and never failed to use every occasion for sowing seeds of righteousness as he went about doing the work of the beloved physician. He ministered to the sin-sick, as he healed their bodies; he preached the gospel of love and kindness as he went in and out of the homes of the well-to-do, the poor and the outcast. His daily life was an exemplification of the highest ideals of Christian manliness; his character was spotless and bore no stain of dishonesty or professional trickery. He had a deep, abiding faith that never wavered; a hope and trust that kept him joyful and full of anticipation for the future."

ELIZABETH M. WISHARD.

WISLIZENUS, Frederick Adolphus (1810-1889), of St. Louis. In the "Lancet," London, 1889, volume ii, page 936, it is stated that the romance of medicine might well claim Wislizenus as one of its heroes. He was born in Koenigsee, Germany, in May, 1810, and at the usual age left the gymnasium for the university to study medicine and took his M. D. in 1834 from Zürich University. He worked at Göttingen, Jena, and Würzburg, until shortly before graduation, he became compromised in the famous "Frankfürter Attentat," and had to flee the country. In the spring of 1833 a conspiracy had been formed in Frankfurt-on-the-Main, to avenge itself on the Federal Diet which by its severely restrictive press laws had roused the citizens, particularly the younger portion, including many students in the several faculties, to something little short of madness. In this conspiracy Wislizenus, with Matthiä and others of the medical "Durschenschaft," took a leading part—the design being to blow up the Diet. On April 3, 1833, the attempt was made. The guard house was carried by storm, and the conspirators were within an ace of effecting their purpose when the military appeared in the nick of time, arrested nine of the youths, and put the others to flight. Among those who, after hairbreadth escapes, eluded arrest was young Wislizenus, who found his way to Switzerland, where, at the University of Zürich, he resumed his studies and graduated M. D. with distinction, and in 1835 came to the United States. Ultimately settling in practice at St. Louis, he rapidly formed an extensive clientèle, of which his compatriots were the nucleus, and was enabled to give time to pure science and also to travel in and beyond the United States. He made memorable visits to Mexico and the Rocky Mountains, and published most interesting records of his observations and experiences. By all classes he was looked upon as an enthusiastic and large-minded reformer, an honest and benevolent survivor of the "Vor Achtundvierziger" men, as the precursors of the revolution of 1848 are familiarly called.

He died in St. Louis, Missouri, on September 22, 1889. DANIEL SMITH LAMB.

WISTAR, Caspar (1761-1818), anatomist of Philadelphia. The parents of Caspar Wistar were of German extraction, and belonged to the Society of Friends, of which they were highly respected members. His grandfather, Caspar Wistar, founded at Salem, New Jersey, the first glass works in this country. Wistar was born in Philadelphia, September 13, 1761, and went as a boy to the well-known Friends' School, founded by William Penn, in Philadelphia. The school at that time was in charge of Mr. John Thompson, an able teacher of Latin and Greek. Wistar is said to have acquired a desire for medical study during the battle of Germantown, October 4, 1777, when he helped to care for the wounded. He became a private pupil of John Redman (q. v.) and also attended the practice of John Jones (q. v.), at the same time going to the medical lectures of Drs. Morgan, Shippen, Rush and Kuhn, at the recently organized medical school of Philadelphia. Such teachers aroused in Wistar an ambition to pursue his medical study in Europe, where he went after attaining the degree of Bachelor of Medicine in 1782. Wistar spent a year in England and then went to Edinburgh, and in 1786 graduated doctor of medicine there, publishing and defending a thesis called "De Animo Demisso." On returning to Philadelphia he was initiated into the practice of medicine and surgery under the patronage of Dr. Jones, then the most distinguished surgeon in the city. Dr. Hosack relates the following story: "Dr. Jones, having occasion to perform a very important operation, invited Dr. Wistar to accompany him. When the patient was prepared, Dr. Jones, addressing Dr. Wistar as having better sight than himself, at the same time presenting him his knife, requested it as a favor that he would perform the operation. Dr. Wistar immediately complied; and such was the skill and success with which it was done, that it at once introduced him to the confidence of his fellow-citizens. He was appointed physician to the Philadelphia Dispensary, established in 1787, and in 1789 to the professorship of chemistry and physiology in the College of Philadelphia. From 1793-1810, he was physician to the Pennsylvania Hospital. He became in the meantime a fellow of the College of Physicians, and a member of the "American Philosophical Society," and its president in 1815.

Wistar was largely instrumental in effecting the union of the medical school attached to the University of Pennsylvania and its rival, the College of Philadelphia. Upon the consolidation of the two rival schools, in 1792, he was associated with William Shippen (q. v.), as adjunct professor of anatomy, midwifery and surgery in the University of Pennsylvania. Subsequently surgery and midwifery were separated from anatomy. After the death of Shippen in 1808, Wistar was made professor of anatomy. As a teacher he at once exhibited distinguished qualifications: fluency of utterance, unaffected ease and simplicity of manner, perspicuity of expression, animation, earnestness, and impressiveness. He published a "System of Anatomy," which was primarily designed as a textbook for his classes. It is an excellent work, and shows a good knowledge, for that time, both of anatomy and physiology. He published several memoirs in the "Transactions of the American Philosophical Society," and made a contribution to the anatomy of the ethmoid bone, thus described by Tilghman:

"Anatomy has been so much studied both by the ancients and moderns, and so many excellent works have been published on the subject, that any discovery, at this time of day, was scarcely to be expected. Yet, it is supposed to be without doubt, that Wistar was the first who observed and described the posterior portion of the ethmoid bone in its most perfect state, viz.: with the triangular bones attached to it. Of this he has given an accurate description in the volume of our transactions now in the press. On the subject of that discovery he received, a few days before his death, a letter from Prof. Soemmering, of the kingdom of Bavaria, one of the most celebrated anatomists in Europe, of which the following is an extract: 'The neat specimen of the sphenoid and ethmoid bones are an invaluable addition to my anatomical collection, having never seen them myself, in such a perfect state. I shall now be very attentive to examine these processes of the ethmoid bone in children of two years of age, being fully persuaded Mr. Bertin has never met with them of such a considerable size, nor of such peculiar structure.'"

"Wistar played an active part in the cultured society of Philadelphia. His house was the weekly resort of the literati of the city of Philadelphia, and at his hospitable board the learned stranger from every part of the world, and of every tongue and nation received a cordial welcome. His urbanity, his pleasing and instructive conversation, his peculiar talent in discerning and displaying the characteristic merits or acquirements of

those with whom he conversed will be remembered with pleasure by all who have ever enjoyed his society and conversation." (Hosack) In 1816, he was elected president of the American Philosophical Society, and in 1813 he succeeded Benjamin Rush as president of the Society for the Abolition of Slavery.

Tilghman thus describes the chief characteristics of Wistar:

"The understanding of Wistar was rather strong than brilliant. Truth was its object. His mind was patient of labor, curious in research, clear, although not rapid in perception, and sure in judgment. What is gained with toil is not easily lost."

In 1788 he married Isabella, daughter of Christopher Marshall, of Philadelphia. She died in 1790, and in 1798 he married Elizabeth Mifflin. By his second marriage he had several children, three of whom were living at the time of his death.

He died in Philadelphia, January 22, 1818.

Wistar's memory is splendidly perpetuated by the Wistar Institute of Anatomy and Biology, established in Philadelphia by Gen. Wistar, and in the "corallorhiza Wistareana," the "Wistaria frutescens," the well-known and beautiful vine Wistaria named after the doctor by his friend Nuttall, the botanist.

CHARLES R. BARDEEN.

WITHINGTON, Charles Francis (1852-1917), Boston physician, was born in Brookline, August 21, 1852, the son of Otis and Lucy Jenckes Withington. He was descended from Henry Withington, who came from England in "The James" in 1636, settled in Dorchester in 1640, and for twenty-nine years was Ruling Elder of the First Church in that settlement. After a boyhood spent in Brookline, Charles Withington entered Harvard College in 1870, graduating four years later with the degree A. B. "cum laude," ranking fourth in his class. His work secured a detur and second year honors in the classics, and he read a commencement part on graduating. While in college he was a member of the Pi Eta and Phi Beta Kappa societies. Whenever it was possible, the joint festivities of the societies and the commencement exercises always drew him to Cambridge. After leaving college he taught for one year in the Brookline High School, and the two succeeding years in the Roxbury Latin School, becoming a trustee of the latter a few years later, and serving as secretary of this board for twenty-five years. In 1877 he entered the Harvard Medical School and became a member of the Boylston Medical Society, acting as its secretary. He read a prize essay before this Society, under the title of "The Pupil as a Therapeutic Guide." He received the degree of M. D. in 1891, having served as medical interne in the Boston City Hospital, and the following year was assistant to the superintendent. He began independent practice in Roxbury immediately after leaving the hospital, continuing there until 1902, when he moved to Boston, where he worked until incapacitated.

Although deeply interested in, and loyal to his patients, Dr. Withington enjoyed the study of the deeper problems of his profession, and took keen interest in the critical review of medical literature. Immediately after entering upon practice, he joined the editorial staff of the "Boston Medical and Surgical Journal." His reviews, editorials and other contributions were not only logical and scientific, but permeated with an individuality which lent an added charm. His more notable contributions were entitled: "Consanguineous Marriages, Their Effect upon Offspring." (Transactions Massachusetts Medical Society, 1885), "The Relations of Hospitals to Medical Education" (Boylston Prize Essay), "An Inquiry into the Transmission of Contagious Diseases through the Medium of Rags" (Report Massachusetts Board of Health, 1887) and several articles in Wood's Handbook of the Medical Sciences (1886-8).

In 1891, desiring to study bacteriology, he went abroad, and later being joined by his family, the winter of 1892-3 was spent largely in Berlin, where he matriculated in the University. The following year he was made instructor in clinical medicine at the Harvard Medical School, retaining this office until he resigned in 1905. In 1912 he was appointed lecturer in the Graduate School of Medicine. Early in his practice, he served as physician to the Out-Patient Department at the City Hospital, securing the appointment on the visiting staff in 1892, which he held until 1915, when he was appointed consulting physician. An interesting fact may be noted in calling attention to the first use of diphtheria antitoxin in the Boston City Hospital, which was in his service, on December 12, 1894. (See "Boston Medical and Surgical Journal," cxxxii, No. 11, pp. 249-260.)

In 1898 he was elected a member of the

Association of American Physicians. Several of his contributions appear in the transactions of this society. Dr. Withington was consulting physician to the Boston Insane Hospital, to the New England Hospital for Women and Children and to the Choate Memorial Hospital. These honors and activities, as here outlined, would seem to have made up a life of unusual usefulness, but through all these years there was continuous devotion to an organization in which Dr. Withington found opportunity for service, which led eventually to his being elected president of the Massachusetts Medical Society (1914-15 and 1915-16). Beginning as a censor of the Norfolk District Society in 1892 he, together with his associates, formulated a plan for the uniform examination of candidates for fellowship, becoming supervisor under this scheme. Later, he was chosen councillor from the Norfolk District in 1896-97-98, and vice-president of this district in 1900-01. He was elected president of this same district in 1902. This honor he could not accept because it came just as he was about to remove his home in a suburb out of the district into Boston proper, in another district. From 1908 to 1914, Dr. Withington served the State Society as member of the Committee on State and National Legislation, being the secretary and executive officer for several years. His associates will always remember the valuable services rendered the society and the state, for he carefully and diligently studied all matters of a public health nature. He was quick to detect merit or error in bills presented, and sacrificed valuable time in attending hearings and disseminating information. Although frequently obliged to antagonize the efforts of those opposed to public health and medical interests, he had the rare ability of presenting facts in a logical manner, free from personal bias. He always secured a respectful hearing. He represented the state society in the National Legislative Council of the American Medical Association in Chicago in 1912-13-14, where he reported the conditions in Massachusetts.

On September 20, 1893, he married Georgianna Bowen. Of this union there were born four sons and a daughter. One son died in infancy. It is interesting to note that the father's life inspired one son, Paul Richmond, with the desire to practice medicine.

WALTER P. BOWERS.

WITT, Christopher (1675-1765), or DeWitt, as he is occasionally named, mystic, botanist, of Germantown, Pa., was born in Wiltshire, England, in the year 1675; he emigrated to America in the year 1704 and joined the theosophical colonists on the Wissahickon. He was then in his twenty-ninth year, and in addition to being a thorough naturalist and skilled physician, was well versed in the mystic sciences and in astronomy. He was esteemed highly by his fellow-mystics; his services as a physician were constantly called into requisition. Shortly after the death of Kelpius, Dr. Witt, together with Daniel Geissler, moved to a small house in Germantown upon the land owned by Christian Warmer, who, with his family, looked after the welfare of their tenants. Dr. Witt was a good botanist, and upon moving to Germantown, he started a large garden for his own profit and amusement. It was probably the first botanical garden in America, antedating Bartram's celebrated garden by twenty years. Dr. Witt corresponded for many years with Peter Collinson, of London, whose letters to some of the leading men in the province mention the high esteem and regard in which Dr. Witt was held by the English naturalist. In later years there was a friendly intercourse between Dr. Witt and John Bartram (q. v.).

Besides being an excellent botanist, Dr. Witt was an ingenious mechanic, constructing the first clocks made in Pennsylvania, and probably in America. He was an artist and a musician, possessing a large pipe organ said to have been made by his own hands. He also practiced horoscopy and would cast nativities using the hazel rod in his divination.

When the Doctor was eighty years old his eyesight failed him, resulting finally in blindness. His slave, Robert, carefully looked after his wants until his death in the latter part of January, 1765, at the age of ninety. He was buried in the Warmer burial-ground in Germantown. This spot became known as Spook Hill, as tales were told which have survived to the present time, how upon the night following the burial of the old mystic, spectral flames were seen dancing around his grave.

JOHN W. HARSHBERGER.

WITTHAUS, Rudolph August (1846-1915), toxicologist and expert in legal medicine, was born in New York City, August 30, 1846,

the son of Rudolph A. and Marie A. Dunbar Witthaus, he received the degree of Bachelor of Arts at Columbia University in 1867, and the Master of Arts at the same institution in 1870. Proceeding to Paris, he studied at the Sorbonne and Collége de France in 1873-74, and, returning to New York, received the degree of Doctor of Medicine in 1875 from New York University Medical College. Dr. Witthaus was associate professor of chemistry and physics at the New York University from 1876-78, professor of chemistry and toxicology at the University of Vermont from 1878 to 1898, professor of physiological chemistry at the University Medical College (New York) from 1882 to 1886, of chemistry and physics at the same institution from 1886 to 1898, professor of chemistry and toxicology at the University of Buffalo from 1882 to 1888, professor of chemistry and physics at the Cornell University Medical College from 1898 to 1911, and professor emeritus at the same institution from 1911 until his death. Dr. Witthaus was a member of the Chemical Societies of Paris and Berlin and a fellow of the American Academy of Arts and Sciences. He was called as expert witness in a very large number of poisoning cases, notably in the cases of Carlyle Harris, Buchanan, Mayer, Fleming, and Molineux.

Dr. Witthaus wrote a large number of toxicologic articles, the most important of which were on poisoning by hydrocyanic acid, oxalic acid, opium and strychnine, and on ptomaines (in Wood's "Handbook of the Medical Sciences"). Others were: "On Homicide by Morphine," "The Detection of Quinine," "The Post-Mortem Imbibition of Poisons," "Researches of the Loomis Laboratory." He was also author of the following books: "Essentials of Chemistry" (1879); "General Medical Chemistry," 1861, (in Wood's "Library of Standard Medical Authors"); "Manual of Chemistry" (1879, 6th ed. 1908); "Laboratory Guide in Urinalysis and Toxicology" (1886). The crowning achievement of his life, however was the colossal "Witthaus and Becker's Medical Jurisprudence, Forensic Medicine, and Toxicology" (1894, 4 vols.), of which he was editor-in-chief, and to which he contributed the introduction and the entire fourth volume. A second edition of this work appeared in 1906.

He was a man of undersize, lean until late in life, of a sandy complexion, blue-gray eyes and very light, reddish-brown hair. He wore a mustache and rather long side whiskers until past middle age, when he wore the mustache alone. He was a man of quiet, unobtrusive manner, but inclined, at times, to be irascible. His views about religion were very cynical. He married in 1883 or 1884 a widow by the name of Ranney. He was not a man of many friends, but his friendship won was a matter to be appreciated. His life was dedicated, almost wholly, to his professional calling. He died in New York City, December 20, 1915.

THOMAS HALL SHASTID.

WOLCOTT, Alexander (1790-1830), Indian agent and first resident physician at Chicago, was born at East Windsor, Connecticut, February 14, 1790. The ancestor of the Wolcott family in America was the Honorable Henry Wolcott who came from Tolland, England, about 1638. The father of Alexander Wolcott was also named Alexander Wolcott, an attorney of Windsor, Connecticut, who was a graduate of Yale and a distinguished lawyer. He removed to Middletown, Connecticut, where he was collector of the port through the administrations of Jefferson, Madison, Monroe and John Quincy Adams. He was a member of the constitutional convention of 1818. The grandfather of Dr. Wolcott had been a physician of prominence in Windsor, chairman of the committee that examined applicants for the post of surgeon, or surgeon's mate. Before and since his time, many Wolcotts have been members of the medical profession. One, who became well known to the profession in Chicago, was Dr. Erastus Bradley Wolcott (q. v.), who settled in Milwaukee in 1839, regent of the Wisconsin State University and surgeon-general of Wisconsin.

Alexander Wolcott was graduated from Yale in 1809, studied medicine with Nathan Smith (q. v.) in Hanover, New Hampshire, and in March, 1812, enlisted in the army of the United States as surgeon's mate and in April, 1816, was promoted to the rank of post surgeon. He resigned from the army in 1817 and in 1818, President Monroe appointed him Indian agent to the Lakes (Chicago). Governor Cass, territorial governor of Michigan, was superintendent of the northern division of Indian tribes that comprised the entire northwest. This brought the doctor and governor into close personal relations. In 1819 John C. Calhoun, the Secretary of War, arranged with Governor Cass to organize an expedition to explore the upper lakes region and find the source of the Mississippi River.

The expedition set out from Detroit on the first of May, 1820, in boats constructed by Indians and rowed with oars by soldiers from the garrison at Detroit and Indian helpers. Henry Schoolcraft of New York was sent by the government as mineralogist and Dr. Wolcott as physician, to the expedition. Owing to the large size of their boats, the shallow water of the Mississippi prevented proceeding above the lake, which Mr. Schoolcraft named Lake Cass, and from which they turned back. Four months were consumed in making the journey, visiting Indian tribes and getting back to Detroit. Mr. Schoolcraft, in his report, speaks of Dr. Wolcott as a gentleman commanding respect by his manners, judgment and intelligence. Twelve years later, in 1832, Dr. Douglas Houghton (q. v.), of Detroit, accompanied a second expedition, organized by Mr. Schoolcraft, to finish this work. They succeeded in reaching the source of the river, which they found to be about 180 miles above Lake Cass. Thus Wolcott and Houghton had the honor of connecting the medical profession with the discovery of the source of the Mississippi River.

On August 29, 1821 one of the last great Indian treaties was held at Chicago. Dr. Wolcott was one of the signers with Governor Cass and the United States Indian Commissioners. Henry Schoolcraft, who attended and acted as secretary, attributed to Dr. Wolcott's advice to Governor Cass the acquirement, for a trifling sum of millions of acres of Michigan lands. In 1823 the garrison was withdrawn from Fort Dearborn and the fort and property left in charge of Dr. Wolcott until it was again garrisoned in 1828. In these early days the settlement of Chicago consisted of a few families clustered about Fort Dearborn; one family which had settled there as early as 1804, was that of John and Eleanor Kinzie, whose eldest daughter, Ellen Marion, the first white child born in Chicago, Dr. Wolcott married on July 20, 1823. As there was no one in Chicago legally authorized to perform a marriage, a Justice of the Peace, who was on his way from Green Bay, Wisconsin, to his home in Peoria, was called on for the ceremony.

Shortly before his death Dr. Wolcott purchased at the sale of canal lands, a number of town lots and eighty acres. The latter, years later, became "Wolcott's addition to the city." For many years North State Street bore the name of Wolcott Street. Dr. Wolcott died October 25, 1830, and was buried near the fort. In 1865 Mrs. John H. Kinzie had the remains of Dr. Wolcott and his two children removed to her lot in Graceland Cemetery.

FRANK D. DUSOUCHET.

WOLCOTT, Erastus Bradley (1804-1880), pioneer physician of Milwaukee, Wis., was born in Benton, Yates County, New York, October 18, 1804. His father, Elisha Wolcott, having removed to that section from Salisbury, Connecticut, in 1795. The first of the family in this country was Henry, second son of John Wolcott, of Galdon Manor, Tolland, Somersetshire, England, who came to Massachusetts in 1630 and to Connecticut in 1638, where his descendants made the name historic, it having been borne by officers of the colonial army, by deputies, senators, by several governors of the State, by the secretary of the treasury under Washington, and by a signer of the Declaration of Independence. Erastus Wolcott began his medical training under Dr. Joshua Lee, practitioner of the time. After three years of study and practical experience with Dr. Lee, in Ontario, the Medical Society of Yates County licensed him as a practicing physician in 1825. To obtain means for further study he accepted a position as surgeon with a mining company in North Carolina, practicing there and in Charleston, South Carolina, until 1830. Returning to New York State he entered the College of Physicians and Surgeons at Fairfield and, completing the course with distinction, especially in anatomy, received his M. D. and was urged by professors to settle in New York City; however, wishing to see the Western country, he entered the United States Army as surgeon in 1836, and after accompanying the command removing the Cherokees west of the Mississippi, he was ordered to Fort Mackinac, where he met and married Elizabeth J. Dousman. Resigning in 1839, he settled in Milwaukee where his practice became so exacting as to leave him no time for writing nor even for reporting his own cases. The illiberal rules of the medical societies of that day excluded Dr. Wolcott from membership because he would extend his surgical and consultation aid to homeopathic physicians. In 1850 he was appointed regent of the State University. From 1860 until his death he was surgeon-general of Wisconsin, organizing medical service for the state, selecting and nominating all the surgeons. With a staff of assistants he was

sent to the field whenever any number of Wisconsin regiments became engaged.

His boyhood in country life made him an athlete of unusual proficiency, and developed unfailing physical stamina. He was an expert shot with rifle and gun, and could use a sling with the accuracy of aim of a David. His hands were models of nervous energy and accuracy of touch, the left hand being almost equal in dexterity to the right. Clark Mills, the sculptor, took a cast of the head of Dr. Wolcott in Washington and stated that it was the only one in his collection of five hundred that measured mathematically the same on both sides.

Although he never reported his work, to him is due the credit of having performed an early nephrectomy, which was recorded by C. L. Stoddard in the "Philadelphia Medical Reporter" (1861-62, vol. vii, p. 126). His surgical activities were fostered by his accurate knowledge of anatomy, his nerve, clear judgment and great deftness. Working as he did in pre-antiseptic days he was aided by his own scrupulous cleanliness of hands and instruments and by the comparative freedom from bacteria of a newly settled community.

He was tall and straight as an arrow and an accompliished horseman. His physical perfection, his gentleness, generosity and unfailing courtesy, with his professional attainments, made him a prominent figure in the community and his death was felt as a great public loss.

Married in 1836, his wife died in 1860, having lost three children in infancy and leaving two. In 1869 Dr. Wolcott married a second wife, Laura J. Ross, M. D., one of the earliest women graduates.

Dr. Wolcott died January 5, 1880, of pneumonia after an illness of five days, the result of prolonged exposure to very severe cold.

MARION WOLCOTT YATES.

WOLCOTT, Oliver (1726-1797), governor of Connecticut and signer of the Declaration of Independence, was born of a heroic, patriotic family November 26, 1774, in Windsor, Connecticut, the son of Roger Wolcott, who had been governor of Connecticut and second in command to Sir William Pepperell in the famous expedition which took Louisburg from the French. His elder brother was a brigadier-general in the Revolution and later supreme court judge in Connecticut. Oliver graduated from Yale College in 1747, and was at once appointed captain of a company of colonial soldiers in the war between the French and the English. He studied medicine with his brother Alexander, a physician. In 1751 he was made sheriff of Litchfield County and so entered his political career, becoming in course, member of the council, judge of the court of common pleas, and judge of probate in the district of Litchfield. He also rose to the rank of major-general in the state militia. In July, 1775, he was appointed by the Continental Congress a commissioner, to obtain the adherence, or if possible, the neutrality, of the Iroquois Indians, but failed.

After the riot in Bowling Green, New York, in 1770, in which the lead statue of George the Third was overthrown, the statue was converted into rebel bullets in Wolcott's house in Litchfield for use against His Majesty's soldiers. In 1776, as a member of the Continental Congress, he signed the Declaration of Independence. In 1777 he was active in raising troops for the Continental Army and commanded a militia brigade in the battle of Saratoga. In 1780 he was reelected and remained a member of Congress until 1784. In 1796 he was elected governor of the State of Connecticut.

He died in Litchfield, December 8, 1797, universally respected for his great ability and integrity. His son, Oliver, Jr., succeeded Alexander Hamilton as Secretary of the Treasury.

HOWARD A. KELLY.

WOOD, Edward Stickney (1846-1905), chemist, teacher, toxicologist and medico-legal expert, of Cambridge, Massachusetts, was born in that city, April 28, 1846, the second son of Alfred Wood, of Wood and Hall, grocers, and Laura Wood, born Stickney, who came of old New England stock. He was, in fact, a descendant of William Wood, who came from England in 1638, and of William Stickney, who came somewhat later. He received the degree of Bachelor of Arts at Harvard College in 1867, and the medical degree at Harvard Medical School in 1871, though he had completed his medical studies at Harvard the year before. During his course at Harvard, he was house officer in the Marine Hospital at Chelsea, and surgical house pupil in the Massachusetts General Hospital. In 1872 he spent six months in chemical laboratories at Berlin and Vienna, and, on returning to Cambridge, was made

adjunct professor of chemistry, the full professor being James C. White (q. v.). In 1876 Dr. Wood was himself elected to the full professorship—a position which he held untill his death.

As a teacher Dr. Wood was quite remarkable. Thus an anonymous writer in the "Boston Medical and Surgical Journal" (vol. 153, p. 126) says of him: "He had the rare faculty of making a subject, dry by comparison with others, such as surgery, which is capable of more brilliant demonstration, attractive by his method of teaching, resembling in this respect his warm personal friend, the late Oliver Wendell Holmes (q. v.). He won not only the respect of his students but also their affection, and none will regret his death more than those who have had the rare privilege of having received his instruction. He was most just to all his pupils, and, while he insisted on every man's having a sufficient knowledge of the subject before he could receive his degree, he at the same time exercised a wise and beneficent judgment on the work of each individual man, and he must have been a dull person indeed who, after listening to Professor Wood's instruction, was unable to meet the requirement of the examination paper. His success as a teacher, as well as an expert, was in large measure due to a characteristic manifest even in his earliest years as a student himself. It would probably be extravagant to say that Dr. Wood was a genius, but he had that which counts for more than genius in the long run, a tremendous capacity for work and an infinite power of application, an unremitting insistence on taking pains. He never attacked a subject which he did not master thoroughly. What he knew he "knew". This same thing he endeavored to instill into the minds of his pupils, and there are many now who have achieved success in their profession because of having followed his example. As a member of the faculty he was invaluable, and the president of the university held him in the highest regard and relied largely on his advice. He always had the warmest interest in the welfare of the school and was a valuable friend and advisor to its dean. Enthusiastic, but still conservative, his counsel will be sadly missed in the future."

As a medical expert Dr. Wood is also said to have been without an equal. Cool, calm, clear-headed, ever impartial and absolutely just, both judge and jury felt that they could rely implicitly on Dr. Wood. Under cross-examination he was simply imperturbable—rare quality indeed in either a common witness or an expert. In almost all the important murder cases of New England Dr. Wood was an expert witness, and many were the verdicts which were rendered on the basis of his honesty and skill. He was a fellow of the American Academy of Arts and Sciences, a member of the American Public Health Association, the Massachusetts Medical Society, the Boston Society for Medical Improvement, the American Pharmaceutical Association, and the Massachusetts Medico-Legal Society. He was also a member of the committee for the revision of the Pharmacopoeia in 1880, and chemist to the Massachusetts General Hospital from 1873 until his death.

Among the more important articles by Dr. Wood are the following: "Report on the Sanitary Qualities of the Sudbury, Mystic, Shawsheen, and Charles River Waters" (1874); "Arsenic as a Domestic Poison" (Massachusetts Board of Health Report, 1885); "Examination of Blood and Other Stains," and "Examination of Hair" (Witthaus and Becker's "Medical Jurisprudence, Forensic Medicine, and Toxicology," 1894). The Doctor also translated with Dr. E. G. Cutler Neubauer and Vogel's "Analysis of Urine" (1879) and revised, with R. Amory (q. v.), vol. ii of Wharton and Stillé's "Medical Jurisprudence" (1884) on poisons.

Concerning Dr. Wood as a man, we quote the following from the anonymous writer above referred to: "To those who knew him best, who had the privilege of his close acquaintance, if not intimate friendship, the thing which will hold him longest and best will be his charming personality. Whose greeting so cordial, and so gracious? Dr. Wood was essentially a democrat in the best sense of the word. It was this that made him so universally popular, in no cheap sense but in the sense that the man he honored with his friendship, whatever his walk in life, if he rang true, was sure of kindly recognition. He seemed to be fully in touch with Burns when he wrote 'A man's a man for a' that.' While in Europe he acquired a liking for many of the customs of the German fatherland, which induced him after his return to become a member of the Orpheus Verein, of which he was a most respected and beloved member. Here he was always at home, and it was characteristic of the man that he was as equally at ease, equally happy, 'rubbing a salamander' at the Orpheus as at the council table of Harvard. With artist and artizan, mechanic or musician, professor or publicist, Dr. Wood

was always on the same plane, equally happy, equally admired and admiring. It is to be doubted if he had an enemy in the world, and although such a condition generally predicates a nonentity it may be safely affirmed that if he had an enemy that man's enmity was a compliment."

Dr. Wood married, December 26, 1876, Irene E. Hills. Of the union was born his only child, Grace, the wife of Dr. Frederick M. Briggs, professor of surgery at the Tufts College Medical School. The wife soon died, but the Doctor continued to reside at Cambridge until his daughter's marriage, when he removed to Pocasset. On December 24, 1883, he married Miss Elizabeth Richardson. He died at Pocasset, of cancer of the cecum, July 11, 1905.

THOMAS HALL SHASTID.

WOOD, George Bacon (1797-1879). Seen through the eyes of his generous biographer, Dr. S. D. Gross, (q. v.), George Bacon Wood of Philadelphia, author of the United States Dispensatory, is known as a rather uncommon man, a puzzle to the ordinary mortal, a delight to his intellectual equals. Dignified, somewhat formal, loving books and science more than society, giving loyally of his substance to men and institutions in need.

His family came from Bristol, England, in 1682 and George was born in Greenwich, a small village in New Jersey, March 12, 1797. His father, a prosperous farmer, was able to give him a good education. He studied medicine under Joseph Parrish (q. v.) and when made professor of materia medica and pharmacy at the University of Pennsylvania he characteristically spared nothing that would make the teaching of his master clearer. A large conservatory in his garden furnished medicinal plants, native and exotic, and he spent $20,000 on diagrams, casts and models. Such efforts to instruct had never been known before in this country. In the University of Pennsylvania he established, at an expense of $50,000, what is known as the auxiliary department for instruction in botany, chemistry, geology, mineralogy and zoology. To the College of Physicians he gave his library and $15,000. Though adding nothing new to our knowledge of the nature and treatment of disease, he wrote and taught with such fidelity, such scrupulous exactness, with such reprimanding of slovenly work and recognition of effort, that hundreds of students incurred a debt of gratitude. He was one of the most voluminous medical writers of the age. The first edition of his big "Dispensatory," written with Franklin Bache (q. v.), appeared in 1833, and he lived to revise the fourteenth edition with the assistance of his nephew. His other two large works mentioned at the end of this sketch both reached many editions, his "Practice of Medicine" being largely used as a textbook in some of the English and Scotch schools. Most of his writing was done in the small hours, he often working till four in the morning.

For some months before his death he was unable to leave his bed. He died at his house in Arch Street, March 30, 1879, aged eighty-two, his wife having died twelve years before. They had no children. Among his published works are: "The Dispensatory of the United States," written in conjunction with Dr. Franklin Bache (1833); "A Treatise on the Practice of Medicine" (1847); "A Treatise on Therapeutics and Pharmacology" (1856); "History of the Pennsylvania Hospital;" "History of the University of Pennsylvania;" "History of Christianity in India."

He was A. B., University of Pennsylvania, 1815 and M. D., 1818; LL. D., Princeton, 1858; professor of chemistry in the Philadelphia School of Pharmacy from 1822-1831; of materia medica from 1831-35; professor of the same in the University of Pennsylvania, 1835-1850; of the theory and practice of medicine at the same, 1835-59; president of the College of Physicians of Philadelphia for thirty-four years; president of the American Medical Association.

DAVINA WATERSON.

WOOD, Horatio Curtis (1841-1920), Philadelphia therapeutist, of the ninth generation from the English Quakers who came over with William Penn, was born January 13, 1841, in Philadelphia; his mother's father, John Bacon, was treasurer of Philadelphia for thirteen years, and his father, of the same name, was a well known business man. His early education was received in various Quaker schools. As a lad of fourteen, he haunted the Academy of Natural Sciences and at nineteen published his first scientific paper "Contributions to the Carboniferous Flora of the United States"; within the next few years two further essays on the same subject appeared. These studies continued until 1873 and resulted in numerous papers,

especially on cell botany, the most important of which is "The Fresh Water Algae of North America," 1872, with three hundred and sixty original microscopic drawings. He also made some fourteen contributions to entomology. His handbook on "The Myriapoda of the United States," 1865, attracted the attention of Agassiz (q. v.), who placed his collection of myriapoda at Wood's disposal. An assiduous collector, Wood made two expeditions for the Smithsonian Institute, one to the Bahamas and the other along the valley of the Tornellias River, across the American desert to the Chisos Mountains, and down the Rio Grande into the Mexican desert. During 1866-76, he filled the chair of botany in the Auxiliary Faculty of Medicine in the University of Pennsylvania endowed by his uncle, George B. Wood (q. v.). From the Friends' Select School of Philadelphia, he entered the medical school of the University of Pennsylvania and graduated in 1862. After an internship in the Pennsylvania and Philadelphia General (Blockley) Hospitals, he enlisted in the medical corps of the army for the duration of the Civil War, serving in a front line hospital in Virginia. Returning, he settled in Philadelphia and became quizmaster in the practice of medicine, therapeutics, and chemistry at his alma mater until 1873 when he became lecturer on nervous diseases. From 1875 until 1902 he was clinical professor of nervous diseases, writing over sixty papers on neurology and two books, "Nervous Diseases and their Diagnosis," 1887, and "Syphilis of the Nervous System," 1889, and twelve on medical jurisprudence and toxicology. Dr. Wood was an expert medical witness, clear and quick. In 1876, he was made professor of materia medica and pharmacology, to which title was added that of professor of general therapeutics in 1877. A brilliant lecturer and forceful teacher, he performed his duties with distinguished ability until protracted ill health brought about his appointment as professor emeritus in 1907.

The results of his investigation on sunstroke, carried out in the yard and greenhouses of his Uncle George by apparatus of his own design were embodied in "Thermic Fever of Sunstroke," which took the Boylston prize of 1872, and his suggestion that "Thermic fever" supplant "sunstroke" was adopted at once. Aided by a grant of $1,000 from the Smithsonian Institution, he devoted his spare time during the next eight years to this problem which he considered one of the most important of his life and revolutionized the then accepted theories of the treatment of fever. His famous address on the "Accidents of Anesthesia" delivered before the XII International Congress of Medicine in Berlin in 1890 won world wide appreciation. His work in physiology and pharmacology reached its apex in 1874 in "A Treatise on Therapeutics, Comprising Materia Medica and Toxicology, with Especial Reference to the Application of the Physiological Action of Drugs to Clinical Medicine," which passed through thirteen editions, the later ones in collaboration with his son, Horatio Charles, Jr. More than any single volume, this book helped to lay the foundation of our present system of therapeutics, previously based almost entirely on empiricism or clinical experience, and established him a pioneer pharmacologist of our country. Others of his writings are, "Brainwork and Overwork," 1880, and "The Practice of Medicine." His insistence was largely responsible for the adoption of a three years' course in medicine by the University of Pennsylvania. In 1889, when he received his LL. D. from Yale, his lecture was a plea for suitable legislation in medicine. He was untiring in his efforts to raise the necessary money to erect the University Hospital in 1874 for the better practical instruction of the medical students. He was editor of "New Remedies," 1870-1873, "Philadelphia Medical Times," 1873-1880, "Therapeutic Gazette," 1884-1890, and the "Dispensatory of the United States of America."

Wood was president of the Pharmacopoeial Convention of the United States from 1890 to 1910, of the Philadelphia Neurological Society in 1890-1901, and of the College of Physicians of Philadelphia during 1902-1903. In addition to the LL. D. of Yale, Lafayette honored him in 1883 and the University of Pennsylvania in 1904.

On May 10, 1866, Dr. Wood married Elizabeth, daughter of James Longacre, chief coiner of the Philadelphia mint. Of their three sons, two have attained success in the profession of their father. After a prolonged, painful illness, he died January 3, 1920, "in the hope and faith that the sacrifice of Christ and the mercy of the Lord would bring me to Beatitude."

As a teacher, he was clear, captivating, and convincing; as a lecturer, forceful and fluent; as a writer, unusual in diction; as an investigator, indefatigable, original in conceptions, and ingenious in technic; as a diag-

nostician, quick in perception, swift in analysis, prompt in conclusions; as a man and physician, highly respected. He was vigorous, sincere, high thinking, deep feeling; though at times brusque, he was always considerate and thoughtful of others; by nature, he was deeply religious.

Horatio Charles, was born February 26, 1874; graduated from the medical department of the University of Pennsylvania in 1896; and now holds the chair of pharmacology and therapeutics at his alma mater. He edited the 20th edition of the United States Dispensatory, 1907, and is the author of "A Textbook of Pharmacology," 1912. On December 19, 1899, he married Alice L. Lovell, of Huntingdon, Pennsylvania.

GEORGE E. DE SCHWEINITZ.

WOOD, Isaac (1793-1868), pioneer physician of New York City. Isaac Wood's father, Samuel Wood, came to New York in 1803 with his wife, Mary Learing, and ten children and opened a bookstore. Three more children were born in New York, Isaac being the fourth son and sixth child of the original ten. Four of his brothers helped the father enlarge the business into a publishing house and printed the American edition of the "Medico-Chirurgical Journal" and the "Medical Record," the firm becoming in time William Wood & Company.

Isaac was born in Clinton, Dutchess County, New York State, August 21, 1793, and attended various schools, getting his classics from a Scotch minister. There is no mention of his going to college, but he studied medicine with Valentine Seaman (q. v.) and was licensed to practice by the New York State Medical Society in 1815. The medical apprentice in those days had plenty to do, and Isaac, besides cleaning the consulting rooms and collecting bills, had to compound medicines and find time for study. He used to sit up till two or three in the morning studying, and studying with special zeal after he had had success as a "resurrectionist." One night he went out with two other students and having secured a body from the cemetery tied its hands and feet together and fastening it (a small subject) round his neck so as to be suspended in front, threw a large cloak over all and walked down Broadway at night, locking arms with his two friends and passing within three yards of the night watchman who looked upon them and their singing as the pranks of gay youths returning from a party. On two occasions he was forced to flee the city, having been betrayed by his colored assistant. So eager was Wood to study each dissection when he was house surgeon at the New York Hospital that he would often go without food all day and scale the hospital gate at 4 a. m. to study with his colleague Dr. J. C. Bliss. He received his M. D. in 1816 from Rutgers' College, New Jersey, his thesis being "Carditis and Pericarditis." When in 1832, the cholera broke out in New York, Dr. Wood predicted its ravages at Bellevue Hospital and, in confirmation of his apprehension, out of 2,000 inmates 600 died. Wood, at that time resident physician, was himself one of the first to fall ill; the dead and the dying were often in the same room and coffins could not be made fast enough.

While visiting surgeon at Bellevue, Wood performed nearly all the surgical operations that were done at that time. It is generally conceded that he was the first to remove the ends of the bone in lacerated injury of the elbow-joint. His first case succeeded so well that the patient could use his arm during ordinary labor, not having lost the power of flexion. He had a high reputation as an ophthalmic surgeon, and was for twenty-five years an active manager of the New York Institution for the Blind.

When there was talk of founding a New York Academy of Medicine, Wood entered with great zeal into its organization and was twice its president and, among other appointments, he was consulting physician to the New York Dispensary and Bellevue Hospital; consulting surgeon to the New York Ophthalmic Hospital; member of the American Geograpical Society and fellow of the College of Physicians and Surgeons.

Dr. Wood married three times and had four children.

He died at Norwalk, Connecticut, March, 25, 1868.

WOOD, James Rushmore (1813-1882), surgeon of New York City. The sports of the boy often determine the vocation of the man, and James Wood industriously preparing skeletons of fishes and birds to stock a boy's "museum" at his aunt's farm is seen afterwards as one of America's great surgeons and the childish collection grew into the "Wood Museum" of Bellevue Hospital. His father, Elkanah Wood, was a miller, who, with his wife, Mary Rushmore, were Quak-

ers and when they moved from Mamaroneck to New York City to set up a leather store, James, their only child, born September 14, 1813, at Mamaroneck, spent his summers with his aunt at Half Hollow Hills on Long Island, his health being delicate. In the winter he went to a small Quaker school, and from there to study medicine with twelve other boys under Dr. David L. Rogers. His first course of lectures was at the College of Physicians and Surgeons, New York, and in 1834 he graduated at Castleton, Vermont, soon after this being appointed demonstrator of anatomy and beginning private practice in New York in 1837. As a hospital surgeon Dr. Wood had a most enviable reputation. He was a beautiful, quick and sure operator, and was ambidextrous. He gave indefatigable care to his patients and never spared himself. In the study of the periosteal reproduction of bone he had an international reputation. The president of the German Congress of Surgeons invited him to send to Berlin some specimens of bone reproduction for exhibition with similar specimens. Langenbeck greatly admired a regenerated lower jaw and said he did not believe another specimen existed. In nerve surgery Wood was equally successful, his best operation, performed four times consecutively with ultimate cure, was the removal of Meckel's ganglion with the superior maxillary division of the trigeminus for the relief of tic douloureux. He was the first in America (1840) to divide the masseter muscles and, as far as his biographer was aware, the first to devise division of the peronei muscles in chronic dislocation of the tendon and to treat acute and chronic inflammations of the knee joint by division of the ham strings and tendo Achillis. He had in his collection six fine specimens of osseous union between the femur and the tibia after resection. Report also gives him the credit of being one of the first to cure aneurysm by digital pressure, and he tied the external iliac for aneurysm eight times in succession, with only one failure.

Early in his career he planned for the creation of Bellevue Hospital out of the almshouse, and with Dr. Parker and Dr. Metcalf brought about its foundation and became with them its medical board. His interest in the institution was for a lifetime. In 1856 he helped found the Bellevue Hospital Medical College, growing out of the hospital, and was at once appointed professor of operative surgery and surgical pathology. With Dr. Parker, Dr. Payne and Dr. Mason he had much to do with the Act which granted for anatomical teaching "the bodies of all vagrants dying unclaimed." His work also on behalf of the Bellevue Hospital Training School for Nurses did a great deal to advance the interests of the school.

His literary contributions, though not numerous were all of value, and included: "Strangulated Hernia," 1845; "Spontaneous Dislocation of the Head of the Femur into the Ischiatic Notch During Morbus Coxarius," 1847; "Ligature of the External Iliac Artery Followed by Secondary Hemorrhage," 1856; "Phosphorus-necrosis of the Lower Jaw," 1856; "Early History of Ligation of the Primitive Carotid," 1857.

Dr. Wood was twice president of the New York Pathological Society; member of the New York Academy of Medicine, honorary member New York and Massachusetts State Medical Societies.

He married in 1853, Emma, daughter of Mr. James Rowe, of New York, and had one son and two daughters besides a child who died in infancy.

Death came in the heyday of a full professional life when almost half a century had left untouched his health and skill. As an instructor he brought clinical and didactic information together in fruitful union; tradition will preserve his skill at the operating table, and his contributions to surgical science are permanent. He died in New York May 4, 1882.

WOOD, Thomas (1813-1880), professor in the Medical College of Ohio, editor of the "Western Lancet," was born in Smithfield, Jefferson County, Ohio, August 22, 1813, the son of Nathan and Margaret Wood, and the youngest of five children. The family for three generations were natives and inhabitants of West Chester, Pennsylvania, his great-grandparents having been born there in 1750. The family were Quakers. Dr. Wood's father was a farmer in very moderate circumstances, so that the boy's early education was an exceedingly limited one; he seems, however, to have obtained, through his own exertions, good schooling. In 1835 he began to study medicine with Dr. W. S. Bates, of Smithfield. In June, 1838, he went to Philadelphia, preparatory to entering the University of Pennsylvania. His letters home show that in this he suffered many privations, and the answers indicate many doubts as to the wisdom of the undertaking, but the

lad went steadily on his way. In April, 1839, he received his diploma, and immediately an appointment in the Friends' Asylum for the Insane, near Philadelphia. There he remained three years. In 1842, he returned to Smithfield, and began practice, but in 1844 went to Europe and on his return in 1845 settled in Cincinnati, and began a career which certainly justified all his former privations and longings. The Ohio College of Dental Surgery was chartered January 21, 1845, but did not begin operations until November, 1846. Dr. Wood was professor of anatomy and physiology there, a position he held for a number of years.

Among his appointments he was demonstrator of anatomy in the Medical College of Ohio, 1853; professor of anatomy; professor of surgical anatomy; editor and owner of the "Western Lancet," in connection with Dr. L. M. Lawson, from 1853 to 1857; on the staff of the Commercial (now Cincinnati) Hospital from August 15, 1861, to March 15, 1867; and again in 1870 and 1871, a member of the Academy of Medicine of Cincinnati.

Dr. Wood was a versatile genius; in 1839, before he graduated in medicine, he invented an instrument designed to facilitate the calculation of areas, which received the highest praise from a committee appointed by the Franklin Institute of Philadelphia. It was called the "Arealite." At the same time he presented to the same body a fountain pen, which was likewise highly commended. Subsequently he invented an instrument for determining the length of lines, and to find the horizontal of a line when it ascends or descends a hill. This was called "The Lineal Mensurator." A patent was granted July 22, 1839. In an old scrap-book of the doctor's is a drawing of a balloon which could be driven in any direction. For many years the doctor kept a scrap-book, in which are found a great number of poems, some of considerable merit, none of which were ever published.

Dr. Wood married, March 14, 1843, Emily A. Miller, at Mount Pleasant, Jefferson County, Ohio, and had two children, Edwin Miller, born January 30, 1844, who became a doctor. A second son, Samuel S., died in infancy. In 1855 he again married, this time Elizabeth J. Reiff, of Philadelphia, and had six children. Charles Reiff Wood, born May 9, 1857, became a doctor, but died in 1891. Mrs. Wood died July 27, 1871, and Dr. Wood, undaunted, made a third venture with Carrie C. Fels, of Cincinnati, on July 27, 1876, but had no children.

Dr. Wood died November 21, 1880, in Cincinnati, from blood-poisoning acquired while treating some of the injured in a railroad collision, October 20, 1880.

ALEXANDER G. DRURY.

WOOD, Thomas Fanning (1841-1892), medical editor, botanist and organizer of a state board of health, was born in Wilmington, North Carolina, February 23, 1841. His parents, Robert and Mary A. Wood, were from Nantucket, Massachusetts. He received a high school education in Wilmington and then went to work in a drugstore, where he mastered all that was then known of drugs, and at different times he became the private pupil of the chief physicians of the town. At the beginning of the Civil War he volunteered and was a private in the 18th North Carolina Infantry; he then served as hospital steward under Otis F. Manson (q. v.) in Richmond, Virginia. Here he attended a course of lectures at the Medical College of Virginia, and upon examination was appointed assistant surgeon to the 3rd North Carolina Infantry, remaining until the end of the war, when he returned home to practice. The Federal Army had left in Wilmington an epidemic of smallpox and Dr. Wood organized a hospital for the care of the sick and treated over thirteen hundred cases. He inoculated himself many times with virus from the pustules of his patients and his enthusiasm for vaccination was so great that he named his son Edward Jenner. Dr. Wood received an honorary M. D. from the University of Maryland in 1868; was secretary of the Medical Society of North Carolina; was elected member of the Board of Medical Examiners of North Carolina, and the same year (1878) with M. J. DeRosset (q. v.), began the "North Carolina Medical Journal," of which he was editor-in-chief until his death. He was interested in organized sanitary work and in 1885 secured a statute from the Legislature creating a State Board of Health in North Carolina, planned according to his ideas. As secretary of the Board he issued monthly bulletins with valuable statistics; he was a founder of the American Public Health Association and was its first vice-president.

Dr. Wood was an enthusiastic student of botany and was an authority on the plants of his State. This knowledge made him an important member of the committee for the

revision of the Pharmacopoeia (1890-1900). With Gerald McCarthy he prepared a catalogue of the flora of that section of the South and it was published as a part of the transactions of the Elisha Mitchell Scientific Society of the University of North Carolina under the title of "Wilmington Flora," 1887.

Dr. Wood had an interest in the welfare of his native town and he was president of the Library Association when he died, in Wilmington, aged fifty, August 22, 1892.

EDWARD J. WOOD.

WOOD, William (1810-1899), founder of the Maine Natural History Society, was born in Scarboro, Maine, October 2, 1810, the son of William and Susan Simonton Wood. The young boy received his first instruction at the hands of the mother of the well-known John Neal, of Portland, and after passing beyond her skill in teaching, attended the public schools. Being unusually bright, he learned with great rapidity, entered Bowdoin when less than fifteen, and graduated in the class of 1829. He then studied medicine at the Medical School of Maine and took his M. D. in 1833, soon afterwards going to Europe tals of Paris for nearly three years. He set out for home in the winter of 1836 and en- and spending most of his time in the hospi- countered many storms, so that the voyage lasted seventy-two days, and the ship with all on board was given up for lost. He began practice upon his return, and with his inherent zeal and large acquirements in medicine, ultimately obtained a large clientèle. A skilled diagnostician, he made daily use of the microscope, and by this means gained an insight into the diseases of many patients who had been given up by others, who had failed to make microscopic examinations of excretions.

It would not do to pass unnoticed Dr. Wood's great love of natural history. To this branch of science he gave much time and in it he was an expert. He was the founder of the Maine Natural History Society. He was fond of botany, and had a collection of medicinal plants in his fine garden. In the second story of his house he had a large room looking out on the garden and round about it books were piled in great profusion. He had more than one microscope and I have heard him say that he had as much enjoyment out of a microscope costing a few dollars, as from one of the more expensive, costing hundreds.

Dr. Wood married Mrs. Mary Stanwood Jordan and had four children. It was a matter of regret to him that his son did not become a physician.

He died from old age, in 1899, after a brief illness, leaving a most charming and agreeable memory among natural history students and medical men.

JAMES A. SPALDING.

WOOD, William Maxwell (1809-1880). The father of this surgeon-general of the United States Navy, was Gen. Wood, a prominent merchant of Baltimore, who had come to this country at a very early age. His son William, the eldest of eight children, was born May 27, 1809, went to the Bel Air Academy, Harford County, Maryland, and graduated in medicine at the University of Maryland in 1829. He at once entered the medical corps of the navy and served as surgeon in four wars, the Seminole, the Mexican, the Chinese and the Civil. As surgeon on board the "Minnesota," he witnessed the famous battle between the Merrimac and Monitor. He was commissioned medical director and surgeon-general of the navy May 21, 1871, and retired March 3, of the same year.

He died at Owing's Mill, near Baltimore, March 1, 1880. Gen. Wood wrote "Wandering Sketches of People and Things in South America, Polynesia, California and Other Places Visited During a Cruise on the U. S. Ships "Levant," "Portsmouth" and "Savannah," (1849); and "Fankwei or the San Jacinto in the Seas of India, China and Japan" (1859); "A Shoulder to the Wheel of Progress" (1849); "Hints to the People on the Profession of Medicine" (1852), besides numerous essays and lectures.

ALBERT ALLEMANN.

WOODHOUSE, James (1770-1809), graduate in medicine and pioneer American scientist and chemist, was born in Philadelphia, November 17, 1770. His father was William Woodhouse, bookseller and stationer; his mother was Anne Martin. His education, begun at a private school, was continued at the grammar school and the University of Pennsylvania, where in 1787 he received his A. B. degree, and then began to study medicine as a pupil of Benjamin Rush, graduating in 1792, with a thesis on the persimmon. He experimented with the expressed juice of the immature fruit, "the astringency of which

cannot be conceived of, but by those who have bitten the unripe plum!" He practiced medicine and wrote on hydrocephalus, but his heart was from the first, in experimental chemistry, stimulated by the residence of Priestley in the state, and by the thrill of the new era opened up by the discoveries of Lavoisier whose earliest and best representative he was.

In 1791 he volunteered as surgeon under General St. Clair, bound on a punitive expedition sent West to deal with the Indians; he returned in four months, having escaped the terrible defeat of the fourth of November. At the death of Hutchinson, on the declination of Priestley, and following the death of Carson, he was elected in 1795 to the chair of chemistry in the University of Pennsylvania. His writings appear in the "Medical Repository," of New York, in "Coxe's Medical Museum," of Philadelphia, and in the Transactions of the American Philosophical Society. He experimented in the comparative values of coal, demonstrating the superiority for intensity and regularity of heat of the Lehigh anthracite of Northampton County, Pa., over the bituminous of Virginia. In 1802 he visited England and France and met Davy and other chemists; while in London he published "Experiments and Observations on the Vegetation of Plants," in "Nicholson's Philosophical Journal," Vol. 2. He was interested in geology, mineralogy, plants and insects. He wrote on cantharides and experimented with various species of meloe. He had a lively discussion on the nature of basaltic columns in North Carolina which had been claimed as the prehistoric remains of some great race.

In 1796 he was made a member of the American Philosophical Society. His "Young Chemist's Pocket Companion" (1797) detailed over 100 experiments with a portable laboratory. He edited Chaptal's Elements of Chemistry (1807) with copious notes. In 1798 we find him busy with nitre, "well known to be the basis of gunpowder, a substance of indispensable necessity even in defensive war." Woodhouse and Lavoisier and their contemporaries brought the new chemistry, born of the labors of men like Joseph Priestley, out of her swaddling clothes, and put an end, by precise well-ordered methods, to the era of blind experiment immediately preceding them when the expert investigation proceeded by "heating a substance, or treating it with some reagent, to see what would happen." He introduced the exact methods of the weight and the balance into chemistry in this country, and was ever to be found in the midst of his reagents and crucibles making experiments; his writings are saturated with the atmosphere of the laboratory, of which he was the sprite moving in the midst of his furnaces even in hottest summer weather to the astonishment and dismay of his friends, (Caldwell). His controversy with Priestley dealt its death blow to the phlogiston theory of Stahl, and removed the last clog from the new chemistry. He wrote in the "Medical Repository" for 1802 on the decomposition of water which he calls "the corner stone of modern chemistry." He discovered an inexpensive way of making potassium (1808), following Davy's great discovery of the elements of potassium and sodium (1807). He experimented in 1802 with nitrous oxide gas, discovered by Priestley, the anesthetic effects of which were found out by Davy. Benjamin Silliman (q. v.) studied under him, and Robert Hare (q. v.), the inventor of the oxy-hydrogen blowpipe, was his pupil.

He died of apoplexy June 4, 1809, extinguishing at an early age one of the brightest stars in the American firmament of science.

HOWARD A. KELLY.

WOODRUFF, Charles Edward (1860-1915). Lieutenant Colonel Charles E. Woodruff, Medical Corps, United States Army, writer and sanitarian, was born in Philadelphia, October 2, 1860, and died at his home in New Rochelle, N. Y., June 13, 1915, from arteriosclerosis, at the age of fifty-four. The son of David S. and Mary J. Remster Woodruff, he was educated at the Central High School in his native city, and at the United States Naval Academy at Annapolis, where he spent three years, when he resigned to study medicine at the Jefferson Medical College. Here he graduated in 1886 and entered the navy as assistant surgeon. After a year he was transferred to the army medical corps, being retired because of poor health in 1913. Colonel Woodruff served two terms in the Philippines where he became impressed with the unsuitability of the tropics as a place of residence for white men, a theory which he developed at length in his book "The Effect of Tropical Light on White Men." He wrote also "Expansion of Races," an important book that is a treasure house of anthropological and ethnological facts, and "Medical Ethnology," the last being published not long

before his death. After his retirement he made a tour of the world and studied sanitary problems, publishing a large number of pamphlets, mostly on medical topics. In 1914 he became associate editor of "American Medicine." He was a man of distinguished presence, most attractive as a companion and an admirable conversationalist and speaker.

He was married and had two sons.

WOODWARD, Joseph Janvier (1833-1884), surgeon was born in Philadelphia, October 30, 1833. He was educated in his native city and obtained the A. B. and A. M. from the Central High School of Philadelphia, graduating in medicine at the University of Pennsylvania in 1853 and practicing medicine in his native city until 1861, when, at the outbreak of the Civil War, he offered his services to the Union and served as assistant surgeon with the Army of the Potomac. In 1862 he was assigned to duty in the surgeon-general's office at Washington. After having organized several military hospitals in that city he was put in charge of the Army Medical Museum. While in this position he collected, in conjunction with Col. Otis, the material for "The Medical and Surgical History of the War." Woodward had charge of the medical part. The first volume of the medical history appeared in 1870, the second in 1879. In the meantime Woodward did valuable work in microscopy and photomicrography, and his publications in these fields made his name famous among scientists throughout the world. His papers fill some four columns in the catalogue of the surgeon-general's library at Washington, D. C. His unceasing labors gradually undermined his constitution so that, in the summer of 1880, he was compelled to go to Europe for his health. He returned the same year somewhat improved. In July, 1881, he was called to the bedside of Pres. Garfield. This, too, was a great strain on his constitution and he never completely recovered. He died August 17, 1884.

Besides the great work mentioned, Woodward published "The Hospital Steward's Manual" (1862) and "Outlines of the Chief Camp Diseases of the United States Armies, as Observed During the Present War" (1863). He also published numerous articles on microscopy, photomicrography, cancer and other subjects, the catalogue of the surgeon-general's library containing sixty-one titles. In 1881 he was elected president of the American Medical Association. Woodward was an honorary member of the Royal Microscopical Society and of the Queckett Club of London, of the Liverpool and Belgian Societies of Microscopy and many other societies at home and abroad. There is a portrait in the Surgeon-General's library, Washington, D. C.

ALBERT ALLEMANN.

Woodward, Rufus (1819-1885), prominent physician of Worcester, Massachusetts. See American Medical Biographies, H. A. Kelly and W. L. Burrage, pages 1262-1263.

WOODWARD, Samuel Bayard (1787-1850), alienist and advocate of more humane methods in the treatment of the insane, was the son of Dr. Samuel Woodward of Torringford, Conn., where he was born June 10, 1787. He was a descendant of Henry Woodward, himself a physician, who emigrated from England in 1635, and settled in Dorchester, Massachusetts, afterwards removing to Northampton. Samuel studied medicine with his father and received a license to practice from the Connecticut Medical Society in 1809. The following year he removed to Wethersfield, where he remained in active practice until 1832, receiving the honorary degree of M. D. from Yale College in 1822, and being for the last five years of his residence physician to the Connecticut State Prison. He was one of the "examiners" of the Yale Medical School and was offered a position on the faculty, but declined.

His observation of insane convicts, and his knowledge of the miserable existence eked out by the many helpless lunatics and idiots in the various prisons and almshouses of the state, caused him to take an active part in efforts to provide adequate care for these unfortunates, and it is said that he travelled all over the State in his "gig" urging the establishment of what was later known as the Hartford Retreat for the Insane. In 1880 he was elected to the Connecticut State senate in furtherance of this object, and after the establishment of the "Retreat" was made one of the "visitors" and a director of that institution. His interest in the subject became by these activities so well known, that, on the advice of Dr. Todd (q. v.), superintendent of the Retreat, he was in 1832 chosen by the trustees of the new hospital in Worcester, of which Horace Mann was the chairman, to take charge of that institution. He remained

here as superintendent until 1846, when, broken in health, he resigned and removed to Northampton, where he died as the result of the rupture of an aortic aneurysm, four years later, Jan. 3, 1850, at the age of sixty-three.

The Hospital at Worcester was the first hospital in the State, and, indeed, one of the first in the country built to care for the indigent insane. Established, as the Act read, to care for those "furiously mad," its early patients were truly a select class, gathered from almshouses and prisons, where many of them had remained uncared for during long periods of time. So great was the improvement in these almost hopeless cases, some of whom had been chained for years, others lying naked on straw in unheated rooms, that an enthusiast, like Dr. Woodward, became convinced that practically all insane patients could be cured, if properly cared for, and his reports show an optimism which further experience proved to be too far reaching. Occupation for institution inmates, the value of which is so thoroughly recognized at the present time, was instituted by him in 1832. His wife taught classes in sewing and knitting, and the spinning wheels used at the time are in the attic of the old building, which is—in 1916—still in use. His methods and manner of control met with general approval. In 1834, and again in 1840, he was offered the superintendency of the Hartford Retreat for the Insane. In 1840 he was urged to become a candidate for superintendency of the McLean Asylum in Somerville, and in 1842, the Trustees of the Asylum planned for Utica, N. Y., offered to build it under his supervision, if he would accept the charge of it when completed. All these offers were declined, although he went to Utica, no small journey in those days, to look over the ground.

While in Worcester, he founded, and was the first president, of the Association of American Insane Hospital Superintendents. With Dr. Samuel Howe (q. v.) he carried on a long correspondence urging the establishment of what became the Massachusetts School for Idiotic Youth, or, as we now call them, feeble minded, and we find appeals to him from other States for aid in passing laws for the education and control of the "idiotic." George Bancroft applied to him for information as to the insanity of George III when writing his history of the United States, and his services were generally in demand as an expert witness in the courts and for information on all subjects connected with the insane and their care.

A strong advocate of temperance, he lectured on the subject throughout New England; and, with Mark Hopkins and Samuel Hoar, he issued a printed appeal to the people; and at that early day strongly urged the establishment of an asylum for inebriates, of which he would have willingly been the superintendent. He published essays on diseases of the mind and nerves and contributed much to medical journals. Among his writings were "Essays on Asylums for Inebriates," 38 pp, 1838; "Hints for the Young in Relation to the Health of Body and Mind," 65 pp, 1856; "Fruits of New England."

A man of commanding presence (he was six feet two and one-half inches in height and weighed 260 pounds), he seemed to many to resemble George Washington, in his later years, "so much so," says Henry B. Stanton, in his book of 'Random Recollections' "that when he dined at the United States Hotel in Boston, as he walked erect and majestic through the long room to his seat, every knife and every fork rested, and all eyes centered on him."

He married Maria Porter of Hadley in 1815, and by her had eleven children. His grandson, of the same name, has been one of the prominent physicians and citizens of Worcester. Another grandson, Lemuel Fox Woodward, son of Rufus, has been a leading surgeon in the same city.

A popular subscription by the citizens of Worcester provided a portrait by Frothingham, and a marble bust by King, which at the time of his resignation of the office of superintendent, were presented to the trustees of the Worcester Hospital and they may be seen at the hospital today.

SAMUEL BAYARD WOODWARD.

WOODWARD, Theodore (1788-1840), founder of the Vermont Academy of Medicine, was born in Hanover, New Hampshire, July 17, 1788, and died in Brattleboro, Vermont, October 10, 1840. He studied medicine under Nathan Smith, his maternal uncle, and completed his study with Dr. Adin Kendrich of Poultney, Vt. At the age of twenty-one he began to practice and remained all his life in Castleton, Vermont. By the aid of his colleagues, Dr. Selah Gridley, and some friends of the enterprise, he succeeded in founding and establishing the Vermont Academy of Medicine at Castleton, Vermont, which became associated with Middlebury

College. He was a member of the Corporation of the Vermont Academy of Medicine from 1818 to 1840, and professor of surgery and obstetrics there from 1818 to 1824, and the same in 1822, with diseases of women and children added. In 1824 he was registrar of the Academy and made professor of the principles and practice of surgery, obstetrics and the diseases of women and children, continuing this work until 1838, when he became incapacitated by the disease that terminated his life.

He was a laborious student of everything which related to the nature and cure of disease, and blended with unusual symmetry the characters and avocations of the student and the physician. Woodward was distinguished for quickness of apprehension and acute discrimination when investigating disease, and great shrewdness in the expediency and adaptation of remedies. During the course of his practice he performed most of the operations of surgery which are regarded as critical and was distinguished for his fortunate selection of the proper time and for his medical treatment.

He married Mary Armington, and had three sons and three daughters. One son, Adrian Theodore Woodward, studied medicine and became a general surgeon.

JULIUS HAYDEN WOODWARD.

WOODWORTH, John Maynard (1837-1879), of Chicago, was born at Big Flats, N. Y., Aug. 15, 1837. Educated at the University of Chicago, he received his M. D. at Chicago Medical College in 1862, studied in the hospitals of Berlin and Vienna in 1865, and settled at Chicago in 1866. He was a founder of the American Public Health Association in 1872; assistant surgeon United States Army, 1862-3; surgeon in 1863; demonstrator of anatomy, Chicago Medical College, 1866, sanitary inspector Chicago Board of Health, 1868; supervising surgeon-general, Marine Hospital Service, 1871-9.

Editor of the "Bulletin of Public Health," he was author of "Hospitals and Hospital Construction," Washington, 1874; "Cholera Epidemic of 1873 in the United States," Washington, 1875; "The Safety of Ships and of Those Who Travel in Them," Cambridge, 1877.

He died at Washington, March 14, 1879.

Woolley, John (1786-1833), pioneer physician of Cincinnati. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, page 1265.

Wooten, Thomas Dudley (1829-1906), army surgeon of Austin, Texas. See American Medical Biographies, H. A. Kelly and W. L. Burrage, Balto. 1920, p. 1265.

WORCESTER, Noah (1812-1847), an early dermatologist of Cincinnati and Cleveland, Ohio, was born in Thornton, New Hampshire, July 29, 1812, the son of a teacher of very moderate estate. He was compelled to provide largely for his education by teaching, and in this way struggled through Harvard College after an interrupted course of study of five years, 1827-1832; then settled in Hanover, New Hampshire, studied under R. D. Mussey (q. v.), matriculated in the medical department of Dartmouth College, and graduated there in 1838. He was at once appointed demonstrator of anatomy in his alma mater, and invited by Dr. Mussey to become his assistant. When, in the same year, Dr. Mussey accepted the chair of surgery in the Medical College of Ohio, Worcester was invited to accompany him and be his partner. Soon after his arrival in Cincinnati he received the chair of physical diagnosis in the Medical College of Ohio and in 1841 visited Europe and renewed his studies in London and Paris. On his return to the United States in 1842 he married Jane Shedd, of Peacham, Vermont, an old sweetheart, well advanced in pulmonary tuberculosis, a disease which terminated her life in the following year. Grief at her loss, and the intimate association and anxiety which preceded her death, wore heavily upon the health of her husband, and from this time Dr. Worcester was always an invalid and soon developed signs of undoubted tuberculosis. He was himself a firm believer in the infectiousness of that disease. In spite of waning health and strength, he struggled bravely to fulfil the duties of his profession, and in 1843 even accepted the chair of general pathology, physical diagnosis and diseases of the skin in the newly organized medical college of Cleveland. He was, however, never able to perform the work in spite of the generous and hearty aid afforded by his medical colleagues. For a year or two he lectured on diseases of the skin, but soon even this labor proved too great and he retired to Cincinnati, where he died of tuberculosis April 4, 1847.

We have from his pen "A Synopsis of the Symptoms, Diagnosis and Treatment of the

more Common and Important Diseases of the Skin," Philadelphia, 1845.

HENRY E. HANDERSON.

WORKMAN, Joseph (1805-1894), Canadian alienist, was born in Lisburn, Ireland, May 26, 1805, and died in Toronto April 15, 1894, at the age of 89 years. He came to Canada from Ireland in 1829, and was graduated from McGill College in 1835. In 1836 he removed to Toronto and engaged in business, but returned to the practice of medicine ten years later. For some years he filled the chairs of materia medica and obstetrics in Rolph's Medical School and became favorably known as an able physician. In 1853, he accepted temporary charge of the Toronto Asylum, at the personal solicitation of Dr. Rolph and his appointment was made permanent in April 1854. He remained in office for twenty-two years, resigning in 1875. He was markedly successful as a superintendent and soon became known as the most noteworthy of Canadian alienists. Much that is best in the present system of care for the insane in Canada may be traced to his influence. Possessed of much energy and executive ability, Dr. Workman, during his management of the Toronto Asylum, introduced many improvements, one of the first of which was a reconstruction of the drainage. On assuming charge he had found 347 patients in residence, many of whom had frequent attacks of erysipelas, diarrhea and dysentery. Setting to work to investigate the cause, he soon found that the whole space beneath the basement was a foul and enormous cesspool. When this was emptied it was found that, while the basement drains and main sewer were admirably constructed, by some oversight no connection had been made between them, with the result that nearly four years' accumulation of filth had collected there. When this condition was remedied there ensued a marked improvement in the general health of the household. After his resignation of office, Dr. Workman spent the remainder of his life in Toronto. He was an accomplished linguist, and during his last years found his favorite occupation in the translation of articles, generally relating to psychiatry, for various medical periodicals. These translations possess a strong individuality, Dr. Workman's style of writing being always pungent, clear and flowing.

Although as a young man an ardent politician, he was never a believer in the so-called political methods which time after time in many asylums have caused the sacrifice of the interests of the insane to the demands of the political exigency. He steadfastly resisted any attempts to convert the asylum into a machine to satisfy the demands of political office-seekers, and would willingly have sacrificed his position rather than wink at the perpetration of a wrong. When, after twenty-two years of faithful service, he began to chafe in official harness and longed for rest, the decision to retire once made was soon carried into practice. There was nothing to put in order—the institution was in excellent condition; the running gear well oiled; harmony in every department, and "esprit de corps" among the officials that argued well for the comfort of a successor.

For many years he was much criticised by the legal fraternity and press for his theories in regard to "insanity and crime," as he fearlessly maintained the medical view of responsibility in mental disease. In the courtroom, as a witness and medical expert, it was soon learned that he could not only enforce respect when under examination, but could also cover with confusion any facetious attempts to divert him from his fixed purpose. Gifted with an excellent command of language, a wit as keen as a Damascus blade, a perfect grasp of man's mental attitude, and a profound knowledge of science, it can easily be understood why he was "facile princeps" among witnesses.

His contributions to alienistic literature have been many. In Europe his name was well known, and he was made an honorary member of medico-psychological societies in Britain and in Italy.

In 1835 he married Elizabeth Wassridge, a native of Sheffield, England, and they had six children.

WORMLEY, Theodore George (1826-1897), toxicologist and legal physician of Columbus, Ohio and Philadelphia, was born at Wormleysburg, Pennsylvania (a town named after his ancestors) on the first day of April, 1826. His people were of German descent. They were also very poor, and Wormley not only had to furnish the means for his education, but also to support his mother. When sixteen years old, he went to Dickinson College, for three years devoting himself to his work with the utmost assiduity. After studying medicine with Dr. John J. Meyers, he entered the Philadelphia College of Medicine, in Philadelphia, where he received his degree in 1849. For a while he had some difficulty

in finding a suitable practice. Spending almost a year in Carlisle, Pennsylvania, then a few months in Chillicothe, Ohio, he eventually settled (in 1850) in Columbus, where he remained twenty-seven years, rising to the top of the profession. During most of this time he was professor of toxicology in the Starling Medical College. In 1877 he removed to Philadelphia, as he had been elected to the chair of chemistry and toxicology in the University of Pennsylvania. It is interesting to note that for this position he competed with the famous John James Reese (q. v.). He held the chair almost twenty years.

Wormley was a very extensive writer, his magnum opus being a large volume entitled, "The Micro-chemistry of Poisons," 1867. Of this world-famous book it is well-nigh impossible to speak in terms of too high praise. Though the work is large (the second edition contains almost 800 pages) it is very concisely written, and is characterized throughout by the ripest and fullest scholarship and the most painstaking accuracy. Never before perhaps had toxicological subjects been handled with quite the high degree of literary skill and the miraculous care for detail and truth which appear in this volume. The work soon became known throughout the medicolegal world. This work is dedicated "To my wife, who, by her skilful hand, assisted so largely ni its preparation, this volume is affectionately inscribed." At the end of the book are fifteen pages of steel engravings, numbering ninety-six engravings in all, each of the utmost fineness and accuracy. At the bottom of each page we read,, "Mrs. T. G. Wormley, ad. nat. et sculp." It is told by Dr. John Ashhurst, Jr., that, when the manuscript of the book was handed to the publishers, the latter declared that it would be impossible to find a draughtsman capable of reproducing the illustrations by which the manuscript was accompanied, so great was their exquisite delicacy. In fact, a number of engravers, to whom the matter of reproducing these illustrations was submitted, declared (according to the "American Literary Gazette") that the work, assuming that it could be done at all, would cost the engraver who did it, his sight. Thereupon Mrs. Wormley set herself to work to acquire the difficult art of engraving on steel. This feat she accomplished to such a degree that the desired engravings were produced by her hand and remain to this day a marvel of the steel engraver's art.

Mrs. Wormley was born at Columbus, Ohio, Oct. 5, 1837. Her maiden name was Anne Eliza Gill, and she was the daughter of John Loriman and Mary Waters Gill. Further engraving, we may add, of a highly accurate sort, was done for the second edition of the book by Dr. Wormley's elder daughter, Mrs. John Marshall, of Philadelphia—with whom the mother resided after her husband's death.

Dr. Wormley was a man of medium height, always smooth-shaven, and had brown hair and blue eyes. He was a healthy, vigorous man, and delighted to go the winter through without an overcoat. He was not merely a scientist of superabounding energy, but also a man of strong and sincere affections and sentiments, a lover of nature, of music, and his home. His love of nature is shown by his wide-ranging investigations in other fields than that of his own particular specialty. He was interested in ornithology and icythyology, in crystallography, in infusorial earth and diatoms. He discovered a species of fish (of brilliant coloring) to which he gave the anme of Etheostoma Iris. He mounted many birds and fishes, which are to be found at the present moment in the Smithsonian Institution at Washington. And birds and fishes, crystals and diatoms, were to him but parts of a very great and very beautiful world which he loved, and which he tried to comprehend for the reason that he loved it.

During the summer of 1896, Prof. Wormley began to be attacked by the disease which eventually ended his life. At that time he was on a farm in Berks County, working among plants and flowers, as he very much loved to do. I nthe fall he went back to the city and his customary teaching, but soon it became apparent that he was seriously affected with chronic Bright's disease. The end of the great worker arrived one quiet Sunday morning, January 3, 1897. The world of legal medicine lost perhaps its clearest mind; while a very much larger and broader world was undoubtedly the poorer for the dropping out of a fine example of a quiet, unassuming scholar and gentleman.

He was a co-editor of the "Ohio Medical and Surgical Journal," from 1862-4. A tolerably full list of his writings is in the Surgeon-general's Catalogue, Washington, D. C.

THOMAS HALL SHASTID.

WORTHINGTON, Edward Dagge (1820-1895), who is said to have been the first surgeon in Canada who performed a capital

operation under ether, was born in Queen's County, Ireland, December 1, 1820. His parents, John Worthington and Mary Dagge, sailed for America on May 2nd, 1822, and settled in Quebec for the remainder of their lives. In 1834 Dr. Worthington was indentured for seven years to the distinguished James Douglas (q. v.), and after serving over five years, Dr. Douglas relieved him from the balance of his indenture, to enable him to accept an appointment as staff-assistant-surgeon in the British army. An assistant-surgeoncy in the army, however, in those piping times of peace, with its "7s. 6d. sterling per diem, and rations," presented few attractions, so after serving two years, he left the army and went to Edinburgh, where he spent two years in attending lectures and "walking" the hospitals. He was awarded the medal of the Royal College of Surgeons there, and became acquainted with many eminent men. In 1843 he returned to Canada and settled in Sherbrooke, Eastern townships, where he soon built up an extensive practice, and won the fullest confidence of the community in his skill as a surgeon, having for over forty years all of the practice in his district. On March 10, 1847 he amputated below the knee, under ether, and in January, 1848, operated on three cases under chloroform, one being excision of bone. In 1854 the University of Bishop's College, Lennoxville, conferred upon him the degree of M. A., "honoris causa," and in 1868 McGill College, Montreal, that of M. D. C. M. "ad eundem."

He was distinguished as a friend and physician of the poor, and in 1865 he was presented with a flattering address and a solid tea service as a mark of public favor, for his gratuitous attendance on the poor. He was given also a gold watch and chain for his energetic and successful efforts to prevent the spread of that most loathsome of all diseases in Sherbrooke, the smallpox. He was a private in the Quebec Regiment of Volunteer Light Infantry, and on active service in both Fenian raids, retiring in 1887, retaining his rank as surgeon-major.

He wrote extensively for periodicals, especially for the "Canada Medical Journal," of Montreal, and some of his papers were copied into the medical journals of Great Britain and the United States. Among these may be mentioned: "A New Method of Bed-making in Fractures," (1871); "Glue Bandage in Fractures," (1872); "Acute Fibrinous Bronchitis, with Expectoration of Tube Cases," (1876).

He married Fanny Louisa Smith, daughter of Hon. Hollis Smith, in 1845. Mrs. Worthington died in 1887, leaving five children, two daughters and three sons. One son, Arthur Norreys, graduated in medicine at McGill University in 1886, and settled in Sherbrooke.

Dr. Worthington died early in the year 1895.

WRIGHT, Hamilton (1867-1917), physician and pathologist, known chiefly for his campaign against narcotics, was born in Cleveland, Ohio, in 1867, was graduated from the medical department of McGill University and spent a year in studying at first-hand tropical conditions of life in China and Japan. Then he became John Lucas Walker exhibitioner of Cambridge University, and was appointed assistant director of the London County laboratories. At this period he spent some time in Heidelberg and other continental universities. The British Government sent him, in 1899, to the Malay states to study beriberi and other tropical diseases and there he remained for four years, founding an institute for medical research. Several more years of research work in the United States as honorary fellow of Johns Hopkins University and in Europe were followed by appointment as American delegate to and acting chairman of, the International Opium Commission which met at Shanghai, China, in 1909. Dr. Wright was also prominent in the second and third opium conferences at The Hague in 1913 and 1914. He worked successfully to have the Harrison Narcotic Law and three other similar acts passed suppressing the abuse of narcotics in this country, and forbidding citizens of the United States from engaging in trade in narcotics with China.

He married Elizabeth, daughter of Senator Washburn, by whom he had five children.

From 1915 until he was injured in a motor accident he devoted himself to relief work in France. His writings are in the form of papers and monographs.

He died of pneumonia in Washington, D. C., January 9, 1917.

WRIGHT, John (1811-1846), professor of natural history in the Renssalaer Polytechnic Institute of Troy, N. Y., was born in Troy, New York, February 2, 1811, the son of John Wright. His early education was secured at Allen Fish's School in Troy, where he was prepared for admission to the Rens-

selaer Institute, where he graduated. His education was further completed at Yale College, where he was graduated in medicine in 1833. He was an ardent student of Natural History. At one time he had a museum of birds and animals which he had procured and mounted himself. Rafinesque and Audubon were his friends and each visited him at Troy. He referred in after years to Mount Rafinesque which he named in honor of his friend, but which is known now as Bald Mountain, about five miles northeast of Troy. Dr. Wright had a pet raccoon, a remarkably fine specimen, of which Audubon made a sketch while on his visit to Troy, reproducing it in his great work on the animals of North America. Dr. Wright was professor of natural history in the Rensselaer Polytechnic Institute from 1838-1845; had published a Flora of Troy and vicinity, and was associated with Prof. Amos Eaton in publishing the "North American Botany," (eighth edition). He was also on the state survey of Michigan in 1837 as state botanist and continued in that work about two years.

For several years he was associated in practice with Dr. Thomas C. Brinsmade of Troy, a combination of talent that gave them the best kind of practice. Dr. Wright attended to the surgical cases.

On April 11, 1838, he married Mary Cottrell who died April 10, 1841. They had one son who died September 18, 1841. He married again, Catherine Wyant, December 5, 1844. He died of tuberculosis of the lungs, April 11, 1846, at Aiken, South Carolina. He was a member of the Rensselaer County Medical Society.

The full title of his book was: "A Catalogue of Plants Growing Without Cultivation in the Vicinity of Troy," by John Wright, M. D., and James Hall, A. M., Troy, 1836.

SMITH ELY JELLIFFE.

WRIGHT, Joseph Jefferson Burr (1801-1878). Brevet Brigadier General Joseph Jefferson Burr Wright was born in Wilkesbarre, Pennsylvania, where his parents had long lived, in May, 1801. He received the degree of A. B. from Washington College, Pa., in 1821 and M. D. from the University of Pennsylvania in 1825. Subsequently Jefferson Medical College conferred on him an honorary M. D. in 1836. After practicing medicine in his native town until 1833 he entered the Army as assistant surgeon and during the first ten years of his service was stationed at many posts on the frontiers, participating in the operations against the Seminole Indians in Florida, 1841-42, and finally becoming attached to General Zachary Taylor's "army of occupation" in 1846. He was present at the battles of Palo Alto, and Resaca de la Palma, and received special commendation from his commanding officer for efficiency and zeal in the performance of his duties; next he had charge of the general hospital at Matamoras and in the campaign from Vera Cruz to Mexico City he was medical purveyor to the army. Following the Mexican War Surgeon Wright was on the staff of Major General Worth with headquarters at San Antonio, Texas and there he had charge during an epidemic of Asiatic Cholera of great severity. During the Civil War while on the staffs of Generals McClellan and Rosecrans Surgeon Wright participated in some of the engagements in West Virginia and then served as medical director, department of Missouri, under General Halleck. He attained the rank of colonel and brevet brigadier general in 1865 and was retired in December, 1876.

He was among the first to use and recommend sulphate of quinine in large doses during the remission in the treatment of malaria. He published articles in "Southern Medical Reports."

General Wright was a man of true soldierly instincts, never permitting personal consideration to interfere with the discharge of duty, and of high professional skill; he was most fair and honorable in all his dealings and had many friends.

He died at his residence in Carlisle, Pennsylvania, May 14, 1878.

WRIGHT, Marmaduke Burr (1803-1879), physician and medical teacher of Cincinnati, Ohio, was born in Pemberton, New Jersey, November 10, 1803. His early education was acquired in the Trenton Academy, and at the age of sixteen he began to study medicine with Dr. John McKelway, of Trenton, an alumnus of the University of Edinburgh. After attending three courses of medical lectures in the University of Pennsylvania he received his M. D. there in 1823 and in the same year he settled in Columbus, Ohio, and speedily established his reputation as a skilful physician and surgeon. In 1835 he married Mary E. Olmstead, of Columbus. In 1838 he held the chair of materia medica and therapeutics in the Medical College of Ohio, and two years later was transferred to the chair of obstetrics in the same

institution. From this position he was removed by the action of the trustees of the college in 1850, a step which occasioned no little controversy and bitterness of feeling, but he was reelected to the same chair in 1860, and continued to hold this position until his retirement, with the title of professor emeritus, in 1868. During a large portion of his term of service in the Medical College of Ohio Dr. Wright filled the office of dean of the faculty.

Dr. Wright was one of the founders of the Ohio State Medical Society in 1846, president of this society in 1861, corresponding member of the American Society of Physicians of Paris, an honorary member of the American Gynecological Society, president of the Cincinnati Academy of Medicine in 1864, a member of the Cincinnati Obstetrical Society, and for thirty years held a position on the staff of the Commercial and Cincinnati hospitals. He was an early and persistent advocate of combined cephalic version in obstetrics, "Difficult Labors and Their Treatment." ("Transactions of the Ohio State Medical Society," 1854); and of the establishment of asylums for the care and cure of inebriates. A fluent and logical writer he contributed numerous papers to the journals and societies of his day. Among the more important of these were: "The Prize Essay of the Ohio State Medical Society," for the year 1854; "Drunkenness, its Nature and Cause or Asylums for Inebriates." ("Transactions of the Ohio State Medical Society," 1859); "Report of the Committee on Obstetrics to the Ohio State Medical Society," ("Transactions of Ohio State Medical Society," 1860).

He died in Cincinnati, August 15, 1879.

HENRY E. HANDERSON.

WRIGHT, Thomas Lee (1825-1893), of Bellefontaine, Ohio, the author of a volume entitled "Inebrism, a Pathological and Psychological Study," was the son of Dr. Thomas Wright, who came to Quebec from the north of Ireland in 1817 and settled in Craftsbury, Vermont. He married a daughter of Dr. Huntington of that town and moved to Ohio, and Thomas Lee was born in Windham, Portage County, August 7, 1825. He was educated at Miami University and at the Ohio Medical College, Cincinnati, where he received an M. D. in 1846. He practiced at Kansas City until 1854, chiefly as government physician among the Wyandotte Indians. During the season of 1855-56 he was lecturer upon theory and practice in Wesleyan University, at Keokuk, Ia.; after that he practiced in Bellefontaine where he had married the daughter of Dr. A. H. Lord, in 1846. Being affected with organic heart disease, in 1880 Dr. Wright relinquished active practice and devoted himself to the study of inebriety, a subject that had led him to write "On the Action of Alcohol on the Mind and Morals" for the "Lancet Clinic," the previous year. He became a frequent contributor to "The Journal of Inebriety',, and every year until his death presented a paper before the American Association for the Study and Cure of Inebriety. In 1885 through the advice of friends he published "Inebrism, a Pathological and Psychological Study." This book of two hundred and fifty pages was translated into the French, German and Russian languages, and has been regarded as one of the most valuable contributions to this subject that had been made by American physicians. His work was of a pioneer character, pointing out the paralyzing action of alcohol on the brain and nervous system and the philosophy of defects in the moral faculties of inebriates. In 1860 he published a "Disquisition on the Ancient History of Medicine," 1 vol. 8vo., 84 p. and in 1874, "the Deterioration of the Race upon the Western Continent," a paper in the "Cincinnati Lancet and Observer."

Personally, Dr. Wright was a genial man, keen to notice the follies and weaknesses of human nature, but charitable in his judgments.

He died at his home suddenly June 22, 1893.

WYETH, John Allan (1845-1922), New York surgeon and writer, founder of the first post-graduate Medical School in the United States, was born in Marshall County, Alabama, May 26, 1845, the son of Judge Louis and Euphemia Allan Wyeth. His grandfather Wyeth was one of the early publishers of Philadelphia. After a common school education, he attended the La Grange Military Academy. When the Civil War broke out he enlisted with the Confederate troops and served in Morgan's Cavalry in Co. I, Russell's 4th Alabama Cavalry under Wheeler and Forrest, fighting in both of the engagements at the Battle of Chickamauga. Taken prisoner, he was confined in the military prison at Camp Morton, Indiana for fifteen months. At the close of the war he acted as superintendent of a large cotton plantation in Franklin County, hoping to counteract the after

effects of pneumonia contracted while imprisoned, but as the cough continued he resigned and spent the next year living out of doors on his father's estate, buying and selling cattle and produce. In 1867 he began to study medicine under J. M. Jackson of Guntersville, Alabama and in 1869 was graduated from the Medical School of the University of Louisville. A few months of practice confirmed his belief that he needed better training so he took down his sign and sought the means for further study by becoming the superintendent of a railroad construction company in Arkansas. A year and a half later he gave up this position to erect public buildings for the county of Woodruff, Arkansas. The following November, 1872, he matriculated at Bellevue Medical College, New York City, and in March, 1873, received the "ad eundem" medical degree. While at Bellevue, he constantly trained his left hand until he became ambidextrous,—an invaluable aid in surgical work. After graduating, he was assistant demonstrator of anatomy for a year when he became prosector to the chair of anatomy and surgery in Bellevue. He began to study pathology in 1875. In 1876, he became seriously ill and resigned his Bellevue appointment and went to Europe where he studied in London, Paris, Berlin, and Vienna, returning in 1878. He was visiting surgeon to Mt. Sinai Hospital and consulting surgeon to St. Elizabeth's Hospital. In 1881, he founded and became senior professor of surgery and later president of the faculty of the New York Polyclinic Medical School and Hospital—the first post-graduate medical school in the United States. During the World War this school and hospital was turned over to the government for hospital purposes; afterwards, Dr. Wyeth was active in securing its reopening and remained professor of surgery and president of the faculty until his death.

Wyeth was a man of active interests: He was president of the New York Pathological Society in 1885 and 1886, of the New York State Medical Association in 1900, of the American Medical Association in 1901, of the New York Academy of Medicine in 1907-11, and of the Hospital Alliance of Greater New York and of the Alabama Society in 1913. The best known of his writings on medical subjects are the "Handbook of Medical and Surgical Reference," 1875; "Monograph on Minor Surgery," 1876; "Amputation at the Ankle-joint," which won the award of the Bellevue Hospital Medical College Alumni in 1876; "Surgery of the Carotid Arteries," the prize essay submitted to the American Medical Association in 1878—from which time his ligation of the external carotid artery became the accepted procedure; "Surgical Anatomy and Surgery of the Innominate and Subclavian Arteries" which won the second prize of the same association in 1878. In 1886, he published the first edition of his "Textbook on Surgery, General, Operative and Mechanical" which passed through four editions by 1909. In the latter year, he also made public the first recorded case of the cure of sarcoma by streptococcus infections. The bloodless method of amputation at the shoulder and hip joints, known as Wyeth's method, was first demonstrated by him in 1890, the operation for correcting deformity of nose, lip, and the alveolar arch in cleft palate, in 1894, and the new method of treating inoperable vascular tumors by the injection into their substance of water at a high temperature, in 1903. He also wrote a number of articles on his experiences during the Civil War, and the "Struggle for Oregon," written chiefly from the diary of a cousin, in 1892; the "Life of Lieutenant-General Nathan Bedford Forerst," 1899 (2nd ed., 1908); the "History of La Grange Military Academy and the Cadet Corps," 1907; and "With Sabre and Scalpel," 1914, his autobiography, and containing various verses published from time to time in magazines.

April 10, 1886, he married Florence Nightingale Sims, the daughter of his intimate friend, J. Marion Sims (q. v.). They had three children, Florence Sims, Marion Sims, and John Allan, Jr.

Wyeth, the highly skilled surgeon, polished gentleman, enthusiast, and true friend, died suddenly from heart disease on May 28, 1924, his passing regretted by the entire profession.

WYLIE, Walker Gill (1848-1923), gynecologist of New York, was born at Chester, South Carolina, September 2, 1848, the son of Alexander Pearson and Juliet Agnes Gill Wylie—his father a leading surgeon of that city for nearly half a century, and the grandson of Peter Kelso Wylie, a probate judge there for forty years. During the Civil War Gill Wylie served in the Confederate army as commander of a company of boys in active service. After graduating from the University of South Carolina in 1868, he entered the Bellevue Hospital Medical College, New York City, and took his M. D. in 1871. He served

a year and a half as surgical intern in his alma mater and then spent eighteen months in the Woman's Hospital under J. Marion Sims, Thomas Addis Emmet, and T. Gaillard Thomas. When a new up-to-date building was desired for the Woman's Hospital, Dr. Wylie was sent abroad to study hospital construction in Europe. While there, he also investigated nursing systems; a personal interview with Florence Nightingale was prevented by a death in her immediate family, but she was so interested in the project of a school for nurses in America that she wrote to Dr. Wylie suggesting essential points in the organization and methods of administration. He thus became the leading figure in establishing the Bellevue Hospital Training School for Nurses in 1873, according to her ideas, a school unsurpassed from the beginning and a model for those which quickly followed.

In 1873, he began to practice privately in New York City, specializing in obstetrics, gynecology, and abdominal surgery. He was appointed visiting gynecologist to Bellevue Hospital in 1882 and served for twenty years when he became consulting surgeon to the hospital. In 1882 also, he was one of the founders of the New York Polyclinic Medical School and Hospital, of which he was professor of gynecology.

Dr. Wylie was an active member of the American Gynecological Society. His essay on "Hospitals, their Organizations and Construction" won the Boylston prize of Harvard University in 1876. He also received the McMaster Gold Medal in 1900, conferred by the University of South Carolina upon the alumnus who had done the most for humanity.

In the latter year, he became extensively interested with the Duke brothers in water-power development in his native state and spent one week out of every month there until it became one of the successful water power developments in the South.

Dr. Wylie married Fanny Dainon of Northampton, Massachusetts, June 13, 1877; they had two daughters and three sons.

On March 13, 1923, he died of pneumonia

Gill Wylie, like Joe Price, his contemporary, was a character,—ever active and keen and critical. Often exasperated while operating, he would relieve himself by swearing at his assistant. He was a frequent contributor to current literature and one of the founders of modern gynecology. He had a tall, commanding figure and spoke effectively in medical meetings.

WYMAN, Jeffries (1814-1874). This Boston physician, who did so much to advance the knowledge of natural sciences, was the third son of Dr. Rufus and Ann Morrill Jeffries, and a brother of Morrill Wyman (q. v.). He was born at Chelmsford, Massachusetts, on August 11, 1814. As a boy he went to the local academy; in 1826 to Phillips Exeter Academy and graduated from Harvard in 1833. He was not remarkable as a student, although he showed a liking for chemistry and anatomy. Some of his class-mates remember him by a skeleton which he made of a mammoth bull-frog from Fresh Pond, probably one which is still preserved in his museum of comparative anatomy. His skill and taste in drawing, which he turned to such excellent account in his investigations and in the lecture room, as well as his habit of close observation of natural objects met with in his strolls, were manifested even in boyhood. He began the study of medicine under John C. Dalton (q. v.) at Chelmsford and at Lowell, also studying under his father and taking the regular courses at Harvard Medical School. Elected house-student in the medical department at the Massachusetts General Hospital in his third year, the position offered him good opportunities for the study of disease. He graduated in 1837. His graduation thesis, which was not published, was entitled "The Oculo." He started practicing in Boston, and at the same time was made demonstrator of anatomy in the Harvard Medical School under Dr. Warren, a position bringing but scanty returns, but his life was abstemious. He was unwilling to accept more from his father, who out of his moderate income had provided for the education of two sons, so he often went without things he really needed and to get a little ready money he joined the Boston Fire Department. Rufus Wyman (1778-1842), the father, was the first superintendent of the McLean Insane Asylum, then at Charlestown, holding the position from 1818 to 1835.

Fortunately in 1840 Jeffries was offered the curatorship of the Lowell Institute by Mr. John A. Lowell. He gave a course of twelve lectures upon comparative anatomy and physiology in the winter of 1840-41, and earned enough from this course of lectures to spend a short time in study in Europe. In Paris he studied human anatomy in the school of medicine, and comparative anatomy and natural history at the Jardin des Plantes, attending the lectures of Flourens,

Magendie, and Longet on physiology, and of de Blainville, Isidore St. Hiliare, Valenciennes, Dumeril, and Milne-Edwards on zoology and comparative anatomy. He took a walking trip along the Loire and another along the Rhine, whence he went through Belgium to London. In London he made a study of the Hunterain collections at the Royal College of Surgeons, but was called home by the illness of his father, who died before he reached America. On his return to Boston he spent most of his time in scientific work, but without adequate remuneration. In 1843 he was offered a professorship of anatomy and physiology in the medical department of the Hampden-Sidney College, established at Richmond, Virginia. The work in the medical college lasted merely during the winter and spring months, and the rest of the year he spent in Boston. In 1847 he resigned this professorship to accept the Hersey professorship of anatomy in Harvard College, a chair at this time transferred from the medical school to the college at Cambridge, while a new professorship, the Parkman, was established at the medical school in Boston and conferred upon Oliver Wendell Holmes. Wyman began his work at Harvard in Holden Chapel, a small building not well fitted to the purpose. The upper floor was made into a lecture room while the lower floor contained the dissecting room and museum of comparative anatomy, which was a mere rudiment when he took charge of it, but rapidly enlarged under his activity. He gave two annual courses of lectures and lessons, each for twenty weeks. One was on embryology, the other on anatomy and physiology. In addition to teaching undergraduates he directed numerous special pupils in advanced work and was loved as a simple, unaffected, attractive, stimulating teacher.

Wyman's museum was one of the first of its kind in the country to be arranged on a plan both physiological and morphological. "No pains and labors were spared, and long and arduous journeys and voyages were made to contribute to its riches."* (Gray.) Among these expeditions, the following are the more important: In the summer of 1849 he accompanied Capt. Atwood, of Provincetown, upon a fishing voyage up the coast of Labrador. In the winter of 1852 while in Florida for his health, he began a fruitful study of this district. In 1854, accompanied by his wife, he travelled extensively in Europe, and visited many of the best museums. In the spring of 1856, with his pupils Green and Bancroft as companions, he sailed to Surinam, made canoe trips far into the interior, where they got many interesting collections, but also got the fever from which Wyman suffered severely. In 1858-59 he accompanied Capt. J. M. Forbes on a voyage to the La Plata, ascended the Uruguay and the Parana, and then with George Augustus Peabody, as a companion, crossed the pampas to Mendosa, and the Cordilleras to Santiago and Valparaiso, returning home by way of the Peruvian coast, and the Isthmus. Wyman's museum was made up of specimens gathered largely by himself and at his own expense, and in the main prepared by his own hands, but Agassiz by his personal enthusiasm got many to aid him. In Dr. Wyman "we have an example of what one man

bler means, by persistent and well-directed industry, without éclat, and almost without observation. While we duly honor those who of their abundance cast their gifts into the treasury of science, let us not, now that he cannot be pained by our praise, forget to honor one who in silence and penury cast in more than they all." (Gray).

Although Wyman's salary was small, he adapted his wants to his means, yet was not one to complain when, in 1856, Dr. William J. Walker, a friend of his father's, sent him ten thousand dollars to aid in his work. In the same year Thomas Lee, another friend, supplemented the endowment of the Hersey scholarship with an equal sum, stipulating that the income should be paid to Prof. Wyman during life whether he held the chair of not. The aid given Wyman by these two gifts did much to enable him to continue scientific work in comfort. In 1866 Wyman was made one of the trustees of the Museum and held the professorship of American Archeology and Ethnology, founded by George Peabody, of Harvard University. By the other trustees he was made curator of the museum. After taking charge of the museum he devoted himself mainly to ethnology. "With what sagacity, consummate skill, untiring diligence and success, his seven annual Reports, the last published just before he died, his elaborate memoir on shell-heaps, and especially the Archeological Museum in Boylston Hall, abundantly testify. If this museum be a worthy memorial of the founder's liberality and foresight, it is no less a monument of

*Holmes in a biographical sketch of Wyman in the Atlantic Monthly for November, 1874, has given an interesting description of the museum.

Wyman's rare ability and devotion." (Gray).

During his earlier years he did much to build up the museum of which he had charge. "The record shows that he has made here one hundred and five scientific communications, several of them very important papers, every one of some positive value.

He was a member of the Faculty of the Museum of Comparative Zoology, and was chosen president of the American Association for the advancement of Science for the year 1875, but did not assume the duties. His scientific papers embrace a wide range of studies including human and comparative anatomy, physiology, microscopic anatomy, paleontology, ethnology, and studies of the habits of animals. He also wrote several capital biographical sketches of fellow scientists. In human anatomy, his most important paper is entitled, "Observations on Crania," published in the "Proceedings of the Boston Society of Natural History," for 1868. This contains considerable valuable information. Wyman also made a careful study of the skeleton of a Hottentot; was one of the first to investigate the arrangement of spongy bone in relation to the uses to which the bone is put; compared the spicula of bone in the neck of the human femur with that in the femurs of animals which do not stand upright; gave a careful description of the brain and cranial cavity of Daniel Webster, and important evidence concerning the effect of heat on the structure of bone.

A master in the field of comparative anatomy and paleontology, he achieved some popular, as well as scientific reputation by showing the Hydrarchus Sillimani publicly exhibited as the remains of a gigantic extinct seaserpent, to be in fact made up of fossil bones belonging to several animals and these animals mammals, not reptiles. He also showed that some, at least, of the so-called paddles exhibited with this skeleton were casts of chambered cells. Wyman made numerous valuable studies of fossil remains including those of a fossil elephant and of a megatherium and of the cranium of a mastodon. In comparative anatomy the most important publication is probably that on the nervous systems of Rana Pipiens published in the "Smithsonian Contributions to Knowledge," 1852. In this he gives a full description of the peripheral nervous system of the bullfrog and of the changes undergone during metamorphosis. His theoretical summaries are particularly valuable. His paper on the embryology of the skate (Raia Batis) in the "Transactions of the American Academy of Arts and Sciences," 1864, is also important In 1843 he published an account of the anatomy of the chimpanzee and in 1847 the first account of the osteology of the gorilla ("Memoir, Boston Society Natural History"). To him is due the name of this animal which was discovered by Dr. Thomas S. Savage. The name was adopted from a term used by Hanno, the Carthaginian, in describing the wild men found on the coast of Africa, probably one of this species of the Orang. This term was adopted at the suggestion of A. A. Gould (q. v.). Gray wrote in 1874: "Nearly all since made known of the gorilla's structure and of the affinities soundly deduced therefrom, has come from our associate's subsequent papers, founded on additional crania brought to him in 1849, by Dr. George A. Perkins, of Salem; on a nearly entire male skeleton of unusual size, received in 1852, from the Rev. William Walker, and now in Wyman's museum; and on a large collection of skins and skeletons placed at his disposal in 1859, by Du Chaillu, along with a young gorilla in spirits, which he dissected. It is in the account of this dissection that Prof. Wyman brings out the curious fact that the skull of the young gorilla and chimpanzee bears closer resemblance to the adult than to the infantile human cranium." In the "Boston Medical and Surgical Journal," for 1866, he published a valuable paper on the "Symmetry and Homology in Limbs." In this he took the standpoint that the limbs of each side are reversely symmetrical. In a paper "Notes on the Cells of the Bee," ("Proceedings of the American Academy for January," 1866), he shows clearly that the structure of the honeycomb is far from being ideally perfect. Of the development of organisms in boiled water, enclosed in hermetically sealed vessels and supplied with pure air, he reported in the "American Journal of Science and Arts," for 1862, the second in the same journal for 1867; in the first paper showing infusoria could develop even after prolonged boiling of the water and when air admitted came through red-hot tubes. In the second paper he showed that when the boiling was carried up to five hours no organisms develop.

Wyman's studies of Unusual Methods of Gestation in certain Fishes ("Silliman's Journal," 1859), were likewise valuable. He gave a careful account of the development of Surinam toads in the skin of the back of their mother, and showed that the developing ovum is nourished at the expense of materials

derived from the parent. His interpretations according to Wilder, were either teleological or purely morphological; that is, they either illustrated function or the relations of single parts without reference to the entire organism. "He would not allow his imagination to outstrip his observation."

Gray gives the following account of Wyman's character: "His work as a teacher was of the same quality. He was one of the best lecturers I ever heard, although, and partly because, he was the most unpretending. You never thought of the speaker, nor of the gifts and acquisitions which such clear exposition were calling forth—only of what he was simply telling and showing you. Then to those, who like his pupils and friends, were in personal contact with him, there was the added charm of a most serene and sweet temper. He was truthful and conscientious to the very core. His perfect freedom, in lectures as well as in writing, and no less so in daily conversation, from all exaggeration, false perspective, and factitious adornment was the natural expression of his innate modesty and refined taste, and also of his reverence for the exact truth."

Of Wyman's mode of work in the laboratory, O. W. Holmes gives the following description: "In his laboratory he commonly made use, as Wollaston did, of the simplest appliances. Give him a scalpel, a pair of forceps, a window to work at, and anything that ever had life in it to work on, and he would have a preparation for his shelves in the course of a few hours or days, as the case might be, that would illustrate something or other which an anatomist or a physiologist would find it a profit and pleasure to study. Under a balanced bell-glass he kept a costly and complicated microscope, but he preferred working with an honest, old-fashioned, steady-going instrument of the respectable, upright Oberhaueser pattern. His outfit for happy employment was as simple as John the Baptist's for prophecy."

To Holmes we are likewise indebted for the following personal description of Wyman: "Jeffries Wyman looked his character so well that he might have been known for what he was in a crowd of men of letters and science. Of moderate stature, of slight frame, evidently attenuated by long invalidism, with a well-shaped head, a forehead high rather than broad, his face thin, his features bold, his expression mild, tranquil, intelligent, firm as of one self-poised; not asserting, his scholarly look emphasized by the gold-bowed spectacles his nearsightedness forced him commonly to wear; the picture of himself he has left indelibly impressed on the memory of his friends and pupils is one which it will always be a happiness to recall."

In 1850 Wyman married Adeline Wheelwright, who died in June, 1855, leaving two daughters and in 1861, Anna Williams Whitney, who died in 1864 shortly after the birth of a son.

Wyman suffered throughout most of his life from consumption, which grew worse as time went on, so his winters were usually spent in Florida.

He died at Cambridge, Massachusetts, on September 4, 1874, of pulmonary tuberculosis.

CHARLES R. BARDEEN.

WYMAN, Morrill (1812-1903), inventor of the operation of thoracentesis and son of Rufus Wyman, a physician of Chelmsford, Massachusetts, later the first superintendent of the McLean Insane Asylum, was born in Chelmsford July 25, 1812. He was graduated from Harvard College in the same class as his brother Jeffries (q. v.) in 1833, and received the M. D. from the Harvard Medical School in 1837. He studied with Dr. William J. Walker, of Charlestown, before graduating from the school and after graduation served as house officer at the Massachusetts General Hospital. He began practice in Cambridge in 1838 and continued until a few years before his death, which occurred January 31, 1903, at the ripe age of ninety-one. For a few years during his early life he was adjunct Hersey professor of the theory and practice of physic in the Harvard Medical School. From 1875 to 1889 he was an overseer of the University and in 1885 was given the LL. D. of Harvard. He was consulting physician to the Massachusetts General Hospital, to the Cambridge Hospital, in the establishment of which he was especially prominent, and to the Adams' Nervine Asylum in Jamaica Plain, a part of Boston.

In 1846 he published a volume of 400 pages on ventilation which was an authority for many years; in 1868 appeared "Progress in School Discipline" from his pen.

On February 23, 1850, he removed a large quantity of fluid from the chest of a patient suffering from pleural effusion, making use of an exploring needle and a stomach pump. He repeated the operation a few days later with success, and on April 17, of the same year, operated on a patient of Dr. Henry

Ingersoll Bowditch (q. v.). Bowditch was convinced of the value of the operation, described it and gave it popularity, assigning, however, the credit of the invention of thoracentesis to Wyman. In 1863 Wyman delivered the annual discourse before the Massachusetts Medical Society of the subject: "The Reality and Certainty of Medicine," an excellent supplement, to Oliver Wendell Holmes' address in 1860 on "Currents and Counter-Currents in Medical Science." Wyman was the author of a brochure on "Autumnal Catarrh (Hay Fever)," published in 1872, in which he described two forms of the disease of which he was a victim annually.

In 1839 he married Elizabeth Aspinwall, daughter of Capt. Robert S. Pulsifer, a Boston shipmaster, and was survived by a son and daughter.

He was dearly beloved by many generations of students at Harvard College to whom he was not only the college physician, but adviser and helper in time of need.

WALTER L. BURRAGE.

WYMAN, Walter (1848-1911), Surgeon-General of the United States, was born at St. Louis, Missouri, August 17, 1848, his parents being Edgar Wyman, LL. D., and Elizabeth Hadley Wyman. His ancestors were among the pioneers of New England. He attended St. Louis University and Amherst College, graduating from the former in 1866 and from the latter in 1870. From this latter institution he received the degree of A. B. at graduation, and that of A. M. in 1889. He attended the Medical Department of Washington University, and graduated in 1873, receiving the degree of M. D. He later received the honorary degrees of LL. D. from Western University of Pennsylvania in 1897, the University of Maryland in 1907, and Amherst College in 1911. Dr. Wyman entered the Marine Hospital Service as assistant surgeon October 21, 1876. He was promoted to the grade of surgeon Oct. 1, 1877, and became surgeon general May 27, 1891. Early in his official life he became interested in public health matters. As a result of this interest, laws were enacted to improve the physical conditions affecting sailors in the merchant marine. In 1876 he advocated the use of the "prairie schooner" as a means of affording sailors the benefit of the high, dry climate of the Southwestern plateau. In later years he was instrumental in the establishment of a sanitorium for sonsumptive sailors at Fort Stanton, N. M. Perhaps his most important services to his country were the development of a national system of quarantine already begun and the fostering of scientific research in matters pertaining to the public health.

Dr. Wyman was a member of many societies, in a number of which he held important offices. He was president of the American Public Health Association in 1902 and of the He was vice-president of the American National Red Cross in 1904 and of the American Medical Association in 1905. Other societies to which he belonged included the American Academy of Medicine, American Medical Editors Association, American Association for the Advancement of Science, and the American Climatological Society. He was chairman of the International Sanitary Bu- Association of Military Surgeons in 1904. reau of American Republics, and in this capacity did much to unify maritime quarantine practice. He was also chairman of the Committee on International Quarantine of the Pan-American Medical Congress in 1896, and of the Section on Public Health of the International Congress of Arts and Sciences in 1904. During the International Congress on Tuberculosis in 1908 he was president of the Section on State and Municipal Control of Health Matters. For a long period he was director of the National Association for the Study and Prevention of Tuberculosis and the National Association of Mental Hygiene.

During his public life he contributed many scientific and popular articles relating to health matters. Lists of these under appropriate headings may be found in the Index Medicus and other catalogues.

Dr. Wyman was unmarried. He died, of Bright's disease and diabetes, complicated by carbuncle, at Providence Hospital, Washington, D. C., November 21, 1911.

J. W. KERR.

WYNNE, James (1814-1871), of Baltimore, writer and student of life insurance, was born in Utica, New York, in 1814 and died in Guatemala, Central America, February 11, 1871. He was a lineal descendant of Sir John Wynne, of Gwydyr, Wales. He was educated at the University of the City of New York, studied medicine, and was licensed to practice, settling in Baltimore, Md. Later he removed to New York City, where he devoted much attention to the subject of life insurance and medical jurisprudence, contributing to the "Transactions of the American Medi-

cal Society," to the "North American Review," "Knickerbocker," and other standard magazines, and about 1867 he emigrated to Guatemala, where he engaged in coffee-culture. He published valuable reports, including "Public Hygiene" (New York, 1847); "Asiatic Cholera in the United States in 1847," prepared at the request of the British government, from which he received a medal (London, 1852); and one on the "Vital Statistics of the United States," made to the Mutual Life Insurance Company of New York and London (New York, 1877). His other works are "Memoir of Maj. Samuel Ringgold" (Baltimore, 1847); "Lives of Eminent Literary and Scientific Men of America" (New York, 1850); "Importance of the Study of Legal Medicine" (New York, 1857); and "The Private Libraries of New York" (1863).

WYNNE, Thomas (1631-1692). Doctor James J. Levick (q. v.), has called attention to the fact that all the physicians of Philadelphia, previous to 1700, were natives of Wales, even though Welsh immigrants formed but a part of the population of that city. Among them was Thomas Wynne who set sail from Deal, England, August 30, 1682, in the ship "Welcome," with William Penn, on his first voyage to America, reaching here October 27, 1682. Wynne had practiced medicine on the Surrey side of the Thames for some thirty years and was said to have been "the most thoroughly equipped and learned physician who, until then, had visited America." When smallpox broke out on the "Welcome" coming over, the skill of "good Dr. Wynne" was taxed to the utmost. Here was a three hundred ton vessel, with one hundred emigrants, with insufficient medical attendance, no delicacies for the sick and only such remedies as could be supplied from the ship's medicine chest; and the voyage took fifty-three days. But Wynne, acting as both physician and nurse, conquered the epidemic; thirty died of smallpox before the voyage was over. Wynne was born in the town of Caerwys, Flintshire, North Wales, in 1631 and was the fifth son of Sir John Wynne, of Gwydyr, and Sydney, daughter of Sir William Gerard, Chancellor of Ireland. He was sent to London in 1650, entered the Royal College of Surgeons and was subsequently licensed as a surgeon and physician. He married Mary Bultall about 1656. After landing with Penn in Philadelphia, Wynne became a member and president of the first Provincial Assembly held in that town, a prominent preacher among the Friends and a writer of controversial tracts. Penn was warmly attached to him and named the present Chestnut Street, one of the principal thoroughfares of the new city, Wynne Street, in his honor.

A daughter of Wynne, Mary, married Edward Jones, whose daughter, Martha Wynne Jones, became the wife of John Cadwalader, the father of Thomas Cadwalader, and so Wynne was the great-grandfather of Thomas Cadwalader. Wynne purchased five thousand acres of land in Sussex County, Delaware, and lived there for a time, but returned to Philadelphia, where he died January 16, 1692.

HOWARD A. KELLY.

WYTHE, Joseph Harry (1822-1901), preacher-physician, was born in Manchester, England, March 19, 1822, the son of Joseph Wythe and Mary Shamberlain. He came to this country in 1835 and was licensed to preach in the Methodist Episcopal Church in 1842. He studied medicine and was graduated in 1850 at the Pennsylvania Medical College and settled in Port Carbon, Pennsylvania, where he was surgeon to the Beaver Meadow Collieries. In 1862-3 he was surgeon in the United States Army and organized Camp Parole Hospital at Alexandria, Virginia. After the war he moved to the Pacific Coast and in 1865 was President of Williamette University, Salem, Oregon, and organized a medical department. Uniting with the conference he again began preaching. Later he settled in Oakland, California, and in 1874 became professor of Microscopy and Histology in the Medical College of the Pacific, San Francisco, which became Cooper Medical College in 1882. Dr. Wythe continued in the chair of histology till 1897 and was Professor Emeritus till his death October 14, 1901.

He wrote several books, "The Microscopist, a Complete Manual on the Use of the Microscope" (1850), which went through several editions; "Curiosities of the Microscope" (1852); "Physician's Pocket Dose and Prescription Book" (1852), 8th ed. 1869); "Agreement of Science and Revelation" (1883); "Outline of Normal and Pathological Histology, a Syllabus in 3 parts;" "Easy Lessons in Vegetable Biology" (1883) and "The Science of Life" (1884), also numerous articles in the medical periodical press.

Dr. Wythe was a little round man, full of energy, a splendid teacher with a charming

personality and an excellent gift for free hand drawing at the black-board with colored chalk with which he illustrated his lectures on histology. In the community in which he lived he was best known as a surgeon although most of his work was done in the pre-antiseptic era he was very successful as an operator. He did a great deal of abdominal surgery, performing hysterectomy for fibroids, ovariotomy, and other major operations, and still found time to occupy the pulpit on Sunday morning many times during each year.

EMMET RIXFORD.

YALE, LeRoy Milton (1841-1906), New York pediatrist, and known also for his good etching, was born at Holmes Hole (Vineyard Haven), Massachusetts, on February 12, 1841, the son of LeRoy Milton and Maria Allen Yale. He brought the same exactitude to his surgical as to his artistic work, and dealt with children with equal carefulness. As an etcher he produced several hundred plates. The best of his work had the qualities demanded of a painter-etcher and he took an active interest in founding the New York Etching Club.

He was graduated from Columbia College in 1862 and from Bellevue Hospital Medical College in 1866, lecturing there for some time on orthopedic surgery, and afterwards on obstetrics in the University of Vermont, also holding successively a surgeonship in the Charity, Bellevue, and Presbyterian Hospitals. He was co-editor of the "Medical Gazette"; medical editor of "Babyhood" and wrote "Nursery Problems," 1893; "The Century Book of Mothers;" "Phimosis," 1877; "The Mechanical Treatment of Chronic Diseases of the Hipjoints," 1878; "Remarks on Excision of the Hip," 1885; "The Diagnosis of Early Hipjoint Disease from Rheumatism, Neuralgia and So-called 'Growing-pains,'" 1893.

He died on September 14, 1906.

DAVINA WATERSON.

YANDELL, David Wendel (1826-1898), was M. D., LL. D. (University of Louisville); soldier of the Civil War (South Carolina); medical director of the Department of the West; professor of clinical surgery University of Louisville; editor and founder of the "American Practitioner"; President of the American Medical Association; surgeon-general of the troops of Kentucky; president of the American Surgical Association; pioneer in clinical teaching in the west; honorary fellow, and corresponding member of the Medico-Chirurgical Society of Edinburgh and fellow of the Medical Society of London.

Dr. Yandell was born at Cragg Bluff, Tennessee, on the fourth of September, 1826. The ancestors of the Yandells came from England and settled in South Carolina, in Colonial days. His father was Lunsford Pitts Yandell (q. v.), a pioneer in medical education in the West; his mother was Susan Juliet Wendel, a daughter of David Wendel, of Murfreesboro, Tennessee. After a course at Centre College, Danville, he studied medicine at the University of Louisville, and was graduated in 1846. That year he went to Europe, where he continued his studies for nearly two years and wrote two series of letters (one secular, the other medical) which established his reputation as a writer. In 1850 he was made demonstrator of anatomy in the University of Louisville. About this time he established the "Stokes Dispensary," the first clinical institution in the west, and later was elected to the chair of clinical medicine in the University. When the Civil War began Yandell became a soldier in the Confederate Army, and was made medical director of the department of the West, by Gen. Albert Sidney Johnston, and was in the battles of Shiloh, Murfreesboro, and Chickamauga. In 1867 he was elected to the chair of the science and practice of medicine in the University of Louisville, and in 1869 took there the chair of clinical surgery. As a teacher of clinical surgery he had few rivals. In operating he cut to the line and to the required depth with geometrical precision. His dissections were artistic, and he found his way through labyrinthine surgical spaces with certainty and safety. His dressings were beautiful, while his treatment of wounds, surgical and accidental, was characterized by a scrupulous cleanliness, which in post bellum days was prophetic of asceptic surgery. In 1870, in conjunction with Theophlius Parvin (q. v.), he established "The American Practitioner," which held high places in medical literature for sixteen years (1886), when it was combined with the "Medical News," under the name "American Practitioner and News." He was editor-in-chief of this journal till the year of his death. All his writings were forceful, terse, and condensed. One of his own papers, published in the second volume of the "Practitioner," is a classic. This is an analysis of 415 cases of tetanus.

His contributions to literature include: "Notes on Medical Matters and Medical Men in London and Paris," Louisville, 1848; "Re-

ply to the Attack of Dr. E. S. Gaillard" ("American Practitioner," Louisville, 1871); "A Clinical Lecture on the Use of Plastic Dressing in Fractures of Lower Extremity," 1876; "Pioneer Surgery in Kentucky"; a sketch, 1890; "Temperament," an address, 1892; "Battey's Operation," 1875.

His nature was gentle and affectionate; his liberality and benevolence conspicuous.

He married Francis Jane Crutcher, of Nashville, Tennessee, in 1851, and had four children, a son and three daughters. He died in Louisville, Monday, the second of May, 1898, of arterio-sclerosis, his last illness stretching over a period of five years. During the last two years his mind was a blank.

HENRY A. COTTELL.

YANDELL, Lunsford Pitts (1805-1878). Briefly summed up, the professional life of Lunsford P. Yandell is that he was graduated M. D. from the University of Maryland, 1825, and was professor of chemistry, Transylvania University, 1831-1837; founder of Louisville Medical Institute, 1837, professor of chemistry, materia medica, and physiology, in the University of Louisville 1846-1858; geologist; minister of the gospel (Presbyterian), 1862; editor "Transylvania Medical Journal," Lexington; editor "Western Medical Journal," Louisville; president Kentucky State Medical Society, 1878.

He was born July 4, 1805, on his father's farm near Hartsville, Sumner County, Tennessee; his father, Dr. Wilson Yandell, being a native of North Carolina. Of Lunsford's childhood and early school days, nothing is known. He began to study medicine under his father, attended one course of lectures at the Transylvania University, Lexington, Kentucky, and another at the University of Maryland. After six years' practice in Tennessee, he was called to the chair of chemistry in the Transylvania University. This chair he held until 1837, when he came to Louisville, where he was a founder of the Medical Institute which in 1846 became the University of Louisville. During the war he was for a time in the hospital service of the Confederacy. In 1862 he was licensed to preach by the Memphis Presbytery, and served as pastor of a church in Dancyville, Tennessee, but in 1867 he returned to Louisville and resumed practice, though preaching frequently, as occasion offered. He devoted much time to literary work and geological research, in these departments being a pioneer in the West. He made many valuable contributions to paleontology, preparing numerous papers and enriching the science through discoveries in fossils. As early as 1847 he published, with Dr. B. F. Shumard, "Contributions to the Geology of Kentucky." In 1848 a note by Prof. Yandell concerning this discovery of calcareous arms in Pentremites Florealis was published in the "Bulletin of the Geological Society of France." In 1855 he discovered a new genus of Crinoidea, which he named Acrocrinus Shumardi. Sir Charles Lyell, Prof. Owens, and other masters in paleontology recognized the value of his work, and his name stands memorialized and immortalized in fossils as follows: Playcrinus Yandelli (Owen and Shumard); Actinocrinus Yandelli (Shumard); Choetes Yandellana (Prof. James Hall); Amplexus, Yandelli (Edwards and Haime); Trachonema Yandallana (James Hall); Phillips Astrea Yandelli (Dr. Rominger).

In all the years of his busy life, he was unresting in the labors that he loved. They were diversified, but such was the skill he displayed in each department which he adorned, that in looking at any one specimen of his work we might have supposed that one was his vocation. Whether he wrote history, essays upon geology, on medical themes, biography, the advancement of education, or the wisdom, the power and beneficence of the Creator in His works he seemed to make each theme his own, and he adorned it with life and beauty. Independently of his lectures, he wrote fully one hundred papers on the various subjects that he had studied, and they are papers of profound interest. Among his medical and general-literature papers, the best known are: "History of American Literature;" "History of Kentucky Medicine;" A Review of the Last of the "Idyls of the King," Tennyson; "The Diseases of Old Age" (completed and sent to the printer a few days before his death).

A list of his writings may be found in the Library of the Surgeon-general's Office, Washington, D. C.

He married twice: first Susan Juliet Wendel and had six children. His second wife was Eliza Bland by whom he had no children.

His death on the fourth of February, 1878, was caused by pneumonia, after a few days' illness. Being in pain he asked his son for a portion of opium, and when laudanum was given him, in the Latin of his favorite, Sydenham, he said: "Magnum donum Dei," and these were his last words.

HENRY A. COTTELL.

YATES, Christopher C. -1848), of Albany, N. Y., was born in Rensselaer County, New York State, studied medicine with Dr. Samuel Stringer, a veteran in the professoin, and was probably licensed by the Supreme Court of the Staee, in the year 1802 or 1803. For many years he lived in Albany and at one time created great excitement in the community by exhuming, for dissection, a half-breed Indian who had died there. The public were incensed by such sacrilege, and Dr. Yates braved the storm almost at the risk of his life. In 1812 an epidemic of bilious fever appeared in Abany, upon which Dr. Yates wrote an article which was published in the "American and Philosophical Register" in 1813. He attributed the prominent characteristics of the disease to derangement of the liver and regarded the malady as purely inflammatory. The article was reviewed by Dr. Hosak and Dr. Francis of New York (q.v.). In 1820 he took an active and decided part in the controversy on yellow fever. In 1832 he published an article on "Epidemic, Asiatic or Spasmodic Cholera, Prevailing in the City of New York, with advice to planters in the south on the medical treatment of their slaves." He also discussed cholera in a letter to Dr. Barent P. Staats, the health officer of Albany in 1832, and gave an account of the disease as observed by French authors. These articles are preserved in the State Library. While living in New York, Dr. Yates lost a son, Winfield Scott, a lad of eighteen, extraordinarily proficient in the various branches of learning.

Yates gave his attention to the cure of stammering, as a professional specialty, but there remains no evidence that he was particularly skilful in such cases. He returned to Albany about 1840, but went eventually to Parrsborough, in Nova Scotia, where he passed the rest of his days, and died September 23, 1848. In personal appearance, he was tall, with a slender figure, an intelligent face, and prepossessing address.

YOUNG, Aaron (1819-1898), aurist of Maine.

Aaron Young, senior, was born in Pittston, Maine, May 12, 1798, married a Miss Mary Colburn in 1805 and in 1819 was living in Wiscasset, Maine, where on the 19th of December of that year, Aaron Young, Junior, the last of a large family, was born. At that time his father was a surveyor of lumber. The family moved a few years later to Randolph and then to Bangor, Maine. The son, Aaron, was delicate in youth and probably affected with enlarged tonsils and adenoids, for at the age of ten he was noticeably deaf, an affliction which persisted through life. His inability to converse freely, owing to his defect, turned the boy's attention to nature, and at the age of eighteen years he became an expert botanist and well versed in natural history. He followed not only the curriculum at Gorham Academy in Maine, but he gave public lectures on botany and natural history. During two vacations he established a natural history society at Bangor, lectured on related topics, and oddly enough, had for one of his listeners an older and celebrated man, Professor Asa Gray (q.v.). When about nineteen, Young made the acquaintance of Parker Cleveland, chemical professor at Bowdoin, and at his suggestion attended lectures on medicine and chemistry at the Bowdoin Medical School. From time to time he consulted various specialists concerning his deafness and in 1841 saw Dr. John H. Dix (q.v.), of Boston, a famous man in his day. After studying two years at the Bowdoin Medical School, 1840-1841, he obtained letters of proficiency, and set off in the fall of 1842 for medical lectures at the Jefferson Medical College, Philadelphia. As he journeyed he consulted the eminent aurists of the day, and was by them in turn puked and bled and bistered and setoned, and scraped in his pharynx, but to no avail, for he remained perpetually deaf.

I have never been able to discover positively that Aaron Young obtained a diploma from Jefferson College, but judge from the fact that on his arrival in Boston in 1875 he became a fellow of the Massachusetts Medical Society, that he must have had the diploma and the documents to prove his right to practice medicine.

Provided with the proper instruments for examining and treating diseases of the ear, Young settled in Maine. He became so discouraged with the question: "Why don't you cure yourself of your own deafness?" that after a year he threw away all the apparatus he had for ear treatment, and settled in Bangor as a druggist in company with Dr. Daniel McRuer (q.v.), who also kept a drug store. For four years, until about 1848, Young continued his studies in medicine and botany and natural history; collecting an herbarium and a mineralogical cabinet, and made such progress that he was known all over the country, and in Europe, as a botanist, keeping up a wide correspondence with learned men at home and abroad. He was appointed State Botanist of Maine in 1848, and for two years

giving up business and medical practice, composed a now rare work on the Flora of Maine, reviewed by Gray in the "American Journal of Arts and Sciences," but of which no copy has come to light in late years. Whether it was a book or a collection of pictures, or simply a "hortus siccus" with indigneous plants of Maine, pasted to large sheets of paper, can unfortunately not be discovered. As the botanist of Maine, Young explored the coast and the interior extensively, and made one of the very early ascents of Mount Katahdin. "The Maine Farmer" for 1848 contains a report of this expedition, the report being a valuable piece of literary work. This was the first time that afforestation was ever advocated in Maine; had it been adopted, we should now be reaping its manifest wide benefits. The Maine legislature did not see fit to grant another term to Young at the high price of $600 and traveling expenses, so he tried to make a living by teaching at South Paris, where he explored the mines, afterward famous for tourmalines, with success. From here, he corresponded with the British specialist Harvey, on seaweeds and sea-dredging, and with Berkley on fungi, edible and poisonous.

Another curious episode about this time was the proposal from an artist who had lost his voice, for Young to lecture on botany and natural history, whilst the artist showed to the audience his handsome pictures painted from life. Wearied of teaching, in 1850 Young established himself as a physician in Auburn and Lewiston, kept a drug shop, and gradually extended one of his own prescriptions into a famous cough syrup, sold as a patent medicine known as Dr. Young's "Catholicon." He set up print, edited, and wrote every word of all the editorials, city notices and gossip, and even the advertisements in three newspapers all by himself. Although his papers, one entitled "The Farmer and Mechanic," another "The Pansophist," and a third "The Touchstone," were small weekly sheets, they show evidence of a vigorous mentality and entitled Young to a high position in newspaper literature. I may add, parenthetically, that finding a few copies of "The Touchstone" at Bowdoin College Library, and a few others in Wisconsin, I tried in vain to bring them together, but finally succeeded in securing typewritten copies from the west, so that the curious can consult a complete file of "The Touchstone" at Brunswick, Maine.

Young finally established himself in Portland, as an ear surgeon, in 1858, and did a good business for a while, but lacked persistence. In another year, as one born under the Bands of Orion, he moved to Farmington, Maine, and there issued a marvelous pamphlet entitled "The Franklin Journal of Aural Surgery and National Medicine;" a copy is in the Surgeon-general's Library at Washington. He insists upon diseases of the naso-phraynx as causes of ear diseases, discharges and deafness; he discusses how to remove foreign bodies from the ear, gives the tests for hearing, and reveals a case list suggestive of over 1,000 patients, first and last. This unique pamphlet ends with a delightful picturesque and satisfactory eulogy of the late Professor Parker Cleveland of Bowdoin, a model biography, and one in which Carlyle would have reveled for piquancy and human color.

During 1859 and 1860 Young traveled through Maine as an aural surgeon. From Bath, he wrote to the "Boston Medical and Surgical Journal" an account of the way to illuminate the ear, and from Rockland another "On Various Cases of Ear Disease," accepted by that journal as from "Dr. Aaron Young, Jr., Farmington, Maine." Amongst the curious cases mentioned are double mastoid fistula, exfoliation of the ossicles, artificial ear drum for relief of deafness, and the removal of a pea.

At the time of the Civil War Young was practicing in Bangor as an aurist and having always been a talker, he talked altogether too much on conciliating the South, on paying the slave-holders for their property, and wrote similar papers in the public press, until he became known as a Copperhead, although Hon. Hannibal Hamlin continued to befriend while warnning him. Finally, public spirit was aroused, the "Bangor Whig" office was sacked and gutted, and there was a rumor that harm would be done to Young if he did not stop talking. Warned in season and fearing reprisals, and ruin, he fled to the Provinces and there for four years practiced as an aural surgeon, writing papers of popular value on the ear, nose and throat, and on deafness and its cure; it would seem that he had offices for practice in St. Johns, New Brunswick; Halifax, Nova Scotia; St. John's, Newfoundland, and one or two other places. Finally, wearied of living out of the United States, he appealed to Hon. Hannibal Hamlin to give him a chance to come back to Bangor where he agreed to keep still, but Hamlin did better than this, for he obtained for Young the consulate at Rio

Grande do Sul, Brazil, where for some years he did good official service, wrote marvelous consular reports on the harbor, the channels, botany, public health, agriculture, epidemics, the people, and corresponded frequently with the Smithsonian Institution and sent home wonderful specimens from Brazil—insects, birds and minerals. Then he was ousted, as happens often in republics to the best of men; regretfully he had to come home. He would gladly have stayed for life but the politicians were against him—somebody found out (after twelve years of perfect service) that he was deaf and could not hear complaints! He settled next in Boston in 1875, was elected a member of the Massachusetts Medical Society, and spent the rest of his life trying to be an ear surgeon, but was not successful because he was ageing fast, his hearing was worse, new men were coming in, and, in fact, he had had his day. He invented an instrument to assist hearing.

At the request of H. I. Bowdin (q.v.), he wrote on "The Effect of Alcohol on Inhabitants of the Tropics," he experimented with Dr. Bowditch at the Massachusetts General Hospital on oxygen gas, wrote on "antidotes for strychnia poisoning," "on quackery" and "sale of patent medicines in Brazil." He had pneumonia in 1892, but survived, then again in 1898 from which he died, January 13, 1898, at the age of seventy-nine.

Young worked in many directions; he first classified ear diseases in Maine, but was abused by some physicians as an "Eclectic;" by others as a patent medicine seller. As the writer all by himself of one of the very earliest ear journals, as the first regular ear surgeon, and as a writer of many medical papers of historical value, he is clearly worthy of being held in remembrance.

JAMES A. SPALDING.

YOUNG, Daniel S. (1827-1902), surgeon, artist and inventor of Cincinnati, was born in New York in 1827 and graduated in medicine at the Albany Medical College, New York, in 1855, settling in Cincinnati. During the war he was surgeon of the 21st Regiment Ohio Volunteer Infantry, afterwards lecturing on surgery in the Cincinnati College of Medicine and Surgery. He contributed some valuable papers on military surgery to the "Cincinnati Journal of Medicine," which was edited by G. C. Blackman (q.v.), accompanying them with beautiful colored illustrations, all his own work, he being an expert draftsman, painter, engraver, lithographer and block-cutter. Young was engaged in writing a "Surgical History of the Civil War," but abandoned the work when the War Department announced the preparation of such a work by the surgeon-general's office. He was for some years connected with the surgical staff of the Cincinnati Hospital and had a wide reputation as a surgeon and obstetrician. He died in 1902.

Dan Young, as he was known, was a versatile man. Years ago he discovered that zinc plates might be used for engraving but never thought of patenting his invention. He was a master of the art of etching and modeling; some beautiful samples of his work are to be found in the library of the Cincinnati Hospital. He was also a violin-maker; in fact, there was hardly any kind of handiwork in which he did not excel. In making splints or dressings of any kind he was quick as he was resourceful and artistic. It is but natural to suppose that he possessed the eccentricities of genius to a liberal extent.

Young in 1867 reported a case of gangrene of the heart, a pathological curiosity. In 1880 he made a drawing within twelve hours after the shooting of President Garfield, showing the exact location of the bullet; and the autopsy, made many weeks later, proved the correctness of Young's diagram.

OTTO JUETTNER.

YOUNG, Ernest Boyen (1869-1923), Boston gynecologist, was the son of Mary Emerson and Stephen Jewett Young—and the descendant of Thomas Dudley one of the early governors of Maine, professor of Modern Languages, treasurer, and trustee of Bowdoin College. He was born at Brunswick, Maine, July 11, 1869 and was graduated from Bowdoin in 1892 and four years later in medicine from Harvard. After service as house officer at the Children's Hospital and at the Massachusetts General Hospital, he settled in Boston, specializing in gynecology and obstetrics. After graduation, he became assistant in anatomy in his alma mater, finally giving up this post in 1902 to become assistant in gynecology. In 1908, he was appointed instructor in gynecology and retained this position until death. He was also visiting physician on the gynecological service of the Boston City Hospital, assistant surgeon to the Free Hospital for Women, assistant physician in diseases of women at the Boston Dispensary, surgeon to the Massachusetts Women's Hospital, and surgeon in chief of the gynecological and obstetrical section of the Fifth

Surgical Service of the Boston City Hospital. In 1909, he was chosen one of the Overseers of Bowdoin. During the World War, he enlisted in the medical corps and was commissioned captain in April, 1918, and in May, detailed to the Medical Officers' Training Camp, Camp Greenleaf, Georgia. Later, he became orthopedic surgeon and thus served until discharged in April, 1919.

Dr. Young wrote a number of articles on gynecology and obstetrics for the medical journals. He was a fellow of the American Gynecological Society and of the American College of Surgeons. A man of large cultural tastes, he had an unusual and large collection of medical prints and a library containing many volumes of the classics of medicine. He was a scholarly man, a good operator, and a splendid teacher.

He married Grace A. Simonton of Rockland, Maine, in 1900; their only child was Ernest S. Young.

Dr. Young died, after a brief illnes from pneumonia, January 17, 1923.

YOUNG, James Kelly (1862-1923), Philadelphia orthopedist, was born in Trenton, New Jersey, April 29, 1862, the son of William and Eliza Kelly Young. His grandfather was William Young, a former English subject and a manufacturer of porcelain and gold printer to the Queen, who with his sons established the famous potteries at Trenton in 1853. James attended the public and high schools of Trenton and in 1883 was graduated from the Medical Department of the University of Pennsylvania. He was connected with the Philadelphia Dispensary in 1883-84 and with the Philadelphia Hospital the next year. Appointed assistant demonstrator of surgery in his alma mater in 1886, he worked under Dr. Hayes Agnew (q.v.) for six years and served as surgical registrar to the University Hospital; he was subsequently made lecturer then associate professor of orthopedic surgery. At death, he held the chair of orthopedics at the Graduate School of Medicine of the University of Pennsylvania. He was also assistant surgeon at Wills Hospital during 1886-1900, professor of orthopedic surgery at the Philadelphia Polyclinic after 1894, clinical professor of orthopedic surgery at the Woman's Medical College of Pennsylvania following 1895, surgeon to the Home for Crippled Children during 1894-99, and on the staff of the Woman's Hospital and of the Philadelphia Lying-in Charity Hospital. With De Forest Willard (q.v.) he was instrumental in establishing the orthopedic department of the University of Pennsylvania—the first of its kind in the city of Philadelphia. He had a large practice in orthopedics and was especially sympathetic and helpful in his work among the poor. Remarkable patience and attention to details were dominating characteristics. His practice and his writing were all absorbing. He was the author of a "Manual and Atlas of Orthopedic Surgery," 1894, 1895; "Synopses of Human Anatomy," 1889 (6th ed. 1923); and numerous articles. In 1898, he published, contributions to orthopedic surgery by Dr. A. Sidney Roberts with a biographical sketch.

On June 7, 1899, he married Mary Thornton Wilson, M. D., who with a son, William Wilson Young, and a daughter, Elizabeth Wilson Young, survived him.

Dr. Young's health began to fail in 1918 following his extra work during the World War. In August, 1923, when at Beach Haven, New Jersey, with his wife, hoping to escape hay fever and asthma, he became acutely ill and died August 28 from acute endocarditis and complications.

He was a man of spare habit with a kindling eye and a face always expressive of interest and was noted for a certain kindliness of manner.

YOUNG, John Richardson (1782-1804), America's pioneer medical scientist, was born in Hagerstown (then Elizabethtown) Maryland, in 1782, son of Dr. Samuel and Ann Richardson Young. His mother died in 1791, at the age of 31, leaving, besides John Richardson, two girls, Elizabeth and Martha, aged 8 and 6. John went to Princeton University (then the College of New Jersey) and while there became a member of the undergraduate "Cliosophic Society." He graduated in 1799, and returning home, soon after took up the study of medicine with his father. The elder Young was born in County Down, Ireland, in 1730 and came to this country before the Revolution, being a widely known physician and enterprising citizen of Hagerstown. He was a graduate of Trinity College, Dublin, and educated in medicine in Edinburgh. He died in Hagerstown in 1838. The son bears tribute to indebtedness to his father for "paternal kindness and first principles in medicine" in his thesis in 1803.

John R. Young's thesis on graduating at the University of Pennsylvania was entitled, "An Experimental Inquiry into the Principles of Nutritition and the Digestive Process," and this constitutes his one great claim to fame.

Young's work on digestion was based on experiments on our big bull frog with its capacious accommodating gullet; the results were far in advance of anything that had heretofore been done for physiology in this country; he demonstrated for the first time that digestion was effected by an acid secreted by the stomach, that it checked putrefaction, and he rejected the idea that digestion was a process of trituration, fermentation or putrefaction He says: "We would, therefore, explain this process in a few words. Aliment is dissolved by the gastric menstruum; it then passes into the duodenum and meets with bile and pancreatic liquor; after being united with these, a heterogeneous mass is formed called chyme, and from this lacteals secrete chyle." Young's thesis was published in Philadelphia in 1803, and was reprinted in Caldwall's Medical Theses in 1805. Two other writings of his have been found in Benjamin Smith Barton's (q.v.) "Philadelphia Medical and Physical Journal" for 1804, one of these is a brief excerpt from a letter of Young's but valuable as adding to the little that can be found of him.

A more interesting work in a manuscript found among the few effects preserved by descendants of the family; this is evidently a paper prepared for a general audience, setting forth in non-technical language the process of digestion as known before his experiments on frogs an snakes. In one year from the time he graduated, he died in Hagerstown, June 8, 1804, in the twenty-second year of his age. A tradition in his family states that the cause of his death, as well as that of his sisters, was tuberculosis. The graves of all the family are in the old St. John's Episcopal Church burying-ground in Hagerstown. Dr. Samuel Young lived to be 108 years old, but misfortune seemed to follow him. In 1805, a year after his son's death, he took into partnership, at the recommendation of Dr. Benjamin Smith Barton (John R. Young's friend, as well as his teacher) a classmate of his son's—Dr. Thomas Walmsley, of Pennsylvania (at that time practicing at Chambersburg), and on August 15, 1806, this young man died. The suggestion seems not amiss that he died of tuberculosis contracted at the Young home. Dr. Samuel Young was at this time 76 years old, a man of property in real estate and in slaves, whom he liberated at his death.

There is an exquisite miniature of John Young, painted by Peale, and an indifferent life-size bust of Samuel Young, painted by Frymier, both in the possession of Miss Bessie Bell Patterson (whose mother was a second cousin of John R. Young's) at her home near McConnellsburg, Pennsylvania.

HOWARD A. KELLY.

ZAKRZEWSKA, Marie Elisabeth (1829-1902). Berlin, Prussia, was the birthplace of Marie Zakrzewska, a pioneer woman physician of Boston. Her father, an officer in the Prussian Army, was a descendant of a Polish family of high rank which shared their country's downfall. Her mother traced descent from a gipsy queen of the tribe of Lombardi. The great-grandmother went through the Seven Years' War as assistant-surgeon to her father, an army-surgeon; her daughter was a veterinary surgeon and Marie's mother studied and followed the profession of midwife when her husband was dismissed from the army on account of his revolutionary tendencies. Marie was the eldest of a family of five sisters and one brother. When eleven years old she was taken by a doctor to the dead house of a hospital to see the corpse of a young man whose body had turned green from poison; she was left to roam at will in the dissecting rooms and later was forgotten and locked alone in the dead house until late at night. At about this time she was given two books to read, "The History of Surgery" and "History of Midwifery," and her school days ended when she was thirteen. The mother's practice was by this time large and increasing and Marie assisted her wherever possible. Marie, when twenty was admitted to the Berlin School of Midwifery, but only after a direct appeal to the King by Dr. Schmidt, a prominent physician of the school, himself in failing health. It was planned that Marie should eventually be chief accoucheur in the Hospital Charité and professor of midwifery when he resigned. Marie met with untold opposition, which was only overcome through Dr. Schmidt's tenacity of purpose and the desire of his colleagues to fulfill his dying wishes. The appointment was granted on May 15, 1852, but insidious enmity accomplished its purpose and in November of the same year she relinquished her position.

The first report of the Pennsylvania Female College had been sent to Dr. Schmidt, and Marie planned to emigrate, a project not executed until March, 1853. The parting from a home to which she was never to return, was, she writes, the hardest moment of her life. A sister accompanied her and after a voyage of forty-seven days the two girls

reached New York with the sum of one hundred dollars between them. It was a blow to learn from Dr. Reisig, a friend, that in America, women physicians were of the lowest rank, and Marie's limitations in the English language prevented her from getting in touch with members of the medical profession. Nevertheless, after securing suitable rooms she put out her sign but practice did not come. Then she turned heroically for a time from her chosen work and started in the trade of supplying embroidered work to the wholesale houses. She was soon able to give work to as many as thirty girls and thus earned sufficient to keep in comparative comfort a family of four, for in September a second sister and a friend joined them. From her workgirls she gained a lasting impression of the almost hopeless struggle they waged against a life of shame. The wolf being now a reasonable distance from the door, Marie turned again to her cherished project, and obtained an interview with Dr. Elizabeth Blackwell (q. v.), whereby the gates, so long closed, began to swing slowly open to the kingdom of hope. Dr. Elizabeth Blackwell invited Marie to assist in her dispensary, offered to give her lessons in English and obtained admission for her to the Cleveland Medical College. The two years at this college gave her considerable pecuniary distress and in 1855, when joyfully expecting the arrival of her mother, a despatch brought her the crushing news of her death and burial at sea. Returning to New York, Dr. Zakrzewska with Drs. Elizabeth and Emily Blackwell bent every effort to the task of bringing into existence the "New York Infirmary for Women," which was opened in May, 1857, with Dr. Zakrzewska as first resident physician.

In 1859 the New England Female Medical College of Boston invited Dr. Zakrzewska to fill the chair of obstetrics. Dr. Zakrzewska consented, with the provision that a hospital for chemical work should be opened with the college. After three years, finding growth impossible either in college or hospital, she resigned to begin the foundation of a hospital for women and children. Friends were ready to aid and a small ten-bed hospital was started in a rented house in Pleasant Street in 1862. The hospital was incorporated March 12, 1863, the incorporators being Lucy Goddard, Marie E. Zakrzewska, and Ednah D. Cheney. Its objects were to provide for women medical aid of competent physicians of their own sex, to assist educated and to train nurses for the care of the sick, women in the practical study of medicine, Rapidly the work increased and eventually land was purchased in Roxbury and a thoroughly equipped building erected, which became the New England Hospital for Women and Children of 160 beds and invested funds of a million and a half dollars. For nearly forty years Dr. Zakrzewska was the guiding inspiration.

Though she did not marry, her roof sheltered two sisters and the family of a German reformer, Karl Hinzen, a Republican exile. She wrote much on important and vital questions. In 1899 Dr. Zakrzewska, now seventy years old, retired. She had been suffering for some time from a nervous trouble which took the form of noises, which she described to a physician a steady sound of falling rain that prevented sleep, which evoked the comment "Well we do fall asleep even if it rains hard, and so you will." With fortitude and cheerfulness she awaited the last sleep which came on May 12, 1902.

Among the papers she has left cover the following subjects: "Climate; Its Influence upon Health;" "The Woman's Club;" "Amusements; The Value of the Theatre;" "The Dormitory System in Schools and Colleges;" "The Poor; How Best to Help Them;" "The Duty of the Physician to Give Moral as Well as Physical Aid to Her Patient;" "The American Woman" (a series of articles sent to an English woman's journal. Her letters were edited by Dr. Agnes C. Vietor of Boston and published in 1924 under the title of: "A Woman's Quest."

ZEISLER, Joseph (1858-1919), dermatologist of Chicago, was born October 7, 1858 in Bielitz, Austrian Silesia, the son of Isaac and Anna Kanner Zeisler. He was graduated in medicine from the University of Vienna in 1882 and was an intern in the Vienna General Hospital for two years. In 1884, Zeisler came to America and settled in Chicago where in 1888, he began his teaching career as professor of skin and venereal diseases in the Postgraduate Medical School, an office he retained until 1895. From 1889 until 1901, he was professor of dermatology in the Woman's Medical College; and from 1889 until 1917, when he became emeritus professor, he was also professor of skin and venereal diseases in the Northwestern University School. His contributions to the literature, numbering about forty, are on impetigo herpetiformis, trophic dermatoses following

fractures, angio-keratoma, arsenical zoster, pemphigus, tropic affections of the nails, and six articles for Morrow's "System." He was president of the American Dermatological Association in 1903 and of the Chicago Dermatological Society in 1904 and 1914. He was devoted to music and the arts.

He died August 31, 1919, leaving a widow, Teresa Feuchtman Zeisler, and three children, one of whom is Dr. Irwin P. Zeisler.

ZOLLICKOFFER, William (1793-1853). The available material for a life of William Zollickoffer, botanist, proved very scanty. He was graduated M. D. at the University of Maryland in 1818, and the Washington University in 1838. In the minutes of the Medical and Chirurgical Faculty of Maryland is a note that in 1830 Dr. William Zollickoffer was put in charge of a "vaccine agency" in Baltimore provided he should sustain it for one year and conduct it to the satisfaction of the faculty. He was one of the earliest in the United States to write a materia medica and his book entitled "A Materia Medica of the United States," came out in 1819, and was re-issued in 1827. He also wrote, in 1822, a pamphlet on the "Use of Prussiate of Iron in Intermitting and Remitting Fevers." He was lecturer on medical botany, materia medica and therapeutics at the University of Maryland. It is said the Zollikoferia, one of the "asteraceae," was named after him by De Candolle. His death took place in Carroll County, Maryland, in 1853, at the age of sixty.

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